

**The Digital Millennium Copyright Act at 22:
What Is It, Why Was it Enacted, and Where Are We Now?
Questions for the Record for Professor Sandra Aistars
Submitted March 2, 2020**

Questions from Senator Thom Tillis

1. *How did the advent of the internet impact copyright infringement in the 1990s? What did online copyright infringement look like in the 1990s when the DMCA was enacted? And how does the infringement of the dial-up internet era compare to infringements taking place today?*

Sandra Aistars: At the time the DMCA was passed, Members of Congress realized that “[c]opyright laws have struggled through the years to keep pace with emerging technology from the struggle over music played on a player piano roll in the 1900’s to the introduction of the VCR in the 1980’s. With this constant evolution in technology, the law must adapt in order to make digital networks safe places to disseminate and exploit copyrighted materials.”¹

Much as Congress anticipated, profound technological changes – many for the better – have occurred since the 1990s when the DMCA was passed. It is beyond my expertise to catalog all of these changes, but some that are particularly relevant here include innovation in increased upload/download speeds and the unprecedented growth of internet companies such as Google/YouTube, Facebook, and others, that have made it faster than ever to transfer large quantities of data quickly and efficiently and, for millions of users around the world, to interact with materials uploaded to such networks. Professor Mark Schultz speaks to some of these issues in his written testimony, and I agree with his analysis.

To put it plainly, if in the 1990s it was possible to contain infringement by addressing it on a link-by-link, file-by-file basis, that has not been the case for nearly two decades. The user-generated content sites of the 1990s were Usenet sites and bulletin board-based. Much has changed since then. Napster was launched in 1999 and broadband technology became widely available in the early 2000s. Today, copyrighted works are regularly made available on sophisticated social media platforms and other sites by companies that are among the largest and most profitable in the world. Accordingly, much as Congress passed the DMCA in 1998 to address the challenges and opportunities that existed then, it is wise to review and update the approaches to address copyright infringement on the internet under today’s circumstances.

2. *What was the historical context for the enactment of the DMCA? What were the key issues, legal decisions, agreements, and other activities it sought to address?*

A: Pages 2-8 of the Senate Report accompanying S.2037, the Digital Millennium Copyright Act of 1998, provide a concise overview of the historical context for the enactment of the DMCA.² Steven Metalitz and Judge Edward Damich also outline their recollections of the process and need for the DMCA in their testimonies, which comport with my memory as well.

¹ S. Rep. No. 105-190, at 1 (1998).

² S. Rep. No. 105-190, at 2-8.

Essentially, Title I of the Act implemented the World Intellectual Property Organization Copyright Treaty (WCT) and the WIPO Treaty on Performances and Phonograms (WPPT). Title II of the Act sought to provide certainty for copyright owners and online service providers regarding copyright infringement liability online.

It is important to note that the DMCA was a compromise for all parties involved, and that compromises were struck to enable passage of all parts of the Act. Both the sections of the DMCA that ultimately became Section 512 and Section 1201 of Title 17 likewise included measures intended to correct any issues revealed in day-to-day practice and to encourage cooperation between all stakeholders over time (e.g., Section 512(i) concerning the development or identification of “standard technical measures,” and the provisions establishing a triennial rulemaking proceeding by the Copyright Office to set out exemptions from the anti-circumvention provisions of Section 1201). It is incorrect to view Section 1201 as provisions “for copyright owners” and Section 512 as provisions “for online service providers,” as some may suggest.

- 3. When it passed the DMCA Congress envisioned copyright owners and ISPs/platforms working together and reaching voluntary agreements on issues such as standard technical measures. Yet, twenty years later, very few—if any—effective voluntary agreements have been reached and there are no approved standard technical measures under 512(i). Why is that? Is it because ISPs/platforms are comfortable with the current system and have little incentive to meet copyright owners halfway?*

A: Judging from testimony and filings of various parties in hearings before the Copyright Office on Section 512, testimony to the House Judiciary Committee on the DMCA and Section 512 during its comprehensive review of the Copyright Act, and testimony in this hearing, it does appear that platforms are satisfied with the status quo and do not have any incentive to engage in collaboration that neither the courts nor any other government authority seem to be requiring from them. Certainly, technologies exist – including Audible Magic, Content ID, and others – that are widely implemented by many stakeholders; however, they have not as yet been identified as standard technical measures (STMs). As I mention in my written testimony, the courts have largely supported online service providers’ litigation strategy to eliminate requirements for platforms to act independently when they become aware of infringements on their services whether by actual or “red flag” knowledge. Thus, there is no reason for online service providers to look towards identifying additional helpful measures as intended by Section 512(i).

4. *The DMCA, and more specifically Section 512's safe harbor provisions, were drafted in a way to allow pioneering internet platforms and services to innovate and grow without the constant threat of liability for the third-party content uploaded to their websites or using their services. Twenty-plus years later, internet platforms that grew up under these safe harbors have become some of the most powerful and wealthy entities in the world, and they have created business models based on their ability to monetize the content of others while turning a blind eye to infringement. Given this change of circumstances, do you think these companies ought to play a more proactive role in combating online infringement and assume more accountability for the misappropriation facilitated by their services?*

A: Yes. Professor Mark Schultz includes an eloquent discussion of this issue in his testimony, with which I agree. Given the benefits internet companies have reaped from the safe harbor provisions, they should be expected to also engage in collaborative efforts to detect and deal with infringements on their platforms, as Section 512 anticipated.

I have identified various changes that this Committee might consider in order to restore the balance originally achieved in the DMCA. I do not advocate doing away with the protections that safe harbors have afforded internet companies because, along with the negative, they have also done much to spur positive developments and creativity on the internet. Nevertheless, I believe that the last twenty-two years of applying the DMCA to everyday practice have demonstrated that the marketplace and the courts have eroded the original intent of Congress.

In considering legislation, it will be important to focus on how best to restore those elements of the DMCA intended to foster cooperation between stakeholders. One clear area of legislative reform would be to restore and clarify the original meaning of "red flag" knowledge. Similarly, elements of the DMCA that have received little or no attention -- such as the concept of sending notice of infringements by means of representative lists, rather than link-by-link, and the requirement to accommodate standard technical measures (STMs) -- should be revisited and incorporated more effectively into any new legislation.

Much has also been said about the concept of "notice and staydown," and I certainly support that goal. Legislation could provide incentives for internet businesses to incorporate technologies or policies to bring us closer to that goal. Some progress has already been made on this in the European Union's Directive on Copyright in the Digital Single Market, demonstrating not only that this is an achievable goal, but that internet services operating in the EU will already be required to meet such standards.³

There are also practical measures stakeholders could pursue independently of legislation. For example they could create uniform automated means of providing notices, allowing all copyright owners access to technology and tools, such as the technology behind Content ID that makes the monitoring and sending of notices more efficient, and enumerating technologies which have

³ Directive 2019/790 of the European Parliament and of the Council of 17 April 2019 on copyright and related rights in the Digital Single Market and amending Directives 96/9/EC and 2001/29/EC, 2019 OJ (L 130/92), <https://eur-lex.europa.eu/eli/dir/2019/790/oj>.

become “standard” to screen works prior to upload or to make identification and removal or monetization of infringing posts easier.

Particularly given that online service providers are profiting from the copyrighted work of others made available by their platforms, they should share the responsibility to protect such works from infringement. Sophisticated online service providers have the resources and capabilities to solve these problems. Congress should motivate them to do so.

5. *What are some of the practical challenges posed by the digital age that were unforeseen when the DMCA was enacted?*

A: Steve Metalitz’s testimony identified various unforeseen challenges posed by developments in the digital age, and I agree with his assessment. Significantly greater volume, velocity, and ease of infringement has occurred than was anticipated, but rather than keeping pace with these developments, courts have interpreted Section 512 in such a limiting fashion so as to cripple the law’s ability to deal with infringements online.

Likewise, sophisticated software has become standard in many consumer products that have little or nothing to do with the original goals of the DMCA. While such software may well be protectable by copyright law, Section 1201 (and the Copyright Act more broadly) does not need to be the vehicle to address unanticipated challenges posed by the use of software in devices and vehicles. Other areas of the law, such as consumer protection and antitrust, could be deployed to solve concerns related to interoperability and the ability of consumers and mechanics to repair devices and vehicles.

6. *In order to better understand the various parties who participated in the DMCA legislative process, can you give us a sense of who the government and non-government participants were? Did individual creators or small businesses have a voice in the proceedings?*

A: The Senate Report accompanying the legislation contains a detailed description of the hearings and negotiations leading up to the passage of the DMCA. According to that report:

Testimony was heard from Fritz Attaway, Senior Vice President, Government Relations and Washington General Counsel, Motion Picture Association of America; Cary Sherman, General Counsel, Recording Industry Association of America; Daniel F. Burton, Vice President, Government Relations, Novell; George Vradenburg, Senior Vice President and General Counsel, America Online, Inc.; Roy Neel, President and C.E.O., U.S. Telephone Association; and Professor Robert L. Oakley, Director of Law Library and Professor Law, Georgetown University Law Center. . . .

The Subcommittee on Courts and Intellectual Property of the House Judiciary Committee held two days of hearings on H.R. 2281, the WIPO Copyright Treaties Implementation Act, and H.R. 2180, the Online Copyright Liability Limitation Act, on September 16 and 17, 1997. Bruce Lehman, Assistant Secretary of Commerce and Commissioner of Patents and Trademarks, Patent and Trade-

mark Office, and Marybeth Peters, Register of Copyrights, Copyright Office of the United States, Library of Congress testified on behalf of the Administration. The Subcommittee also heard testimony from Roy Neel, President and Chief Executive Officer, United States Telephone Association; Jack Valenti, President and Chief Executive Officer, Motion Picture Association of America; Robert Holleyman, II, President, Business Software Alliance; M.R.C. Greenwood, Chancellor, University of California, Santa Cruz, on behalf of the Association of American Universities and the National Association of State Universities and Land Grant Colleges; Tushar Patel, Vice President and Managing Director, USWeb, Lawrence Kenswil, Executive Vice President, Business and Legal Affairs, Universal Music Group; Marc Jacobson, General Counsel, Prodigy Services, Inc.; Ken Wasch, President, Software Publishers Association; Ronald G. Dunn, President, Information Industry Association; John Bettis, Songwriter, on behalf of the American Society of Composers, Authors, and Publishers; Allee Willis, Songwriter, on behalf of Broadcast Music, Inc. (BMI); Robert L. Oakley, Professor of Law, Georgetown University Law Center and Director, Georgetown Law Library, on behalf of a Coalition of Library and Educational Organizations; Johnny Cash, Vocal Artist, with Hilary Rosen, President and Chief Executive Officer, Recording Industry Association of America; Allan Adler, Vice President, Legal and Governmental Affairs, Association of American Publishers; Gail Markels, General Counsel and Senior Vice President, Interactive Digital Software Association; Mike Kirk, Executive Director, American Intellectual Property Law Association; Thomas Ryan, President, SciTech Software, Inc.; Mark Belinsky, Vice President Copy Protection Group, Macrovision, Inc.; Douglas Bennett, President, Earlham College, Vice President, American Council of Learned Societies, on behalf of the Digital Futures Coalition; Edward J. Black, President, Computer and Communications Industry Association; Christopher Byrne, Director of Intellectual Property, Silicon Graphics, Inc., on behalf of the Information Technology Industry Council; and Gary Shapiro, President, Consumer Electronics Manufacturer's Association, and Chairman, Home Recording Rights Coalition.⁴

As the above list shows, although several musicians testified, most of the participants in the hearings and negotiations were major industry representatives or representatives of institutions like libraries and educational institutions. I refer you to pages 2-8 of the Senate Report for further details on the involvement of other governmental officials and agencies.

7. *My understanding is that when the DMCA was enacted, the online platforms proposed a system in which they would simply have to take down infringing files in response to notices from rightsholders. Why was that system rejected by Congress?*

A: It is my understanding that in crafting the provisions of Section 512, Congress intended to differentiate between good actors – those who comply with the various provisions of the safe harbor, such as by participating cooperatively with copyright owners to detect and deal with infringements on their networks and by implementing effective repeat infringer policies – and

⁴ S. Rep. No. 105-190, at 2-8.

bad actors – those who turn a blind eye to or even encourage infringements on their services. Thus, implementing a mere notice and takedown system would not have served that purpose.

Moreover, a notice and takedown-only provision would put a disproportionate burden on copyright owners to police platforms (and indeed the entire internet) for infringements, while allowing the online platforms to benefit financially from the infringements occurring on their networks unless and until a copyright owner were able to locate them and send a notification. Unfortunately, despite Congress' rejection of such an approach, common practice coupled with numerous decisions in cases interpreting the DMCA's "red flag" knowledge standard have reduced the bargain struck in Section 512 to just such a notice and takedown only provision.

8. *In order for service providers to avail themselves of safe harbor protection, the DMCA established a duty to remove infringing content even without the input from copyright owners when they have actual or red flag knowledge of infringement. Do you believe that service providers have held up their end of the bargain and investigated infringing activity when they have red flag knowledge? Has case law supported the intent of Congress in incentivizing service providers to be proactive when red flag knowledge exists?*

A: Because of the unfortunate line of cases outlined in my written testimony, service providers have not been required to identify and remove infringing materials when they have red flag knowledge of an infringement. As my colleague, Professor Devlin Hartline put it:

Here's where we are after *Capitol Records v. Vimeo*: A service provider can encourage its users to infringe on a massive scale, and so long as the infringement it encourages isn't the specific infringement it gets sued for, it wins on the safe harbor defense at summary judgment. This is so even if there's copious evidence that its employees viewed and interacted with the specific infringing material at issue. No jury will ever get to weigh all of the evidence and decide whether the infringement is obvious. At the same time, any proactive steps taken by the service provider will potentially open it up to liability for having actual knowledge, so the incentive is to do as little as possible to proactively "detect and deal" with piracy. This is not at all what Congress intended. It lets bad faith service providers trample the rights of copyright owners with impunity.⁵

9. *In seeking provisions in the DMCA that would minimize their exposure to liability, ISPs likened themselves to common carriers in the telecom industry who enjoyed broad immunities from responsibility for the actions of their customers because they served as a mere conduit or utility. Do you believe that this comparison between ISPs and telecom providers was appropriate 22 years ago? What about now?*

A: I believe it was and continues to be inappropriate to compare online service providers with common carriers in the telecommunications industry. The services at issue here do not merely provide a service analogous to a basic telecommunications service, but rather provide enhanced

⁵ Devlin Hartline, *Capitol Records v. Vimeo: Courts Should Stop Coddling Bad Actors in Copyright Cases*, IP WATCHDOG (June 22, 2016) <https://www.ipwatchdog.com/2016/06/22/capitol-records-vimeo-copyright/id=70288/>.

services by acting on the content, code, protocol, and other aspects of the subscriber's information.

Moreover, many services taking advantage of the DMCA safe harbor also engage actively with the substance and not merely the formatting of the content flowing through their "pipes" in order to earn revenues from advertising, subscriptions, and sales occurring on their platforms. Indeed, internet service providers have themselves argued to the Supreme Court that they should not be regulated like common carriers.⁶

10. Trademark law does not contain safe harbor provisions, and yet internal notice and takedown mechanisms have been implemented among platforms that often deal with infringing and counterfeit materials. Shouldn't platforms be just as willing to take voluntary action to monitor and combat copyright infringement?

A: Yes, platforms should be willing to share the burden of detecting and dealing with copyright infringement. It would benefit all parties concerned – the platforms, the rightsholders, other legitimate businesses using copyrighted works, and the public at large – if infringing materials were swiftly removed by internet platforms when they detect them themselves. Although it is my understanding that the voluntary trademark infringement solutions employed by some platforms to detect and deter counterfeit and other illegal materials are not a complete solution to the problems experienced by trademark owners, the willingness to develop and deploy voluntary solutions shows that platforms are able to combat infringement directly, and it demonstrates that useful technology to deal with infringements exists and is commercially reasonable to deploy – at least by the companies that receive the bulk of infringement notices.

11. Projects such as the Google Transparency Report have tracked the extreme volume—75 million in February 2019 alone—of DMCA-related take down notices received. Are these astonishing numbers evidence of a system working efficiently and effectively?

A: In my opinion, the volume of notices being sent and responded to shows that the system is not working well for any party involved. The huge volume of accurate and uncontested notices suggests that the real volume of infringements is likely many times what Google is able to track, especially since many independent artists and small businesses have given up sending DMCA notices altogether. It benefits no one to have to spend time and money searching for, sending, and responding to notices of infringement, when both the senders and the recipients of notices could be engaged in more productive and creative activities.

12. Do you believe ISPs are doing enough to educate users on copyright infringement and the related harms? If not, what more could be done?

A: One particularly valuable education effort that ISPs and platforms could undertake is to educate users during the upload process about which materials are likely to be infringing and to require users to actively acknowledge and certify that the materials being uploaded do not infringe copyright and to provide any relevant reasoning for their assertions.

⁶ See *National Cable Telecommunications Association v. Brand X Cable Services*, 545 U.S. 967 (2005).

13. *Congress recognized at the time of the DMCA’s enactment that the only thing that remains constant is change and that the enactment of the DMCA was only the beginning of an ongoing evaluation by Congress on the relationship between technological change and U.S. copyright law. Given how drastically technology, the internet, and our online existence has changed and evolved over the past twenty-five years, what changes or solutions would you suggest to deal with the changed circumstances?*

A: As noted in my written testimony and my response to Question 4, I have identified various changes that this Committee might consider in order to restore the balance originally achieved in the DMCA. I do not advocate doing away with the protections safe harbors have afforded internet companies, because along with the negative, they have also done much to spur positive developments and creativity on the internet. Nevertheless, I believe that the last twenty-two years of applying the DMCA to everyday practice have demonstrated that the marketplace and the courts have eroded the original intent of Congress.

In considering legislation, it will be important to focus on how best to restore those elements of the DMCA intended to foster cooperation between stakeholders. One clear area of legislative reform would be to restore and clarify the original meaning of “red flag” knowledge. Similarly, elements of the DMCA that have received little or no attention – such as the concept of sending notice of infringements by means of representative lists, rather than link-by-link, and the requirement to accommodate standard technical measures (STMs) – should be revisited and incorporated more effectively into any new legislation.

Much has also been said about the concept of “notice and staydown,” and I certainly support that goal. Legislation could provide incentives for internet businesses to incorporate technologies or policies to bring us closer to that goal. Some progress has already been made on this in the European Union’s Directive on Copyright in the Digital Single Market, demonstrating not only that this is an achievable goal, but that internet services operating in the EU will already be required to meet such standards.⁷

There are also practical measures stakeholders could pursue independently of legislation, such as creating a uniform, automated means of providing notices, allowing all copyright owners access to technology and tools such as the technology behind Content ID that make monitoring and sending of notices more efficient, and enumerating technologies that have become “standard” to screen works prior to upload or to make identification and removal or monetization of infringing posts easier.

14. *The Copyright Office is on the verge of releasing its much anticipated 512 report. What do you think are the most important issues the report should address and what would you like to see the report propose concerning these issues?*

A: Consistent with my written testimony, I believe it would be helpful for the Copyright Office to acknowledge that the DMCA is in need of review, ISPs should be held to greater

⁷ Directive 2019/790 of the European Parliament and of the Council of 17 April 2019 on copyright and related rights in the Digital Single Market and amending Directives 96/9/EC and 2001/29/EC, 2019 OJ (L 130/92), <https://eur-lex.europa.eu/eli/dir/2019/790/oj>.

accountability than they have been so far, and the provisions concerning “red flag” knowledge in particular should be revisited to restore Congress’ intent in passing the DMCA.

Questions from Senator Chris Coons

1. *The Senate Judiciary Committee’s 1998 report on the DMCA stated that “technology is likely to be the solution to many of the issues facing copyright owners and service providers in the digital age,” and the Committee “strongly urge[d] all of the affected parties expeditiously to commence voluntary, interindustry discussions to agree upon and implement the best technological solutions available to achieve these goals.” Has this cooperation worked in practice as Congress envisioned it should in connection with both Section 512 and 1201 of the DMCA? Why or why not?*

A: Although numerous successful cross-industry efforts have occurred over the years in support of new formats launched with the backdrop of Section 1201 of the DMCA (e.g., DRM/copy protection solutions for the DVD and Blu-ray formats, similar solutions for various home networking protocols), to date no discussions or solutions have been proposed or agreed upon as to standard technical measures (STMs) under Section 512(i). This is likely because there is no incentive for service providers to engage in such discussions, since Section 512 does not obligate any party to do so. In contrast, Section 1201 requires all stakeholders to respect technical protection measures (TPMs); hence, there are mutually shared interests amongst stakeholders to develop TPMs which are as effective, inexpensive, and easily implemented as possible.

2. *The internet and digital content distribution mechanisms have changed drastically in the past 22 years. What technological and practical challenges exist today that may require revising the DMCA, and what revisions would you suggest?*

A: I share the views expressed by Steven Metalitz and Professor Mark Schultz in their testimonies regarding the practical challenges that exist today that did not exist twenty-two years ago. As I suggest in my response to Senator Tillis’ Question 1 and in my testimony, much as Congress anticipated, profound technological changes – many for the better – have occurred since the 1990s when the DMCA was passed. It is beyond my expertise to catalog all of these changes, but some that are particularly relevant here include innovation in increased upload/download speeds and the unprecedented growth of internet companies such as Google/YouTube, Facebook, and others, that have made it faster than ever to transfer large quantities of data quickly and efficiently and to allow millions of users around the world to interact with materials uploaded to such networks. Professor Mark Schultz speaks to some of these issues in his written testimony, and I agree with his analysis.

To put it plainly, if in the 1990s it was possible to contain infringement by addressing it on a link-by-link, file-by-file basis, that has not been the case for nearly two decades. The user generated content sites of the 1990s were Usenet sites and bulletin boards. Much has changed since then. Napster was launched in 1999, and broadband technology became widely available in the early 2000s. Today, copyrighted works are regularly made available on sophisticated social media and other sites by companies that are among the largest and most profitable in the world. Accordingly, much as Congress passed the DMCA in 1998 to address the challenges and

opportunities that existed then, it is wise to review and update the approaches to address copyright infringement on the internet under today's circumstances.

There is a significantly greater volume, velocity, and ease of infringement that has occurred beyond what was anticipated when the DMCA was enacted, but rather than keeping pace with these developments, courts have interpreted Section 512 in such a limiting fashion so as to cripple the law's ability to deal with infringements online.

I have identified various changes that this Committee might consider in order to restore the balance originally achieved in the DMCA. I do not advocate doing away with the protections safe harbors have afforded internet companies, because along with the negative, they have also done much to spur positive developments and creativity on the internet. Nevertheless, I believe that the last twenty-two years of applying the DMCA to everyday practice have demonstrated that the marketplace and the courts have eroded the original intent of Congress.

In considering legislation, it will be important to focus on how best to restore those elements of the DMCA intended to foster cooperation between stakeholders. One clear area of legislative reform would be to restore and clarify the original meaning of "red flag" knowledge. Similarly, elements of the DMCA that have received little or no attention – such as the concept of sending notice of infringements by means of representative lists, rather than link-by-link, and the requirement to accommodate standard technical measures (STMs) – should be revisited and incorporated more effectively into any new legislation. Much has also been said about the concept of "notice and staydown," and I certainly support that goal.

There are also practical measures that stakeholders could pursue independently of legislation such as creating uniform, automated means of providing notices, allowing all copyright owners access to technology and tools such as the technology behind Content ID that make monitoring and sending of notices more efficient, and enumerating technologies which have become "standard" to screen works prior to upload or make identification and removal or monetization of infringing posts easier.

3. *Professors Litman and Tushnet suggest that a duty to monitor all user-posted content would stifle online providers. Would you support a middle ground that would require service providers to ensure that once infringing content has been removed pursuant to Section 512's notice-and-takedown procedure, the same user cannot repost the same content on any platform controlled by that provider?*

A: None of the suggestions for improvement to Section 512 I am aware of would require online service providers to monitor all user-posted content. Instead, as I suggested in my written testimony, legislation could provide incentives for internet businesses to incorporate technologies or policies to bring us closer to ensuring that removed materials are not immediately reposted. Some progress has already been made on this in the European Union's Directive on Copyright in the Digital Single Market, demonstrating not only that this is an

achievable goal, but that internet services operating in the EU will already be required to meet higher standards than exist in the United States under the DMCA.

While the suggestion that services be required to ensure that works removed from their services not be reposted by the same user to any platform controlled by the provider sounds like a “middle ground,” it likely would not be acceptable to any party involved and may in fact be more difficult to implement than a solution that focuses on identifying works that a copyright owner does not wish to have posted by others, rather than focusing on a user.

Given the way in which users interact with copyrighted works on social media, millions of other users might have the ability to repost a work after it is removed from one location. Moreover, from the perspective of the site operator, I imagine it would be more challenging and intrusive to scrutinize and verify the identity of every user account across multiple platforms in order to prevent a user from reposting a removed work than it would be to adopt one of the many currently existing technologies that help site operators identify works.

4. *In exchange for the safe harbor protections of Section 512, the DMCA established an online service provider duty to remove infringing content even without the input from copyright owners when faced with actual or red flag knowledge of infringement. Has the case law supported the intent of Congress in incentivizing service providers to be proactive when red flag knowledge exists? Your testimony and Professor Schultz’s testimony suggest that it has not, while the testimony of Professors Litman and Tushnet paints a very different picture. How do you reconcile these conflicting narratives?*

A: As I note in my testimony, I believe that the case law – particularly in the Second and Ninth Circuits – has eroded the meaning of “red flag” knowledge and undermined the intent of Congress to impose a duty on online services to detect and remove infringing content from their services even without the direct input of copyright owners. Indeed, numerous parties who endorsed the Principles for User Generated Content Services (the Principles) publicly announced their agreement that independent action by user generated content (UGC) sites was commercially reasonable and a “best practice.” In return, copyright owners joining the Principles agreed not to sue them for the actions of users on their platforms.⁸

You ask that I and Professor Schultz resolve the seemingly conflicting narratives described by Professors Tushnet and Litman on the one hand and Professor Schultz and I on the other. I believe all of our testimonies taken together describe the lived experiences of parties on opposite sides of the equation over the last twenty-two years. I do not dispute that ISPs think the DMCA is working, and doubt Professors Litman and Tushnet would dispute that rightsholders have a different view. That is exactly the crux of the problem. If the DMCA as a whole was designed to

⁸ In October 2007, leading commercial copyright owners, including CBS and Disney, and YouTube-like user-generated content (UGC) services that display and distribute user-uploaded and user-generated content, followed the Principles by, for example, using state-of-the-art filtering software and displaying information about the importance of intellectual property rights. They agreed that copyright owners would not sue them for copyright violations committed by software and displaying information about the importance of intellectual property rights.

strike a balance between the interests of all parties, and if the balance of interests is thrown off kilter over time in the views of one stakeholder group, the balance must be restored. The bargain struck in Section 512 of the DMCA should work for all copyright owners.

5. *You testified that students in your clinic who went through the process of addressing online infringement on behalf of copyright owners found the process “confusing and frustrating.” How can the notice-and-takedown process be improved, particularly for small creators? Would you recommend standardizing the process across service providers? If so, who should be responsible for establishing and enforcing those standards?*

A: Various measures could be taken to standardize the content and means of sending notices, and individual creators and small businesses could likewise benefit from gaining access to the electronic tools provided by various platforms to corporate copyright owners to facilitate effective identification and removal/monetization of infringements. The United States Patent and Trademark Office and National Telecommunications and Information Administration conducted a stakeholder process to seek to identify such solutions. Unfortunately, the effort had little success because internet giants such as Google, Yahoo, and others did not wish to change their existing approaches, and smaller online platforms feared that the approaches taken by larger platforms were out of reach.

It may be possible to address at least some of the issues identified without resorting to standards and regulation. Numerous individual artists advocated that rather than attempting to agree on standardized forms for sending notices, platforms wishing to reap the benefits of the Section 512 safe harbor should be required to prominently display an email contact for their DMCA agent to which takedown notices can be sent by email so that contact information is readily found and they are not boxed into the variety of forms created by various platforms to suit their own interests.

Since the DMCA does not require any particular format for sending notices, this could be an easy first step to address some of the “low hanging fruit” identified as concerns by individuals. Additionally, platforms employing automated technologies to seek out and act on infringing files (either to remove or monetize them) should make those tools available to individuals and small businesses, both of whom have the greatest need for help in identifying infringements of their works, instead of providing such tools only to major corporate or trade association users.

Questions from Senator Mazie Hirono

1. *The members of the first panel testified regarding the goals the DMCA was supposed to achieve.*
 - a. *In your view, is the DMCA currently working to achieve these goals?*

A: No. As I testified, the DMCA has been continually interpreted by various courts in such a way as to upset the balance that was originally achieved by Congress between the interests of

various stakeholders – particularly with regard to the operation of Section 512. Moreover, various provisions included in the DMCA, such as Section 512(i), are essentially dead letters. The evolution of the online marketplace and the unfortunate decisions by several courts have eroded the original intent of Congress in enacting the DMCA.

b. In light of changes in technology since 1998, are the goals expressed by our first panel still valid or should the DMCA be reevaluated completely?

A: The goals of the DMCA, particularly as articulated by Steve Metalitz and Judge Damitch, are still valid, but we need to find ways to restore the balance of interests in compromises that were originally achieved in the DMCA. As technology has greatly advanced from the bulletin board-based websites of the 1990s to the sophisticated social media sites of today, we must think about evolving the DMCA obligations to address today’s reality. The instantaneous accessibility of copyrighted works on the internet enables mass infringement by many users around the world reposting works again and again. While I believe the goals of the DMCA are still valid, it is crucial to remember that the DMCA consisted of compromises for and by all parties throughout all of its Titles (with the possible exception of the Vessel Hull Design Protection Act, which is not relevant here).

2. The Conference Report accompanying the DMCA states that Title II, which relates to online infringement liability, was meant 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.” Is this “cooperation” between service providers and copyright owners currently working? If not, what caused the DMCA to fail in this regard?

A: As I testified, there seems to be little if any cooperation between service providers and copyright owners in detecting and dealing with copyright infringement, other than what may occur in the context of sending and responding to takedown notices. The courts have largely supported online service providers’ litigation strategy to eliminate requirements for platforms to act independently when they become aware of infringements on their services whether by actual or “red flag” knowledge. Judging from testimony and filings of various parties in hearings before the Copyright Office on Section 512, testimony to the House Judiciary Committee on the DMCA and Section 512 during its comprehensive review of the Copyright Act, and testimony in this hearing, it appears that platforms are satisfied with the status quo and do not have any incentive to engage in collaboration and that neither the courts nor any other government authority seem to be requiring from them. Certainly, technologies exist – including Audible Magic, Content ID, and others – that are widely implemented by many stakeholders; however, they have not as yet been identified as standard technical measures (STMs), and there is no practical reason for online service providers to employ them voluntarily.

3. *Section 512 of the DMCA seems to have created a one-size-fits-all world where copyright owners have to police their content online by searching for pirated copies and notifying online service providers of their existence—no matter the size or sophistication of the online service provider. While a system like that may have made sense in 1998, I wonder if it is still appropriate today when certain online service providers are among the biggest, most profitable companies in the world.*
 - a. *Should all online service providers be treated equally with regard to policing copyrighted content or would it be better to apply a sliding scale based on a provider’s size and sophistication?*
 - b. *How can Congress make sure that big players like Google, Facebook, and others are taking appropriate steps to proactively search for and remove copyrighted content without overburdening small companies?*

A: I agree that the largest and most sophisticated services – many of which have profited from the availability of copyrighted works on their platforms – should be held to a higher standard than what the DMCA currently imposes with respect to protecting the works they profit from. Moreover, instead of using the massive costs of infringements as a negotiating tool for extracting licensing agreements with unfavorable terms for copyright owners, as some large industry players have done, platforms should be incentivized to detect and deal with infringements on their networks independently, as well as when they have received notice from copyright owners.

Likewise, services should not be permitted to condition access to automated tools to detect and deal with copyright infringements with extortionate terms requiring artists to make their catalogs available for exploitation by the networks – this behavior is also not uncommon by industry giants.⁹ However, Congress should be wary of explicitly taking a “sliding scale” approach – it should never be permissible to infringe the works of others as a means of building a profitable business, regardless of the size or sophistication of a company. Instead, the obligations of sites should be judged by commercial reasonableness. I do not believe that sites like the one described by Professor Tushnet that receive one or two takedown notices a year should be required to license filtering technology that exceeds the costs of addressing infringements manually. I am not aware of any proposal that would impose such requirements. Instead, online service providers should be required to deal with infringements on their sites – whether they are discovered by notice from copyright owners or actual or “red flag” knowledge independently developed by the service provider, – and to take appropriate measures so that works are not reposted upon removal. The focus should not be on the size of the site but rather the volume of infringements – a small company experiencing a lot of infringement should be required to deal with it effectively even if it means taking a license for screening technology. On the other hand, a service with only rare infringements might be able to address infringements manually.

⁹ See Sandra Aistars, *Why are Artists Disappearing from the Internet?* THE HILL (June 24, 2014), <https://thehill.com/blogs/congress-blog/technology/210113-why-are-artists-disappearing-from-the-internet>.