



April 1, 2016

The Honorable Maria A. Pallante
Register of Copyrights
U.S. Copyright Office
101 Independence Avenue, SE
Washington, DC 20559-6000

Re: Section 512 Study: Notice and Request for Public Comment
Docket No. 2015-7 (December 31, 2015)

Dear Register Pallante:

Google Inc. (“Google”) appreciates the opportunity to submit comments in connection with the U.S. Copyright Office (the “Office”) Request: *Section 512 Study: Notice and Request for Public Comment*, 80 Fed. Reg. 251. We share the Office’s interest in reviewing the efficiency and effectiveness of the safe harbor provisions contained in 17 U.S.C. § 512 for owners and users of copyrighted works. We are therefore pleased to explain why the safe harbor framework is crucial not only to Google’s many online products and services, but to the growth of the Internet, and to share some of the steps we have taken to combat piracy online.

General Effectiveness of Safe Harbors

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

Congress intended that the DMCA safe harbors serve two objectives: (1) to stimulate investment in an Internet economy that would otherwise be discouraged by overbroad copyright infringement liability; and (2) to provide remedies against online infringement while facilitating collaboration between online service providers (“OSPs”) and rightsholders. *See* S. Rep. 105-190 at 1 (purpose of the DMCA is “to facilitate the robust development and world-wide expansion of electronic commerce, communications, research, development, and education in the digital age”); H.R. Rep. 105-551 (II) at 49 (purpose of the DMCA is to “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.”). The safe harbors established by the DMCA have achieved both of these objectives, establishing a balanced approach to intellectual property enforcement that has allowed the Internet to flourish. They have fostered collaboration between OSPs and rightsholders, and given rightsholders powerful new tools to police for infringements of their rights.



Following the passage of the DMCA in 1998, the Internet economy has grown to be a pillar of U.S. economic strength, responsible for approximately \$966.2 billion of real GDP in 2014.¹ Digital platforms like iTunes, Netflix, Amazon, Hulu, Google Play, Spotify, and Deezer are making content legally available on the Internet to millions of consumers, facilitating almost \$8 trillion in online commerce each year.² By providing access to convenient and legitimate content offerings to users in markets all around the world, these digital platforms offer the most effective method of fighting piracy. In the process, Google has sent over \$3 billion to the music industry—and that number is growing year over year. Platforms hosting original, user-generated content, such as YouTube, Facebook, Instagram, Vine, and Blogger, are also stimulating an explosion of new creativity by making it easier than ever for creators to find their audiences. The result is that more photography, music, video, software, and books are being created by more people than ever before.³ Companies using the Internet with a high intensity are also shown to grow twice as fast as low-web intensity companies, export twice as much, and create more than twice as many jobs.⁴

The protections the DMCA provided to OSPs played a significant role in spurring that growth. Congress recognized in 1998 that investment in online services would be stunted if OSPs faced strict liability and statutory damages for the misconduct of a tiny minority of its users. Absent the DMCA safe harbors, much of the economic power, export strength, and cultural benefits created by the Internet would be lost. Indeed, a study showed that 81% of angel investors would prefer to invest in a digital content intermediary in a weak economy under the current regulatory environment as opposed to investing in a strong economy where websites were held liable for user-uploaded content.⁵ It is clear the safe harbors are a critical concern for the investors who support the Internet economy.

The DMCA has been almost universally embraced by U.S. online service providers. This is noteworthy given that the DMCA safe harbor regime imposes more copyright enforcement obligations on OSPs

¹ Internet Association, *Measuring the U.S. Internet Sector*, at 5 (Dec. 10, 2015), available at <http://internetassociation.org/wp-content/uploads/2015/12/Internet-Association-Measuring-the-US-Internet-Sector-12-10-15.pdf>.

² McKinsey Global Institute, *Internet matters: the Net's sweeping impact on growth, jobs, and prosperity*, at 1 (May 2011), available at <http://www.mckinsey.com/industries/high-tech/our-insights/internet-matters>.

³ Computer & Communications Industry Association, *the sky is rising*, at 3 (Oct. 2014), available at <https://www.cciainet.org/wp-content/uploads/2014/10/Sky-Is-Rising-2014.pdf>.

⁴ McKinsey Global Institute, *Internet matters: the Net's sweeping impact on growth, jobs, and prosperity*, at 3 (May 2011), available at <http://www.mckinsey.com/industries/high-tech/our-insights/internet-matters>.

⁵ Booz & Company, Inc., *The Impact of U.S. Internet Copyright Regulations on Early-Stage Investment A Quantitative Study*, at 22 (2011), available at <http://www.strategyand.pwc.com/media/uploads/Strategyand-Impact-US-Internet-Copyright-Regulations-Early-Stage-Investment.pdf>.



seeking to qualify for the safe harbors than previous technology vendors ever faced. For example, the companies that brought the photocopier, the tape deck, the VCR, and the personal computer to market did not have any obligations to “terminate repeat infringers” or act on notices of infringements committed by their customers. Likewise, companies such as Netscape, Dell, and Sun Microsystems that brought the World Wide Web to life by selling software, servers, and computers had no “notice-and-takedown” responsibilities with respect to their customers. Today, in contrast, thanks to the DMCA’s safe harbor regime, more than 90,000 OSPs have registered copyright agents to receive takedown notices and adopted policies to terminate customers who are shown to be repeat infringers.⁶ These 90,000 include individual bloggers, small startups, enterprise cloud providers, and global online platforms—all of whom actively work within the DMCA framework.

That widespread participation by OSPs in the DMCA safe harbor system has delivered considerable benefits to rightsholders. The notice-and-takedown system of the DMCA allows rightsholders to avoid many of the costs that would previously have come with policing infringement, including registering copyrighted works, hiring an attorney to write a cease-and-desist letter, and engaging in litigation. The DMCA has established a cheaper and more efficient way to remove infringing content from the Internet quickly without the need for lawyers and court actions.

The DMCA has also succeeded in fostering voluntary collaboration between many service providers and rightsholders. One example of collaboration between OSPs and rightsholders facilitated by the DMCA safe harbor is YouTube’s Content ID system. Using this service, which YouTube invested more than \$60 million to develop, copyright owners can identify user-uploaded videos that include their content, and can opt to block the video from appearing, leave the video on YouTube for promotional value, or monetize it with advertising. To date, Content ID has generated more than \$1 billion in revenue for the content industry. The vast majority of the more than 8,000 partners using Content ID choose to monetize their claims, rather than block their content from appearing. Content ID is good for users as well. When copyright owners choose to monetize or track user-submitted videos, it allows users to remix and upload a wide variety of new creations using existing works.

Another example of collaboration made possible by the DMCA safe harbors is the demotion signal used in Google’s search algorithm. Based on the information received from rightsholders through the notice-and-takedown process, Google acts to demote results from sites receiving a high number of valid removal notices.⁷ This solution has the benefit of responding quickly and automatically to changing patterns of

⁶ U.S. Copyright office, Directory of Service Provider Agents for Notification of Claims of Infringement, available at http://www.copyright.gov/onlinesp/list/a_agents.html.

⁷ How Google Fights Piracy, at 18 (Oct. 17, 2014), available at <http://googlepublicpolicy.blogspot.com/2014/10/continued-progress-on-fighting-piracy.html>.



infringing conduct online, as rightsholders adjust their submissions of takedown notices. This feature would not be possible without the notice-and-takedown mechanism at the heart of the DMCA safe harbor regime.

Google has also made a major effort to go beyond its baseline DMCA obligations in the online advertising space. By coordinating with the Office of Management and Budget, the Interactive Advertising Bureau (IAB), and other leading ad networks, Google helped develop “Best Practices and Guidelines for Ad Networks to Address Piracy and Counterfeiting.”⁸ Under these best practices, ad networks maintain and post policies prohibiting websites that are principally dedicated to engaging in piracy or counterfeiting from participating in the ad network’s advertising programs. Ad networks also agree to establish systems that can receive and respond to takedown notices from rightsholders. Google was also among the first companies to certify compliance in the IAB’s Quality Assurance Certification program, which prohibits the sale of any ad inventory supported by infringing content.⁹ With the transfer of the IAB’s Quality Assurance Guidelines to the Trustworthy Accountability Group’s (TAG) Inventory Quality Guidelines (IQG) in late 2015, Google has also worked closely with TAG’s cross-industry accountability working group to ensure that the new audit program upholds the highest standards of transparent and responsive investigation of anti-piracy complaints. These “follow the money” strategies are aimed at cutting off the supply of revenue flowing to rogue sites and play a critical role in the effort to fight piracy online.

Google and YouTube have also created takedown tools beyond their DMCA obligations to provide copyright owners with easier and more efficient ways to submit notices. YouTube, for example, has multiple tools: a webform accessible by all users to submit a copyright takedown notice; the Content Verification Program (CVP), which is available for trusted notifiers to search for and identify infringing content on the platform; and the Content ID system, which includes an enhanced search tool facilitating the submission of takedown notices. For Search, Photos, and Blogger, Google created the Trusted Copyright Removal Program (TCRP). As discussed in more detail in the answer to Question 8, Google’s TCRP and YouTube’s CVP provide bulk submission tools to streamline the submission of DMCA notices. Google maintains a public web form in multiple languages where anyone may submit DMCA takedown notices 24 hours a day by answering a simple set of interactive questions.

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

⁸ See Google Public Policy Blog, Ad Networks Agree on Industry Best Practices to Combat Piracy and Counterfeiting (July 15, 2013), available at <http://googlepublicpolicy.blogspot.com/2013/07/ad-networks-agree-on-industry-best.html>.

⁹ IAB, Quality Assurance Guideline (QAG) Version 2.0, at 28 (July 23, 2013), available at <https://www.tagtoday.net/wp-content/uploads/2015/05/QualityAssuranceGuidelines7252013.pdf>.



Yes. One of the chief strengths of the DMCA safe harbors has been their ability to accommodate innovative new technologies far beyond what Congress envisioned in 1998. As discussed in the answer to Question 1, one of the goals for the DMCA was to stimulate investment and innovation in the then-nascent online sector. Accordingly, Congress intended the safe harbors to be forward-looking and adaptable to new forms of technology. Courts have correctly followed Congress's intent by repeatedly finding that a broad array of OSPs are protected by the safe harbors, including access providers,¹⁰ auction sites,¹¹ video hosting services,¹² online marketplaces,¹³ hosting providers for real estate listings,¹⁴ photo hosting services,¹⁵ and search engines,¹⁶ among others. The adaptability of the DMCA safe harbors to innovative new technologies has also fostered the development of many of today's most successful cutting-edge online services, including social networking, instant messaging, and live video streaming. All of these valuable services could potentially face ruinous copyright liability based on the misdeeds of a tiny minority of users, were it not for the protections of the safe harbors.

Question 3: How have section 512's limitations on liability for online service providers impacted the growth and development of online services?

Please see answer to Question 1.

Question 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?

By fostering the growth of new online platforms, the DMCA has created a plethora of new opportunities for creators to find and engage their audiences. Platforms like YouTube, Flickr, Instagram, Facebook, Twitter, and SoundCloud are just a few of the mechanisms by which musicians, photographers, and video creators are reaching audiences, developing careers, selling their works, and publicizing their events. Online platforms for app developers, such as Google's Play App Store, have created new global markets for small software developers whose apps are now extremely valuable properties. Before the development of these platforms, creators had far fewer ways to reach global audiences, and most of those

¹⁰ *Recording Indus. Ass'n of Am. v. Verizon Internet Servs., Inc.*, 351 F.3d 1229 (D.C. Cir. 2003).

¹¹ *Hendrickson v. eBay, Inc.*, 165 F. Supp. 2d 1082 (C.D. Cal. 2001).

¹² *UMG Recordings, Inc. v. Shelter Capital Partners*, 718 F.3d 1006 (9th Cir. 2013); *Viacom Int'l. Inc. v. YouTube, Inc.*, 940 F. Supp. 2d 110 (S.D.N.Y. 2013).

¹³ *Corbis Corp. v. Amazon.com, Inc.*, 351 F. Supp. 2d 1090 (W.D. Wash. 2004).

¹⁴ *Costar Grp. Inc. v. Loopnet, Inc.*, 164 F. Supp. 2d 688 (D. Md. 2001).

¹⁵ *Wolk v. Kodak Imaging Network, Inc.*, 840 F. Supp. 2d 724 (S.D.N.Y. 2012).

¹⁶ *Perfect 10, Inc. v. Amazon.com, Inc.*, 508 F.3d 1146 (9th Cir. 2007).



avenues often required creators to sign away their copyrights (and much of the value that derived from them) in exchange for distribution. Today, every kind of creative endeavor, both amateur and professional, is being transformed by the new opportunities and lower costs made possible by digital tools and online distribution. Online platforms are enabling new creators and new voices to connect with new audiences and opportunities, without the traditional middlemen.¹⁷

Moreover, as set forth in our response to Question 1, the DMCA has given copyright owners powerful new tools for protecting their copyrighted works. Thanks to the process set up by the DMCA, as well as collaborative efforts to improve the efficiency of the notice-and-takedown system and voluntary measures such as YouTube’s Content ID and Google’s DMCA demotion signal for search results, rightsholders have a variety of remedies at their disposal that were not available prior to the adoption of the DMCA. Thanks to the DMCA safe harbors, rightsholders can protect their works at scale without having to hire a lawyer or register works.

Some in the recording industry have suggested that the safe harbors somehow diminish the value of sound recordings, pointing to YouTube and blaming the DMCA for creating a so-called “value grab.”¹⁸ This claim is not supported by the facts. As an initial matter, it is important to understand that YouTube has had license agreements in place with both major and independent record labels for many years; it is simply incorrect to say that YouTube relies on the DMCA instead of licensing works. Those pressing the “value grab” argument also assert that the royalty rates in these licenses are too low, allegedly because the DMCA’s notice-and-takedown process makes it too difficult for record labels to withdraw their works from YouTube in the face of users re-uploading those works. This claim, however, ignores Content ID, which has been in existence since 2008 and which record labels (and many other copyright owners) use every day to monetize their works on YouTube. Thanks to Content ID, record labels do not have to rely solely on the DMCA’s notice-and-takedown process on YouTube—they can remove any or all user-uploads of their works from the platform on an automated and ongoing basis. Indeed, since January 2014, over 98% of all YouTube copyright removal claims have come through Content ID. Although business partners can be expected to disagree from time to time about the price of a license, any claim that the DMCA safe harbors are responsible for a “value gap” for music on YouTube is simply false.

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

¹⁷ Computer & Communications Industry Association, the sky is rising, at 3 (Oct. 2014), available at <https://www.cciainet.org/wp-content/uploads/2014/10/Sky-Is-Rising-2014.pdf>.

¹⁸ Peter Kafka, Streaming Is Officially the Biggest Part of the Music Business, Which Wants YouTube to Pay Up, Re/code (Mar. 22, 2016), available at <http://recode.net/2016/03/22/streaming-is-officially-the-biggest-part-of-the-music-business-which-want-youtube-to-pay-up/>.



Yes. Please see answer to Question 1.

Notice-and-Takedown Process

Question 6: How effective is section 512's notice-and-takedown process for addressing online infringement?

The notice-and-takedown process has been an effective and efficient way to address online infringement. The increasing volume of URLs removed from Search each year demonstrates that rightsholders are finding the notice-and-takedown process worthwhile, efficient, and scalable to their needs. In the past month alone, more than 6,000 individuals or entities used Google's notice-and-takedown interface to request that Google remove from its search index more than 80 million webpages. We process more takedown notices, and faster, than any other search engine. We receive notices for a tiny fraction of everything we host and index, which nonetheless amounts to millions of copyright removal requests per week that are processed, on average, in under six hours.¹⁹ Because of the certainty provided by the safe harbors, Google and other OSPs have invested in new procedures that have made the notice-and-takedown process cheaper, more streamlined, and scalable for rightsholders. The stability of the safe harbor law has also led to the creation of a thriving market for enforcement vendors, who compete to provide quality detection and takedown services to rightsholders.²⁰

A key to the effectiveness of the notice-and-takedown process has been its adaptability to all kinds of OSPs. For smaller startups, the costs of implementing a notice-and-takedown system are reasonable, especially when compared to the unpredictable (and potentially enormous) costs of litigating with individual rightsholders one by one. For larger OSPs like Google, serving billions of users, the notice-and-takedown process helps focus efforts to combat infringement into a manageable process. Regardless of size, the notice-and-takedown process has proven adaptable to varying types of online enterprises, whether they be search, hosting, social networks, messaging, caching, auctions, or marketplaces.

To improve the effectiveness of the notice-and-takedown process, Google has worked with partners across industry and government. In 2014 and 2015, Google participated in the Department of Commerce's Internet Policy Task Force multistakeholder forum, which was convened by the U.S. Patent and Trademark Office (USPTO) and the National Telecommunications and Information Administration (NITA). The multistakeholder forum resulted in the publishing of "DMCA Notice-and-Takedown

¹⁹ Google Transparency Report, Requests to remove content (Mar. 31, 2016), available at <https://www.google.com/transparencypolicy/removals/copyright/?hl=en>.

²⁰ Google Transparency Report, Reporting organizations, Due to copyright (March 31, 2016), available at <https://www.google.com/transparencypolicy/removals/copyright/reporters/?r=last-year>.



Processes: List of Good, Bad, and Situational Practices,” which identifies a number of practices that will improve the efficiency of the handling and processing of DMCA notices by both senders and recipients.²¹

Of course, the notice-and-takedown framework has not been a silver bullet solution to online infringement; it was always meant to be one part of a larger collaborative strategy, led by rightsholders and buttressed by other efforts. The safe harbors have been supplemented by additional voluntary efforts, including supply-based initiatives (making lawful content available to users online) and “follow the money” measures (drying up the financial incentives for rogue sites). These voluntary efforts are exactly what Congress envisioned the DMCA safe harbors would encourage.

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?

The notice-and-takedown process has been an efficient system for addressing infringement online. When compared to the enormous costs of hiring counsel to interface with and potentially litigate against OSPs, the DMCA process is significantly less expensive. For OSPs, the safe harbor regime has proven to be flexible enough to accommodate small services that rely on simple emails for receiving small numbers of takedown notices, as well as large service providers that establish automated systems for ingesting millions of notices. Similarly, the DMCA leaves room for differing approaches to implementing policies for the termination of repeat infringers in appropriate circumstances. This flexibility has been the key to the workability of the system in the long-term.

The notice-and-takedown system is also likely to become even more efficient as time goes on. Improved technology is making the takedown process cheaper and more effective for OSPs. As explained in the answer to Question 6, there is now an emerging market for enforcement vendors, who scour the Internet and rely on the advanced automated submission systems developed by the major OSPs.²² These enforcement vendors have been able to aggregate submissions by large and small copyright owners alike. Market forces should, over time, result in falling prices and increasing quality as these vendors compete to offer services to rightsholders.²³

²¹ United States Department of Commerce, DMCA Notice-and-Takedown Processes: List of Good, Bad, and Situational Practices (April 7, 2015), available at https://www.ntia.doc.gov/files/ntia/publications/dmca_good_bad_and_situational_practices_document.pdf.

²² Google Transparency Report, Reporting organizations (March 31, 2016), available at <https://www.google.com/transparencypdf/removals/copyright/reporters/?r=last-year>.

²³ For instance, Blasty.co is an enforcement vendor currently offering free removal services to smaller rightsholders. And PRS for Music, a UK collecting society, has announced its own takedown tool to streamline the removal process for its members. *See* PRS for Music launches new Member Anti-Piracy System ‘MAPS’ to combat online



Question 8: In what ways does the process work differently for individuals, small-scale entities, and/or large-scale entities that are sending and/or receiving takedown notices?

Google has monitored how the notice-and-takedown system works for different types of users and tailored its processes accordingly. From our perspective, individuals and smaller entities are generally more likely to make errors when sending takedown notices, often failing to submit the necessary information or requesting a removal on an improper basis. Larger submitters, including sophisticated enforcement agents, tend to submit a larger volume of removal notices in an automated fashion with fewer errors.

Google has designed its notice-and-takedown processes to cater to both types of users. For individuals, we have created simple webforms that guide submitters to provide all of the information needed to process the request. For those who submit in large volumes, Google created TCRP, which streamlines the submission process for Google Search, Photos, and Blogger by allowing rightsholders (or their enforcement agents) to submit large volumes of URLs.²⁴ Google now has more than 100 TCRP partners, who together submit the vast majority of removal notices every year. YouTube has a similar Content Verification Program (CVP), which is available for trusted notifiers with proven track records of accurate submissions. CVP tools allow rightsholders to search for and identify potentially infringing content. YouTube now has provided free access to CVP tools to more than 5,000 trusted notifiers.

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

Please see answer to Question 8, which addresses how Google has tailored its notice-and-takedown processes for both individuals and high-volume enforcement vendors making automated submissions.

Question 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?

Notice-and-takedown is the best process for addressing the reappearance of infringing material online. It allows copyright owners to rapidly remove infringing material when they find it, whether it has happened for the first time or reappears.

music piracy (Mar. 1, 2016), available at <https://www.prsformusic.com/aboutus/press/latestpressreleases/pages/prs-for-music-launches-new-member-anti-piracy-system-maps-to-combat-online-music-piracy.aspx>.

²⁴ How Google Fights Piracy, at 15 (Oct. 17, 2014), available at <http://googlepublicpolicy.blogspot.com/2014/10/continued-progress-on-fighting-piracy.html>.



Some have argued for the replacement of the current system with a “notice-and-staydown” regime, in which an obligation is imposed on OSPs to ensure that removed content does not reappear on their service. Such a system would impose an extraordinary burden on OSPs to monitor all content available through their services and would not likely be effective. OSPs cannot implement a staydown regime, because even when given notice that a particular user was unauthorized to upload a particular work, only the rightsholder knows whether subsequent uploaders may or may not be licensed to upload the content.

Moreover, the feasibility of a “staydown” mechanism depends on a variety of factors that vary across online services. An OSP cannot know for certain whether to remove content that has “reappeared” unless it can answer two difficult questions. First, is it the same material? To answer this question, the OSP must have access to the content itself. While this may be possible for some hosting providers, like YouTube with Content ID, for others this can easily be thwarted by user encryption. For social networks and search engines, only a link or metadata may be available, making it impossible reliably to identify content that had been previously removed.

Second, an OSP must ask whether the content is still infringing when and where it reappears. To answer this question, an OSP would need to know whether the ownership of a specific piece of content has changed or whether the content was licensed for the subsequent use. The OSP would also need to make a legal (and contextual) determination as to whether the posting of allegedly reappearing content was a fair use or covered by another copyright exception.

In short, it is both legally and technically difficult to imagine that a “staydown” obligation could feasibly be imposed on all OSPs that are covered by the DMCA safe harbors. Instead, progress in this area lies in the realm of voluntary initiatives, where advances are being made, as demonstrated by YouTube’s Content ID system and similar initiatives undertaken by many other leading providers.

Question 11: Are there technologies or processes that would improve the efficiency and/or effectiveness of the notice-and-takedown process?

Yes. As set forth in the answers to Questions 6, 7 and 8, the emerging market for enforcement vendors—who use technology to process takedowns at scale—is making the takedown process cheaper and more efficient for everyone.

Question 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?

The vast majority of the removal requests Google receives are legitimate. But illegitimate and mistaken takedown notices are also a fact of life for OSPs like Google. Google receives hundreds of unfounded notices a month, many of which come from the same vexatious submitters. For example:



- A poet sent repeated takedown notices targeting criticism and commentary relating to the poet's online copyright enforcement efforts;
- A well-known publisher of children's books sent a takedown notice targeting the use of excerpts by a critic discussing the use of gun imagery in children's literature;
- A physician claiming a copyright in his signature sent a takedown notice aimed at a document related to the suspension of his license to practice medicine;
- A major soft drink company sent a takedown notice targeting a YouTube news channel for including excerpts from a commercial in its critical coverage of that commercial;
- A California city sent takedown notices aimed at a citizen using portions of videos of public city council meetings to criticize the mayor;
- Major broadcast news networks sent takedown notices targeting videos from a presidential campaign that included brief excerpts from news footage; and
- An individual claiming to be a candidate for political office in Egypt filed a copyright complaint to remove two pages on Egyptian news sites reporting on the individual's arrest record.

Google has developed techniques to manage and mitigate the problem by leveraging the strengths of its notice-and-takedown process. For example, Google has had success in conditioning enforcement vendors' access to special tools like TCRP on maintaining high standards that prevent them from filing vexatious takedown notices. Google has also terminated TCRP access for submitters who repeatedly submit inaccurate or abusive notices. Working with enforcement vendors and copyright holders, Google and other OSPs will continue to innovate and implement measures that protect against abusive and fraudulent takedown notices.

Question 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?

Yes, Section 512(d) has proven to be a crucial part of the DMCA safe harbors. Linking has been the hallmark of online communications, making possible the World Wide Web, search engines, social networks, online forums, and publishing platforms. Congress recognized in 1998 that providing enhanced legal clarity for those who publish or host hyperlinks would benefit Internet innovators and rightsholders alike.

Today, the evidence is that copyright owners value the notice-and-takedown mechanism at the heart of 512(d). Rightsholders send removal notices to Google identifying more than two million potentially infringing URLs each day, a number that has steadily increased as OSPs and enforcement vendors have



scaled their practices. Thanks to that process, Google is able to remove from its search results more than 99% of web pages identified as containing infringing content in, on average, under six hours.²⁵ In addition, the data set created by these submissions over time has enabled Google to develop and deploy a search ranking demotion signal that reduces the visibility in search results of sites for which we receive a large number of notices. Finally, the takedown notices we receive for Google Search are used in connection with our advertising products to prevent them from being used to support infringing activity in violation of our policies.

As set forth in the answers to Questions 1 and 6, the safe harbor established in Section 512(d) has been critical to the success of the online economy, has allowed OSPs and rightsholders to find collaborative solutions to fight infringement, and has given OSPs such as Google signals to develop additional solutions, such as the ranking demotion signal and “follow the money” solutions that restrict the flow of money to pirate sites. Each of these advances in fighting copyright infringement would not have been possible but for the notice-and-takedown framework established by Section 512(d).

Question 14: Have courts properly interpreted the meaning of “representative list” under section 512(c)(3)(A)(ii)? If not, what should be done to address this concern?

Courts have properly interpreted the meaning of “representative list” under Section 512(c)(3)(A)(ii). The statute permits the use of a representative list in order to identify multiple works infringed at a particular online location. Courts have uniformly agreed, however, that this does not relieve a copyright owner or its agent of the independent obligations of Section 512(c)(3)(A)(iii), which requires that a valid notice also provide “information reasonably sufficient to permit the service provider to locate the material.” See *Capitol Records, Inc. v. mp3tunes, LLC*, 821 F. Supp. 2d 627, 643 (S.D.N.Y. 2011); *Viacom Intern. Inc. v. YouTube, Inc.*, 718 F. Supp. 2d 514, 528 (S.D.N.Y. 2010), *aff’d in part, vacated in part, remanded*, 676 F.3d 19 (2d Cir. 2012); *UMG Recordings, Inc. v. Veoh Networks Inc.*, 665 F. Supp. 2d 1099, 1110 (C.D. Cal. 2009). In other words, the provision of a representative list of works does not require a service provider to search or monitor its platform for works identified in the list. Such an interpretation of the “representative list” would be inconsistent with the language of Section 512(c)(3)(A)(iii), Section 512(m)’s “no monitoring” provision, and would also be infeasible for many OSPs for the reasons discussed in the answer to Question 10.

Question 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.

²⁵ This means Google rejects or reinstates less than 1% of the web pages identified as containing infringing content because we conclude the material is not infringing, are unable to find the web page, or need further information.



As set forth in the answers to Questions 1 and 6, Google employs a wide range of voluntary measures and best practices to supplement the notice-and-takedown process. Google has also developed a variety of product mechanisms to discourage infringing uses of its services or the use of its services to financially support infringing activities. Such voluntary measures beyond the requirements of the DMCA include:

- Content ID on YouTube;
- Search ranking demotion signal based on valid takedown notices;
- Proactive and reactive measures to ensure Google ad services are not used to support infringing activity;
- Technical restrictions on Google Drive to deter those seeking to use this service to host infringing materials;
- TCRP for Search, Photos, and Blogger to facilitate the efficient, automated submission of takedown notices at scale;
- CVP on YouTube to facilitate submission of takedown notices from trusted submitters on YouTube at scale;
- YouTube creates an electronic hash of each video that is the subject of a DMCA takedown and prevents re-uploads of that identical file;
- Proactive measures to detect infringing apps on Google Play's App Store;
- Preventing terms closely associated with piracy from appearing in Autocomplete and Related Search;
- Participation in multistakeholder best practices efforts convened by the White House, PTO, and NTIA.

Legal Standards

Question 19: Assess courts' interpretation 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?

Consistent with the intent of the DMCA, courts have properly interpreted the provisions disqualifying OSPs from safe harbor protection in order to recognize the importance of the notice-and-takedown process and avoid overly burdensome demands on OSPs to make unilateral judgments regarding potentially infringing material. *See Viacom Int'l, Inc. v. YouTube, Inc.*, 676 F.3d 19, 31 (2d Cir. 2012) ("the actual knowledge provision turns on whether the provider actually or 'subjectively' knew of specific



infringement”); *UMG Recordings, Inc. v. Veoh Networks Inc.*, 665 F. Supp. 2d 1099, 1108 (C.D. Cal. 2009) (“it takes willful ignorance of readily apparent infringement to find a ‘red flag’”); *Capitol Records, LLC v. Vimeo, LLC*, 972 F. Supp. 2d 500, 525 (S.D.N.Y. 2013) (“§ 512(m) and attendant case law make clear that service providers are under no affirmative duty to seek out infringement.”).

Together, this body of law treats the DMCA as a coherent statutory framework designed to encourage the use of the notice-and-takedown process and recognizes the importance of the counter notification provisions to vindicate user interests. That consistent interpretation—in accordance with what OSPs have long understood the law to be—also vindicates important reliance interests. Substantial investments have been made by OSPs and their investors predicated on the availability of the DMCA safe harbor, and court decisions have appropriately not upset those reliance interests by interpreting the knowledge standards in a way that would swallow the safe harbor and inject legal uncertainty into the Internet economy.

Question 20: Assess courts’ interpretation of the “financial benefit” and “right and ability to control” standards under the section 512 safe harbors. How are judicial interpretations impacting the effectiveness of section 512?

Courts have correctly interpreted the “financial benefit” and “right and ability to control” standards set forth in Section 512 by repeatedly holding that these standards are not simply a restatement of the vicarious copyright liability standard. As the Second Circuit has explained, the “right and ability to control” standard “requires something more than the ability to remove or block access to materials posted on a service provider’s website.” See *Viacom Int’l, Inc. v. YouTube, Inc.*, 676 F.3d 19, 38 (2d Cir. 2012) (quoting *Capitol Records, Inc. v. MP3tunes, LLC*, 821 F. Supp. 2d 627, 645 (S.D.N.Y. 2011)). Indeed, an OSP must exert a “substantial influence” on the specific infringing activity if it is to be evicted from the safe harbor. *Id.*; see also *UMG Recordings, Inc. v. Shelter Capital Partners LLC*, 718 F.3d 1006, 1030 (9th Cir. 2013) (same); *Capitol Records, LLC v. Vimeo, LLC*, 972 F. Supp. 2d 500, 526 (S.D.N.Y. 2013) (same). Although the Ninth Circuit once suggested in dicta that the “financial benefit” standard may be akin to “vicarious copyright liability,” see *Perfect 10, Inc. v. CCBill LLC*, 488 F.3d 1102, 1117 (9th Cir. 2007), it has more recently retreated from that view. In *Columbia Pictures Industries, Inc. v. Fung*, it held that the type of connection required to meet the “direct ‘financial benefit’ prong” included “promot[ing] advertising by pointing to infringing activity ... attract[ing] primarily visitors who were seeking to engage in infringing activity ... and encourage[ing] that infringing activity.” 710 F.3d 1020, 1045 (9th Cir. 2013).

The consistent case law has aided in the effectiveness of the statute in promoting innovation online. As set forth in the answer to Question 1, having dependable “rules of the road” has given OSPs the freedom to go above and beyond the legal requirements of the safe harbors in a variety of ways. Had the courts taken the opposite approach in interpreting the “financial benefit” and “right and ability to control” standards, and held that the standards were akin to vicarious copyright liability, it would have rendered



the safe harbors ineffective, transformed the DMCA into an incoherent statute, and potentially subjected OSPs to strict liability for infringing activity by tiny minority of users. *See Viacom Int'l, Inc. v. YouTube, Inc.*, 676 F.3d 19, 37 (2d Cir. 2012) (explaining that interpreting the statute in that way would “render the statute internally inconsistent” and the “prerequisite to safe harbor protection” would be, at the same time, “a disqualifier” from such protection). This alternative approach would have drastically changed the nature of online platforms, to the detriment not only of the U.S. Internet sector, but also the vast majority of users who are not engaging in infringement.

Question 21: Describe any other judicial interpretations of section 512 that impact its effectiveness, and why.

As explained in the answers to Questions 19 and 20, the case law interpreting the language of Section 512 has produced a dependable body of precedent upon which rightsholders, OSPs, innovators and investors all rely.

Repeat Infringers

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

Please see answer to Question 23.

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?

Courts have appropriately given OSPs space to develop repeat infringer policies that are reasonable in light of the size, resources, and services of the OSP. The courts have repeatedly found that OSPs have discretion in identifying repeat infringers, so long as the repeat infringer policy is “reasonably implemented,” as required by Section 512(i)(1)(A). *See Viacom Int'l Inc. v. YouTube, Inc.*, 718 F. Supp. 2d 514, 527-28 (S.D.N.Y. 2010) (finding that YouTube’s “three strikes” repeat infringer policy was reasonably implemented); *UMG Recordings, Inc. v. Veoh Networks Inc.*, 665 F. Supp. 2d 1099, 1118 (C.D. Cal. 2009) (finding that Veoh’s policy of not terminating a user where the DCMA notice identified multiple infringements was reasonably implemented); *Capitol Records, LLC v. Vimeo, LLC*, 972 F. Supp. 2d 500, 515 (S.D.N.Y. 2013) (finding that an evolving policy, including its provision to group notices received in three-day period as a single “strike,” was reasonably implemented).

Allowing such discretion to implement repeat infringer policies has been a positive development. It has allowed OSPs to craft and test different policies to find the most effective one for their platform. For example, YouTube has established a “copyright school” as part of its repeat infringer policy where users



who receive a takedown notice can become eligible to “earn off” a strike based on completion of the program. This approach helps deter future infringement and promotes copyright education among the base of YouTube users. The flexibility afforded OSPs in developing repeat infringement policies has also allowed Google to tailor different policies to different products; what might work for YouTube does not necessarily work for its other platforms.

Question 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?

Under the statute, to qualify as a “standard technical measure,” the technical measure must have been developed “pursuant to a broad consensus of copyright owners and service providers in an open, fair, voluntary, multi-industry standard process,” be available to any person on reasonable and non-discriminatory terms, and not impose “substantial costs” on OSPs. 15 U.S.C. § 512(i)(B). There is no industry consensus regarding any such “standard technical measures.” Nor is any likely to emerge. Given the wide array of OSPs of different sizes, users, and services offered, a one-size-fits-all requirement imposed by private stakeholders would be unworkable for many OSPs, especially smaller ones who might be unable to conform their systems to specific technical standards imposed by the content industry. A better approach for fighting infringement, as set forth in Google’s answers to Questions 1, 6, and 15, is the existing DMCA process, supplemented by the various voluntary efforts OSPs have made (e.g., using valid removal notices to inform demotion signals and developing ways for owners to monetize user-posted content, as with YouTube’s Content ID system), as well as “follow the money” strategies aimed at infringers and supply-side strategies aimed at giving users lawful access to the content they desire.

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?

As discussed in response to Question 24, there are no one-size-fits-all solutions that OSPs should be required to adopt to qualify for the Section 512 safe harbors.

Question 27: Is the limited injunctive relief available under section 512(j) a sufficient and effective remedy to address the posting of infringing material?

Yes. The limited injunctive relief available under Section 512(j) strikes the appropriate balance among the policies Congress weighed in enacting Section 512. Permitting more sweeping or burdensome injunctive relief would undermine the effectiveness of the safe harbor provisions.



Other Issues

Question 29: Please provide any statistical or economic reports or studies that demonstrate the effectiveness, ineffectiveness, and/or impact of section 512's safe harbors.

As set forth in the answer to Question 1, the safe harbors have been instrumental in the development of the Internet economy, which has benefitted OSPs and rightsholders alike. The statistics set forth below reflect how the expansion of the Internet has been beneficial to the American economy in general and to the content industry in particular:

- The U.S. captures more than 30% of global Internet revenues.²⁶
- Internet industries were estimated to be responsible for \$966.2 billion of real GDP, which translates to 6% of real GDP in the U.S.²⁷
- The number of U.S. workers employed in the Internet sector increased 107.6% between 2007 and 2012.²⁸
- Global television revenues have been projected to grow by 24% from 2012 to 2017.²⁹
- Total revenues in the fiction and nonfiction book industry were up 17% from 2008 to 2014.³⁰
- Revenues from music subscription services rose 39% in 2014 to \$1.57 billion.³¹

The safe harbor provisions—and the certainty they provide—have also been a critical concern to the angel investors who are essential to the early-stage development of OSPs, as reflected in the following statistics:

- 80% of angel investors are uncomfortable investing in business models beset by regulatory ambiguity.³²

²⁶ McKinsey Global Institute, Internet matters: The Net's sweeping impact on growth, jobs, and prosperity, at 4 (May 2011), available at <http://www.mckinsey.com/industries/high-tech/our-insights/internet-matters>.

²⁷ Internet Association, Measuring the U.S. Internet Sector, at 5 (Dec. 10, 2015), available at <http://internetassociation.org/wp-content/uploads/2015/12/Internet-Association-Measuring-the-US-Internet-Sector-12-10-15.pdf>.

²⁸ *Id.* at 7.

²⁹ Steven Johnson, The Creative Apocalypse That Wasn't, THE NEW YORK TIMES MAGAZINE (Aug. 19, 2015), available at <http://www.nytimes.com/2015/08/23/magazine/the-creative-apocalypse-that-wasnt.html? r=2>.

³⁰ *Id.*

³¹ IFPI Digital Music Report, Charting the Path to Sustainable Growth, at 15 (2015), available at <http://www.ifpi.org/downloads/Digital-Music-Report-2015.pdf>.



- Regulations making users more easily prosecuted for copyright violations would reduce the pool of interested angel investors by 48%.³³
- 87% of angel investors would prefer making an investment in a company with several competitors, under today’s regulatory rules, as compared to 13% who would prefer no competitors but tighter regulations.³⁴

Question 30: Please identify and describe any pertinent issues not referenced above that the Copyright Office should consider in conducting its study.

In considering the efficacy and structure of Section 512, the Copyright Office should assess how the current statutory damages regime chills innovation. As discussed above, Section 512 has largely succeeded in providing predictability for—and fostering investment in—technologies that fall within the four statutory safe harbors. That stability and investment has revolutionized our economy, creating millions of jobs and extraordinary benefits for consumers and businesses.

Many of today’s disagreements about the application of the DMCA safe harbors, however, are driven by the crushing nature of statutory damages as applied against intermediaries for the activities of a small minority of users. Reforming statutory damages would have the salutary effect of reducing the “temperature” of many of today’s most difficult copyright policy issues, including those surrounding Section 512. We urge the Copyright Office to take up the issue of statutory damages reform, as the Internet Policy Task Force recently recommended in its white paper on digital copyright issues.³⁵

* * *

Google appreciates the opportunity to share its perspective and experience, and we look forward to continued engagement with the Office on these topics.

³² Booz & Company, Inc., *The Impact of U.S. Internet Copyright Regulations on Early-Stage Investment A Quantitative Study*, at 16 (2011), available at <http://www.strategyand.pwc.com/media/uploads/Strategyand-Impact-US-Internet-Copyright-Regulations-Early-Stage-Investment.pdf>.

³³ *Id.* at 6.

³⁴ *Id.* at 20.

³⁵ Dept. of Commerce Internet Policy Task Force, *White Paper on Remixes, First Sale, and Statutory Damages* (Jan. 2016), available at <http://www.uspto.gov/learning-and-resources/ip-policy/copyright/white-paper-remixes-first-sale-and-statutory-damages>.