Chairman Coble, Ranking Member Nadler, and Members of the Subcommittee:

Thank you for the opportunity to testify today regarding Title II of the Digital Millennium Copyright Act of 1998 ("DMCA"), codified in Section 512 of title 17 of the U.S. Code.

The DMCA’s ‘safe harbors’ for online service providers are one of the foundations of the modern Internet, which have allowed for an explosion of creativity and free expression. Today, the Internet enables more than $8 trillion in e-commerce every year. The ‘safe harbors’ have been crucial not only to Google’s many online products and services, but also to those of nearly every other Internet company.

The media landscape has evolved since the DMCA was enacted over 15 years ago. The traditional entertainment industries have begun to harness the power of the Internet to drive revenue for creators and develop new audiences. Digital platforms have quickly become a dominant form of distribution for music, movies, books, and all forms of creative media.

Music is a great example: in 2012, digital music grew to 59% of total industry revenues. Music streaming services, such as Spotify, Pandora, or Google Play Music All Access, are seeing explosive growth around the world. Nielsen and Billboard reported that on-demand audio streams rose 103% in 2013, and they now factor in the popularity of music on YouTube when determining the ranking for songs on their charts.

At the same time, more music, video, text, software, and all kinds of media are being created by more people than ever before. Every kind of creative endeavor, both amateur and professional, is

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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 a global audience directly, without the traditional middlemen.⁴

Google and YouTube are now major contributors in this new ecosystem. Over the past few years, YouTube has generated over a billion dollars for the music industry alone. There are over a million partners making money from YouTube. And we now have partnerships with every major record label and movie studio to sell or stream music and movies on Google Play. We’ve made tremendous progress over the past several years and will continue to partner with the entertainment industry and creators of all kinds to bring entertainment and culture to the world.

The DMCA Has Enabled Economic Opportunities

These opportunities for creators are the direct result of the DMCA safe harbors. Congress rightly understood in 1998 that by establishing clearer copyright “rules of the road” for service providers, it could encourage investment in online services, while also providing copyright owners with new enforcement options online. The DMCA therefore established copyright “safe harbors” for four functions at the heart of the internet: providing internet access, providing caching services, hosting content on behalf of users, and linking.⁵ In order to qualify for these safe harbors, online service providers are required to meet a number of requirements, including responding expeditiously when notified by copyright owners of infringing materials or activity on their networks.

In order to facilitate cooperation between copyright owners and service providers, Congress established a set of responsibilities to be shared between them. Congress put a notice-and-takedown process at the heart of the safe harbor structure. That process describes in detail what information a copyright owner or its representative must provide to a service provider when sending a takedown notice. In response, a service provider must expeditiously disable access to the infringing activity or material, or else forfeit the safe harbor. Service providers are also obligated, as a condition of the safe harbor, to terminate subscribers who are proven to be repeatedly using the service to infringe. Congress also included a number of safeguards intended to protect Internet users from abusive or unfounded copyright allegations.

The DMCA’s shared responsibility approach works. Copyright holders identify infringement and, if they choose, request its removal. Upon notification, online service providers remove or disable access to the infringing material. This approach makes sense, as only copyright holders know what material they own, what they have licensed, and where they want their works to appear.

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⁵ 17 U.S.C. § 512(a)-(d).
online. Service providers cannot by themselves determine whether a given use is infringing. A
text, song, image, or video can infringe copyright in the context of one site but be legal on
another, through license or in the context of criticism, political speech, or other legally protected
use.

And increasingly, copyright owners welcome certain kinds of fan-driven uses, even if formally
unauthorized, as an important part of viral marketing and promotional efforts. Accordingly,
courts have repeatedly found that the initial responsibility of identifying infringing works online
and notifying service providers properly falls on the copyright owner. After being notified, the
DMCA shifts the burden to the service provider to disable access to the material promptly.

The careful balance struck by the DMCA safe harbors created the legal infrastructure for the
Internet we know today, making possible online platforms like eBay, Amazon, YouTube,
Facebook, and Twitter, which in turn have unleashed new sources of creativity, economic
development, and jobs. Today, more than 66,000 service providers have registered DMCA
copyright agents with the Copyright Office, providing a catalog of the diversity of the online
activities protected by the safe harbors. At the same time, the courts have made it clear that the
DMCA safe harbors provide no shelter for illegitimate sites seeking to shirk their
responsibilities.

Google's Experience with the DMCA Safe Harbors

Google relies on all four of the safe harbors established in Section 512. Google Fiber, which we
hope will ultimately deliver gigabit residential broadband access in dozens of cities around the
United States, relies on the 512(a) safe harbor for conduit functions necessary to provide internet
access to subscribers. Google’s Web Cache relies on the 512(b) safe harbor for its caching
functions. There are a broad array of Google services that rely on 512(c)’s safe harbor for
hosting content on behalf of users, including YouTube, Gmail, Drive, and Google Plus. And,
finally, Google Search relies on the 512(d) safe harbor that applies to linking and information
location tools generally. None of these services could exist in their current form without the
DMCA safe harbors. Courts have repeatedly upheld the applicability of the safe harbors to
Google services, recognizing that Google lives up to its obligations as a service provider under
the statute.

Google's experience with the DMCA’s notice-and-takedown provisions dates back to 2002. In

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6 Comments of the Computer & Communications Industry Association (CCIA), Request for Comments on Department of Commerce
Green Paper, Copyright Policy, Creativity, and Innovation in the Digital Economy, Dkt. No. 130927852–3852–01, filed Nov. 13,
March of that year, we received our first takedown notice for Search, sent by the Church of Scientology, seeking to remove links to documents posted as part of criticism of the church. In the years since, Google has seen the volume of DMCA takedown notices increase dramatically.

For example, in 2010, copyright owners asked us to disable access to approximately 3 million items across all of our products. In 2013, in contrast, we received takedown notices for approximately 230 million items. In other words, today we receive takedown notices for more items every week than we received in all of 2010. Despite the rapidly increasing volumes, Google has managed to reduce the average time to process takedown notices, which is a testament to the efforts Google has made to improve and scale its procedures. Today, for example, when we receive a copyright removal request for Search, our average turnaround time is less than 6 hours.

As far as we can ascertain, there are two forces behind the rapid increase in takedown notices. First, over the past 3 years, Google has made substantial investments in making the process more efficient. As the process has become more efficient, copyright owners have been increasingly willing to use it. It has sometimes been a challenge to meet the rising demand, and hundreds of Google employees are involved in the effort. Nevertheless, Google remains committed to making the DMCA process work smoothly, quickly, efficiently, and at no charge for copyright owners.

Second, volumes have increased because copyright owners and enforcement vendors have steadily upgraded their ability to detect copyright infringements online. Over the past three years, we have seen the emergence of a robust, competitive market aimed at providing enforcement services to copyright owners. Today, firms like Marketly, MarkMonitor, and Degban offer their detection services to copyright owners and their industry associations. This has made it cheaper and easier for copyright owners both large and small to send notices to service providers.

The increasing volume of takedown notices demonstrates the continued relevance and effectiveness of the DMCA’s notice-and-takedown regime. Copyright owners are using the process ever more intensively, suggesting that they continue to find it valuable. As copyright owners and enforcement vendors continue to deploy new technologies to identify uses of their works online, we expect the cost per notice to continue to drop, and takedown volumes to concomitantly increase. This suggests that the notice-and-takedown aspect of the DMCA safe harbors will continue to be a vital part of the efforts to battle infringement online.

Google has also made extensive efforts to make it easy to submit takedown notices, whether on behalf of a multinational entertainment company or an individual artist. So, for example, 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. This is supplemented by
“trusted submitter” programs to accommodate the needs of rightsholders and enforcement vendors who use automated means to submit large numbers of notices for products like Search, YouTube, Blogger, and Picasa. And, of course, Google has never charged copyright owners, whether large or small, to submit or process a DMCA takedown notice. As a result of these efforts to make the process easy to use for as many copyright owners as possible, during 2013, Google received DMCA notices from thousands of different submitters, from nearly every country on the globe, in 70 different languages.

Unfortunately, Google also has experience with abuses of the DMCA’s notice-and-takedown system. Here are just a few examples:

- A poet sent repeated takedown notices targeting criticism and commentary relating to the poet’s online copyright enforcement efforts.
- 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.
- Major broadcast news networks sent takedown notices targeting videos from the McCain-Palin campaign that included brief excerpts from news footage, just weeks before the 2008 presidential election.
- 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.

These are only a sample of the troubling takedown notices that Google receives, often repeatedly from the same vexatious submitters.

In enacting the DMCA safe harbors, Congress included provisions intended to deter abuse, including a “counternotice” process whereby a user could contest a takedown directed at his or her content and an affirmative cause of action against those who include misrepresentations in their notices. While those provisions are valuable, they have not proven sufficient to deter those who try to use DMCA notices, not to protect copyright interests, but instead as a pretext for censorship or to interfere with legitimate competitors.

As the volume of removal notices continues to rise, detecting inaccurate or abusive notices continues to pose a challenge. Google invests continuously in engineering and machine learning solutions to address this challenge. Our inclusion of data regarding the DMCA notices we receive in our Transparency Report has also proven useful in detecting abusive notices, enabling journalists, webmasters, and other interested members of the public to identify and respond to unfounded takedowns.

**Beyond the DMCA Safe Harbors**
While the DMCA safe harbors have proven themselves to be effective and valuable for service providers and copyright owners alike, they are not, by themselves, a complete solution to the problem of copyright infringement online. Piracy has been a challenge online, and Google takes that challenge seriously. Accordingly, Google has invested in many measures that go beyond the requirements of the DMCA.

For example, Google has invested more than $60 million to date on the development of Content ID on YouTube. With this system, rightsholders are able to identify user-uploaded videos that are entirely or partially their content, and choose, in advance, what they want to happen when those videos are found.

This is how it works: Rightsholders deliver to YouTube reference files (audio-only or video) of content they own, metadata describing that content, and policies describing what they want YouTube to do when it finds a match. YouTube compares videos uploaded to the site against those reference files. Our technology automatically identifies the content and applies the rightsholder’s preferred policy: track, monetize, or block. Copyright owners have “claimed” more than 200 million videos on YouTube with the help of Content ID.

Thanks to the options that Content ID affords to copyright owners, it’s not just an anti-piracy solution, but also a new business model for copyright owners and YouTube alike. The vast majority of the more than 4,000 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.

While Google is proud to have developed and deployed Content ID, it is important to note that Content ID is not a one-size-fits-all solution for every sort of service or all kinds of service providers. So, for example, YouTube could never have launched as a small start-up in 2005 if it had been required by law to first build a system like Content ID. Nor does such a system work for a service provider that offers information location tools (like search engines and social networks) but does not possess copies of all the audio and video files that it links to. And, of course, Content ID is not perfect, sometimes mistakenly ascribing ownership to the wrong content and sometimes failing to detect a match in a video.

The DMCA safe harbors have succeeded precisely because they do not attempt to impose detailed technology mandates on the rapidly evolving world of online technologies and service providers. Instead, they provide a floor of legal certainty for service providers large and small, upon which content owners and service providers can build further voluntary measures.
For Search, Google is proud that, for the vast majority of media-related queries typed by users each day, our search results point to authorized content. This is a significant achievement considering that we receive more than a billion queries each day, in dozens of languages, and 15% of those queries have never been searched on Google before.

This nevertheless leaves the tiny proportion of infrequently typed queries where there is still more work to be done. As described above, the DMCA’s notice-and-takedown procedure is one important element in the effort to address these remaining results. It is only with the help of copyright owners that we can identify which results are infringing and remove them.

In addition to removing pages from search results when notified by copyright owners, Google also factors in the number of valid copyright removal notices we receive for any given site as one signal among the hundreds that we take into account when ranking search results. As a result, sites with a relatively high number of valid removal notices may appear lower in search results. Google is the only search engine that has implemented such a demotion signal in its ranking algorithm, and we believe that this ranking change should help users find legitimate, quality sources of content more easily.

Our experience with the demotion signal, however, has taught us that it will only succeed if there are better, legitimate results to show above those that have been demoted. There is work to be done on this score, and we have been actively engaged with the motion picture and music industries to explore how we can encourage legitimate sites to take the necessary “search engine optimization” (SEO) steps to that will allow those sites to appear in search results above unauthorized sources. We look forward to continuing our work, in collaboration with other stakeholders, to further evolve and enhance the demotion signal.

We also believe that there are more effective ways to strike at the root causes of piracy online, in hopes of getting ahead of the whack-a-mole problem.

The best way to battle piracy is with better, more convenient, legitimate alternatives to piracy, as services ranging from Netflix to Spotify to iTunes have demonstrated. The right combination of price, convenience, and inventory will do far more to reduce piracy than enforcement can.

The music industry has demonstrated the effectiveness of this approach by licensing a variety of music services including free, advertising-supported streaming services (like Spotify and Pandora), download stores (like iTunes), and on-demand subscription products (like Google Play Music All Access). A survey recently released by the Swedish music industry shows that since 2009, the number of people who download music illegally in Sweden decreased by more than 25
percent after the introduction of new legal services such as Spotify.\(^8\) Similar trends were seen in a 2013 survey from NPD Group.\(^9\) And a recent study conducted by Spotify found that overall piracy rates in the Netherlands have declined dramatically, while the popularity of legitimate digital music services has greatly increased.\(^10\)

Film and television have had success combating piracy with legitimate alternatives, as well. A recent study by Carnegie Mellon University researchers found that ABC's decision to add its television content to Hulu.com led to a nearly 20% drop in piracy for that media.\(^11\) In a recent interview with Stuff magazine, Netflix's Chief Content Officer Ted Sarandos said that when Netflix launches in a new country, piracy rates in that country drop. In his opinion, the best way to reduce piracy is by "giving good options."\(^12\) We were also excited to learn recently that Warner Bros. intends, for the first time, to release one of its major films simultaneously in theaters and online.\(^13\) The best strategy for reducing the demand for unauthorized versions of movie content still in theaters is to provide consumers with authorized online movies for rent or purchase.

Google is not just waiting for others to do the work. Across our product line, we are also heavily invested in bringing new, authorized sources of content to consumers. Whether it is music videos and video rentals on YouTube, movie and TV downloads on the Google Play store, or unlimited on-demand streaming music on Google Play Music All Access, Google is racing to be part of the mix of compelling services that are luring consumers away from unauthorized alternatives.

Until these compelling legitimate alternatives have fully displaced pirate sites, however, there is more that needs to be done. We have long said that the most effective way to combat rogue sites that specialize in online piracy is to attack their sources of revenue. These sites are almost exclusively for-profit enterprises, and so long as there is money to be made by their operators, other anti-piracy strategies will be far less effective.

As a global leader in online advertising, Google is committed to rooting out and ejecting rogue sites from our advertising services. Google continues its efforts, both proactive and reactive, to detect and act against advertisers and web publishers who violate our policies against copyright infringement. Since 2012, we have ejected more than 73,000 sites from our AdSense program, the vast majority of those caught by our own proactive screens.


In April 2011, Google was among the first companies to certify compliance in the Interactive Advertising Bureau’s (IAB’s) Quality Assurance Certification program, through which participating advertising companies will take steps to enhance buyer control over the placement and context of advertising and build brand safety. This program will help ensure that advertisers and their agents are able to control where their ads appear across the web.

In July 2013, Google worked with the White House’s Office of the U.S. Intellectual Property Enforcement Coordinator (IPEC) and other leading ad networks to participate in Best Practices and Guidelines for Ad Networks to Address Piracy and Counterfeiting. Under these best practices, ad networks will maintain and post policies prohibiting websites that are principally dedicated to engaging in copyright piracy from participating in the ad network’s advertising programs. By working across the industry, these best practices should help reduce the financial incentives for pirate sites by cutting off their revenue supply while maintaining a healthy Internet and promoting innovation.

**Conclusion**

The DMCA safe harbors are now more than 15 years old. While they are not perfect, they have proven to be a remarkable success at their stated aim — to encourage investment in internet technologies by reducing the uncertainties created by copyright law, while also giving copyright owners new tools to address infringement online.

There is also a new context. The entertainment and culture industries have begun to adapt to the digital environment and are partnering with technology companies to sell and distribute their media. Services like YouTube, iTunes, Netflix, Google Play, Amazon, Hulu, and hundreds other are making content available legally online. This would not have been possible if Internet platforms, the very companies helping drive digital revenue to the creative industries, had faced existential threats from copyright litigation.

In short, the balance struck by the DMCA is working: the legitimate online platforms made possible by the DMCA safe harbors are today driving billions of new dollars to the entertainment industries every year. There is every reason to think that this virtuous cycle will only be reinforced as today’s fledgling internet startups become tomorrow’s global online platforms.

Google, like many other service providers, has built additional voluntary measures to combat piracy on top of the requirements set down by the DMCA safe harbors. This combination of “rules of the road” and evolving voluntary initiatives has proven itself to be an engine of economic growth and technology innovation for more than 15 years, while simultaneously
affording rightsholders new ways to combat infringement online.

Today, we have an opportunity to build on the model that has allowed the U.S. digital economy to flourish. As Congress considers trade treaties and other agreements with countries across the world, it should advocate for provisions reflecting the safe harbors that have become a pillar of U.S. law. Continued commitment to the principles set out in the DMCA provisions are a key part of keeping the American internet industry at the forefront of the global economy in the 21st century.

Thank you for your attention and the opportunity to contribute our views.