

Statement of

Keith Kupferschmid Chief Executive Officer Copyright Alliance

before the SENATE COMMITTEE ON THE JUDICIARY SUBCOMMITTEE ON INTELLECTUAL PROPERTY

December 15, 2020

Good afternoon, Chairman Tillis, Ranking Member Coons, and members of the Subcommittee on Intellectual Property and thank you for the opportunity to testify at today's hearing titled "The Role of Private Agreements and Existing Technology in Curbing Online Piracy" As this is the last in a year-long series of hearings on the Digital Millennium Copyright Act (DMCA), I would also like to take this opportunity to extend a special thank you to the Subcommittee for holding these very important hearings and for listening to the many members of the copyright community and others who testified on their struggles with online infringement and their concerns with the ineffectiveness of section 512 of the DMCA.

My name is Keith Kupferschmid and I am the CEO of the Copyright Alliance, a non-profit, non-partisan public interest and educational organization dedicated to advocating policies that promote and preserve the value of copyright, and to protecting the rights of creators and innovators. The Copyright Alliance represents the copyright interests of over 13,000 organizations in the United States, across the spectrum of copyright disciplines, and over 1.8 million individual creators, including photographers, authors, songwriters, coders, bloggers, artists, and many more individual creators and small businesses that rely on copyright law to protect their creativity, efforts, and investments in the creation and distribution of new copyrighted works for the public to enjoy.

I very much appreciate being asked to testify here today about how voluntary agreements and technological solutions, like Standard Technical Measures (STMs), can help combat the problem of online copyright infringement. There is no silver bullet solution to this problem. Voluntary agreements and technological solutions play an important role in the fight against copyright infringement. But they are only partial solutions and certainly not a substitute for effective laws. So to be clear, nothing I say here today should be construed to take away from the numerous other creators and copyright owners who have testified earlier this year who have voiced concerns with section 512 and misinterpretations of key provisions by courts, or those who have urged this Subcommittee to take steps to ensure that section 512 realizes Congress' intent when it passed the DMCA 22 years ago. This is especially true for the individual creators and small businesses the Copyright Alliance represents who have been at the forefront of asking Congress to take action to reform section 512.

In addition, while my testimony today focuses on voluntary agreements and technological solutions, there are many other components that also make up an effective strategy to combatting online copyright infringement, such as copyright education for creators, users, and the public. The common thread that underlies these elements is cooperation amongst stakeholders. Unfortunately, cooperation is exactly what we are missing.

In passing the notice and takedown provisions in section 512 of the DMCA, Congress intended to encourage copyright owners and service providers to work together to combat existing and future forms of online infringement. Although section 512 seemed to have achieved Congress's purpose when it was first enacted, over the past twenty-two years, court rulings and other unanticipated changes that have taken place in the digital space have rendered these provisions ineffective, creating an ecosystem where mass copyright infringements are an unfortunate and regular occurrence. While section 512 remains a workable legal framework, it is evident that the statute is under strain and that stakeholder collaboration and cooperation are needed in order for the statute to live up to its potential as imagined by Congress.

The primary problem is that section 512 has been so misinterpreted by the courts that most service providers know that they have little risk of liability and need only do the absolute

minimum required under the DMCA to avoid liability. All the while, copyright owners are being devastated by online infringement. This is true for copyright owners both large and small, but is especially burdensome for individual creators and copyright owners. Internet behemoths, like Google, Amazon, Twitter and Facebook, would like to preserve the status quo because it serves their interests. As a result, they have little interest to work with Congress or stakeholders to restore balance to the online ecosystem.

Publicly, online service providers (OSPs) and their representatives have expressed a willingness to work with the copyright community and Congress to address online piracy problems. But actions speak louder than words. Case in point: earlier this year we heard Jon Berroya¹ from the Internet Association talk about their willingness to work with stakeholders and Congress toward solutions, but truth be told, when Microsoft (who I commend for doing this) brought interested parties together at their headquarters a few years ago to discuss new ways OSPs and copyright owners could work together to combat infringement, it was the Internet Association that pulled the plug on the possibility of future meetings.² Further, it is worth noting that Berroya's offer to work toward solutions was made over six months ago, and since that time all we have heard from him is silence.

Publicly, OSPs also talk about all the wonderful technological solutions they have developed to help combat infringement on their platforms. But when an issue arises with the technology—or the way they are implementing the technology—they tend to point the finger at someone else rather than take responsibility and help find a reasonable solution. For example, when faced with complaints about infringement on their sites and their notice and takedown practices, platforms frequently blame users for not understanding fair use and suggest rightsholders are overzealous in their enforcement. They rarely take responsibility for the technologies and policies they employ that create arbitrary thresholds and confusing rules on their sites.

¹ See oral testimony at https://www.judiciary.senate.gov/meetings/is-the-dmcas-notice-and-takedown-system-working-in-the-21st-century (starts at 1:24:38) ("The lack of effective collaboration is at the heart of a lot of the current challenges... old fashioned dialogue and working with one another to understand these rapidly changing problems is a really really important first step.") and written statement at page 7 ("the solution [to the challenges faced by some individual creators">https://www.judiciary.senate.gov/meetings/is-the-dmcas-notice-and-takedown-system-working-in-the-21st-century (starts at 1:24:38) ("The lack of effective collaboration is at the heart of a lot of the current challenges... old fashioned dialogue and working with one another to understand these rapidly changing problems is a really really important first step.") and written statement at page 7 ("the solution [to the challenges faced by some individual creators] should be to continue to provide the flexibility that has encouraged stakeholders to work together to come up with appropriate and effective measures.")

² To be clear, Jon Berroya was not the head of the organization at that time.

To be clear, the copyright community is appreciative of *technologies* employed by these platforms and relies heavily on many of these content protection technologies to enforce their rights. But the technologies are complex tools that function within parameters set by their operators. And those parameters—*how the platforms implement these technologies*—present their own set of problems.

Over the two decades since the turn of the millennium ushered in a new era of digital access and connectivity, online copyright infringement has been a persistent and evolving problem, which undermines the rights of creators, the value of copyright, and the inherent benefits of the internet to the creative communities. For all the potential that the internet promises for reducing barriers to entry, expanding creativity and free expression, and enabling the outgrowth of new business models and licensing opportunities, rampant infringement increases barriers, robs creators of valuable licensing opportunities, and diminishes their ability to recoup investments and fund the next wave of investment. This, in turn, stifles and suppresses creative expression, ultimately to the detriment of both creators and consumers alike.³

The copyright community stands ready to work with the Copyright Office, the Administration, and other stakeholders to ensure that section 512 is an effective and meaningful statutory scheme to combat online infringement in the digital world. We are also prepared to work with OSPs and other stakeholders on voluntary agreements, technological solutions, standard technical measures, educational programs, and any other initiatives that might help stem the tide of online infringement—and that is a sincere pledge. But as long as OSPs sit on the sidelines making empty gestures, creators across the United States will continue to be ravaged by the tremendous harms caused by online infringement.

-

³ Piracy has also been linked to the spread of malware and other nefarious software, which threatens the existence of a safe digital ecosystem. Rightsholders, OSPs and the general public share a common interest in a safe digital environment where copyright holders can distribute, and users can enjoy, legitimate creative content. It is important that OSPs work cooperatively with copyright owners to help combat infringement online, not only to ensure that the internet is a safe environment for copyright holders to disseminate their work, but also to guard against bad actors that threaten the safety of the internet, individual users, and the general public.

Voluntary Initiatives are a Vital Component in the Fight Against Online Piracy

It is essential that we energize the spirit of cooperation between the copyright community and service providers that Congress intended when it enacted the DMCA. We therefore enthusiastically support cross-industry collaborative efforts to address the problem of online infringement. Such initiatives should equitably apportion the burden of reducing infringement, remove profit from infringement, and educate users about legal alternatives. In addition, voluntary agreements provide a degree of flexibility that allows stakeholders to readily respond as the digital ecosystem continues to grow and change, and methods of infringement adapt and shift.

There is a long and successful history of stakeholders developing voluntary agreements to further mutual objectives. Some examples include:

<u>Trustworthy Accountability Group (TAG)</u>

The Trustworthy Accountability Group (TAG) initiative, launched in February 2015, validates tools and services that take measures to prevent advertisements from running on pirate sites. Companies can receive a Certified Against Piracy Seal by operationalizing and complying with the TAG Anti-Piracy Pledge and following the Certified Against Piracy Guidelines. Notable TAG certified companies include Google, Facebook, Disney, WarnerMedia, and NBCUniversal. According to Ernst & Young, in 2017, through the help of TAG, revenue to piracy sites had been reduced by 48 to 61 percent in the U.S. (an estimated \$102 million to \$177 million in losses). By 2018, there were no identifiable premium advertisers at high volumes on infringing websites. In 2019, a study done by TAG and CreativeFuture approximated that TAG had reduced the presence of 76 major brands advertisers on these sites.

Principles for User Generated Content Services

In 2007, various stakeholders agreed upon the Principles for User Generated Content Services ("UGC Principles") to eliminate infringing content, while still taking into

account fair use considerations. This informal understanding between copyright holders and UGC services illustrates a willingness to work together and agree on a middle ground. The UGC Principles use existing copyright law as a starting point, but effectively combine this with self-governance and private arrangements. The UGC Principles stipulate that if UGC services follow guidelines, such as using filtering software and displaying information about intellectual property rights, copyright owners should not take action against them for their users' infringing content. Unlike the DMCA, the UGC Principles anticipate that UGC services will regularly filter their content with up-to-date technology. The Principles also shift the burden of policing infringing content away from being solely the responsibility of copyright owners to a shared and collaborative effort with UGC services.

Trusted Notifier Agreements

Some copyright owners have successfully entered into voluntary agreements with domain name registrars like Donuts and Radix, where they act as "trusted notifiers" for flagging sites engaged in infringing activities. The first of such agreements was entered into by the Motion Picture Association and Donuts in February 2016. For Donuts, the agreement protected the legitimacy of its brand and for the Motion Picture Association, the agreement was a clear step towards removing infringing content and protecting copyright. In the first year of the agreement, action was taken against eleven domain names that were either suspended or deleted. Although concerns were initially raised that this agreement represented a "slippery slope" toward "inappropriate content control," that has clearly not proven to be the case as the only domain names impacted are those that are "clearly devoted to illegal activity."

Payment Processor Agreement

The Payment Processor Agreement is a collaboration between copyright owners and payment processors like Visa, Mastercard, and PayPal—encouraged by the Intellectual

⁴ One Year Later: Trusted Notifier Program Proves Effective, Motion Picture Association (Mar 6, 2020) https://www.motionpictures.org/press/one-year-later-trusted-notifier-program-proves-effective/.

Property Enforcement Coordinator— to create a process to prevent known infringing sites from accessing payment networks. The first of these agreements was launched in 2012 by the International Anti-Counterfeiting Coalition (IACC). The IACC launched the RogueBlock Initiative aimed at targeting the online sale of counterfeit or pirated goods in the United States. Through "payment processor agreements," RogueBlock cut off the flow of money to piracy websites from credit cards. The IACC reviews these reports and passes them on to affiliate payment processors like Mastercard and PayPal. Through this process, rightsholders can provide timely intelligence and, in the process, help payment processors weed out bad actors misusing legitimate financial tools. The program has been successful in terminating thousands of infringing merchant accounts across hundreds of thousands of websites.

There are several lessons we have learned from these agreements and others, regarding what approaches do and do not work that we can use as guidelines for future voluntary agreements. These include:

Incentives and Willingness to Participate: The more successful initiatives are the ones where the stakeholders have an incentive to come to the table. There is ample evidence to demonstrate this. For example, one of the reasons the payment processors were willing to discuss and develop the Payment Processor Voluntary Agreement is that they realized it was in their best interests to participate in voluntary agreement discussions because their customers were using credit cards to unknowingly purchase pirated goods and those customers would demand their money back from the payment processor once they discovered the nature of the illegal goods they purchased. The payment processors also discovered that many pirate sites were illegally using credit card logos to give the appearance of legitimacy when in reality they were not approved by the payment processor and could not accept the credit card payments. Another example is the TAG initiative. Part of the reason ad agencies cooperated in the development of the TAG initiative is that they didn't want their clients associated with certain websites that are engaged in piracy, pornography, spam and other illicit activities.

The lessons learned from these initiatives is that, first and foremost, there must be a willingness of all stakeholders to come to the table to discuss each other's goals and needs with an eye toward finding a workable solution in a collaborative, rather than adversarial, manner. That willingness cannot be manufactured. It must stem from the existence of some type of incentive for the stakeholders to participate. Where there has been collaboration in the past, that incentive came from (i) stakeholders not being quite sure what the law was on a particular issue because of conflicting court decisions in different jurisdictions; (ii) pending litigation that presented risks to both sides; (iii) the possibility of legislation being enacted that would change the playing field for the stakeholders; (iv) customer relations; or (v) some combination of all of these. As noted above, when one or more of these factors exists, the stakeholders tend to be more willing to come to the table and engage in collaborative discussions.

On the other hand, when none of these factors exist and there are insufficient incentives for necessary parties to come to the table, progress is impossible. Here, if courts continue to construe section 512 incorrectly or too narrowly, in a way that shifts the balance away from one of shared responsibility to one where all of the burden is on rightsholders, OSPs will have no reason to participate in constructive exchanges. As a society, we expect OSPs to take commercially reasonable steps to deal with known harms. But because section 512, as misinterpreted by the courts, doesn't require that level of accountability, you end up with, at best, unilateral measures and statements that are not as effective as they could or ought to be.

Congress can certainly play a role in creating the incentives by introducing and considering legislation that will even the playing field. Unless a government agency has specific regulatory authority to take action that can bind the parties, any action by a government agency is unlikely to have the same effect that Congressional action can. For example, in 2015, under the auspices of the Internet Policy Task Force (IPTF) the Department of Commerce's multi-stakeholder forum developed a list of "practices" titled *DMCA Notice and Takedown system the DMCA Notice-and-Takedown Processes: List of Good, Bad, and Situational Practices.* 5 Unfortunately,

⁵ DMCA Notice-and-Takedown Processes: List of Good, Bad, and Situational Practices, USPTO.ORG, https://www.uspto.gov/sites/default/files/documents/DMCA_Good_Bad_and_Situational_Practices_Document-FINAL.pdf.

the resulting document did not result in a meaningful change in OSP behavior. For example, many OSPs were either already following the "good" practices⁶ or they ignored them and continue to ignore them to this day.⁷ In that case, the OSPs had nothing to lose by obfuscating the process. Although they participated, they had "no skin in the game." The IPTF effort demonstrates that an incentive to collaborate cannot be artificially created.

<u>Stakeholder Involvement</u>: The most successful voluntary agreements are the ones produced by a variety of different stakeholders working together to develop solutions, as opposed to unilateral agreements or negotiations that fail to include the appropriate participants. It is important that *relevant* stakeholders have a voice in the discussions. But that does not mean that every stakeholder should have a seat at the actual negotiating table.

A good example of a process that worked well (albeit in the context of legislative change, not voluntary agreements), were the recent discussions to close the streaming loophole that took place under the auspices of Chairman Tillis. During those discussions, different copyright industry stakeholders were on one side and OSP and user groups on the other; each selected four representatives to engage in negotiations with one another with the Chairman's staff moderating. All stakeholders were permitted to listen to the negotiations but only the eight representatives could talk. After each negotiating session the representatives from each group would consult with and get input from their constituencies. In that way, stakeholders could participate in the legislative process and have a voice in the final product while also making sure the process was not undermined by having too many negotiators at the table.

While this streaming loophole process serves as a good model for reaching agreement on legislation, because of the nature of many voluntary agreements, some facets of it simply do not apply in the context of voluntary agreement negotiations. For example, negotiations of voluntary agreements should be limited to the relevant parties - i.e., those parties that have obligations

-

⁶ The group was so dysfunctional that it could not reach agreement to call them "best" practices or "guidelines"

⁷ For example, the first best practice states that "DMCA takedown and counter-notice mechanisms [should be] easy to find and understand. But (as been evident in the Senate IP Subcommittee hearings and House Judiciary Committee's DMCA listening sessions) five years later, many creators are still complaining about the difficulty finding and understanding the takedown forms on the websites of various platforms.

under the agreements. It is also important that the correct type of people participate. In the streaming example above, the eight negotiators were all policy advocates. That made sense because we were negotiating legislation. But in the case of negotiating voluntary agreements, policy advocates may not be the correct constituency to lead negotiations. Instead, the people on the front lines of DMCA enforcement – the technologists, engineers, operations, product managers and investigators – may be better suited to lead the discussions. As Dave Green from Microsoft said so eloquently during the U.S. Copyright Office DMCA Roundtables in San Francisco, "the most effective conversations began... when our engineers started to talk to their engineers."

There may also be a role for government to play during the discussions but (in the case of voluntary agreements, as opposed to STMs (discussed later)) that role should be minimal. For example, in some cases, participation by government officials as moderators or ombudsmen or to oversee and/or facilitate an ongoing dialogue and ensure the discussions are progressing by requiring the negotiators to regularly report back to the government agency or Congress has been helpful. In these cases it is important not only that the government bring stakeholders together, but also incentivize them to work together until they agree on a workable solution. In other cases, however, government participation has not been necessary to find workable solutions; or where incentives were not aligned, government participation has just prolonged a process that was bound for failure. And after voluntary agreements are implemented, the government could play a role in monitoring the effectiveness of existing initiatives.

Approach Taken in the Discussions: Often the best approach to voluntary agreements is for discussions to begin with listening sessions where the goal is just that: to listen to the questions and concerns raised by the participants. There is a time and place to discuss potential solutions, but that is usually not at the outset. Difficult legal questions, policy discussions, and opposing views about what the law requires of the various stakeholders, should likely be left on the cutting room floor with the parties just listening to one another with the focus on achieving a simple goal. That goal should include an understanding of the way copyright owners operate in the particular environment and an understanding of the way that platforms operate in their

_

⁸ See https://www.copyright.gov/policy/section512/public-roundtable/transcript_05-13-2016.pdf, page 158.

environment. Copyright owners should listen to how the platforms work and the challenges and the complexities of making changes to the platform to combat infringement without impacting legitimate conduct on the platform. Likewise, platforms should listen to the challenges faced by different types and sizes of copyright owners and the different infringement challenges they face on different platforms. For example, during the TAG initiative discussions, stakeholders were able to make significant progress by simply listening to one another at the outset and then working together and determining what was and wasn't working and what challenges the stakeholders faced.

The discussions are most productive when stakeholders are comfortable and encouraged to speak openly and honestly. Therefore, the stakeholders should agree to Chatham House Rule and not to talk with the press or the public about the discussions. And as noted above, to encourage open discussion it may be best to limit the role of government.

Setting Goals: In the broadest sense, the goals of any voluntary agreements between OSPs and copyright owners ought to: (1) encourage protection for good actors while withholding it from bad actors; (2) help people who want to do the right thing and guide people who don't know or understand what the right thing is to choose the right course of action; (3) encourage OSPs and copyright owners to work together on an ongoing basis to resolve existing and novel issues as they arise; and (4) result in a shared responsibility between OSPs and rightsholders that recognizes that everyone in the online ecosystem has a role to play in creating a fair and sustainable marketplace. No initiative can be effective if the burden of action falls disproportionately on the creator.

Whatever technological solutions to protect copyrighted works are finally realized in a voluntary agreement ought to consider the gamut of all stakeholders, especially individual creators and small businesses who tend to be left behind in these agreements. For example, some unilateral voluntary measures, like YouTube's ContentID, exclude individual creators and small businesses, and (with limited exceptions) are only made available to large-scale rights holders. Voluntary initiatives to protect copyrighted works will remain ineffective if they are out of reach

of these individual creators and small businesses, who often lack the resources to seek judicial remedies and have no market leverage.

Lastly, voluntary agreements ought to be ongoing. Piracy shifts dynamically. There's an incentive for pirates to quickly change their tactics when solutions like TAG and others impact their illicit activities. So these agreements should not just be a one-time set of principles that are set in stone and never revisited. There needs to be an ongoing dialog between the stakeholders. Voluntary initiatives should be regularly revisited and updated by the stakeholders to ensure that the agreements remain effective over time. The flexibility and ability to revise agreements quickly to account for changing circumstances is a significant benefit that voluntary agreements have over legislation. That shouldn't be ignored.

To sum up, private-sector voluntary agreements are a critical tool for addressing online infringement. (The same is true for technological solution and STMs, discussed below.) But the only way we will accomplish these goals is through stakeholders in the DMCA ecosystem working together. Partnerships in the technology and copyright sectors will lead to improved cooperation and smarter, faster, and more efficient automated tools to better identify infringing material without sacrificing user privacy and legitimate fair uses. It is time that the stakeholders in the DMCA ecosystem explore what mutually beneficial agreements may be possible moving forward. In fact, maybe it is time to revisit the idea of holding a voluntary measure summit to share information and talk about next how best to explore the possibility of new voluntary agreements.

Standard Technical Measures are a Vital Component in the Fight Against Online Piracy

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." This rationale led Congress to include section 512(i) in the DMCA, specifically conditioning eligibility for safe harbor protection on whether a service provider "accommodates and does not interfere with standard technical measures," (STMs) which are to be developed based on "a broad consensus of copyright owners and service providers in an open, fair, voluntary, multi-industry standards process."

Unfortunately, since the inception of the DMCA nearly twenty-two years ago, no standard technical measures that protect copyrighted works have been adopted, effectively rendering the provision useless. *This is one of the most significant drawbacks to the effective application of the notice-and-takedown process*, as it nullifies a provision which is designed to facilitate cooperation between OSPs and copyright owners. There are existing technologies capable of identifying and removing unauthorized copyrighted material posted by users, as well as several off the shelf technologies that are easy to implement and affordable for OSPs of all sizes. Some of the larger OSPs have already implemented technologies like these, but the technologies are not made available to others as is required under section 512(i), which requires that STMs be made "available to any person on reasonable and nondiscriminatory terms," because they have refused to come to the table with other stakeholders to have them adopted as an STM.

As written, there is enormous potential for section 512(i) to incentivize new technologies and encourage stakeholder collaboration. However, to satisfy the requirements of the statute, stakeholders would need to come together "in an open, fair, voluntary, multi-industry standards process." And that is not happening, thereby making the STM provision in section 512(i) irrelevant. That is clearly not what Congress intended. Congress did not include section 512(i) in the DMCA to see it go unused for twenty-two years. Reviving section 512(i) may be the easiest and most important achievement that could result from the Subcommittee's series of hearings.

As noted in the previous section, a growing number of service providers are voluntarily implementing content filtering technology. The fact that this is happening does not displace the

⁹ See S. Rep, supra note 2, at 52.

¹⁰ 17 U.S.C. § 512(i)(2)(A).

importance of adopting STMs in a collaborative manner pursuant to section 512(i). If service providers were to implement these voluntary measures *in addition to* technologies dubbed STMs under section 512(i) in an effort to more proactively detect infringement, that would demonstrate a balanced approach to combatting online infringement. On the other hand, when service providers implement these voluntary measures as a *substitute* for developing and implementing STMs while simultaneously impeding the adopting and deployment of STMs—which is the case now—that suggests a desire by service providers to subvert the intent of Congress in calling for the development and application of a *standardized* set of technical measures.

There can be no doubt that a safe and secure internet benefits us all. Protecting copyright and internet freedom are both critically important and complementary—they are not mutually exclusive. A truly free internet, like any truly free community, is one where people respect the rights of others and can engage in legitimate activities safely—and where those who do not are held accountable under law by their peers. Developing standard technical measures pursuant to section 512(i) is a vital part of creating such an environment.

It's important to understand that section 512(i) does not require consensus from *all* stakeholders *across every industry* to meet the statutory requirements of a STM. Section 512(i) requires only "broad" consensus. Thus, there can be significant flexibility in agreeing to STMs across different types and sizes of copyright owners, OSPs, users and services. There does not need to be, and should not be, a one-size-fits-all approach.

It is also important to understand that section 512(i) requires that a service provider both accommodate *and* not interfere with standard technical measures. That means it is not sufficient for an OSP to merely not interfere with the STM but they must also adopt and implement it. But that does not mean all OSPs must necessarily do so. During the standard-setting process under section 512(i), the stakeholders, in conjunction with the government, can set standards for when an OSP must accommodate the STM, for example, if an OSP receives a certain number of takedown requests over a specified period of time.

The STM process envisioned by section 512(i) does not necessarily require the creation of new technologies. There are numerous technologies that have been implemented over the years by OSPs and others to fight online infringement. The process envisioned by section 512(i) merely takes that existing knowledge and standardize it to the benefit of all OSPs and copyright owners. Doing this could make the takedown process significantly easier for both OSPs and copyright owners. For example, today it is a huge burden for individual creators to register their claims with each platform. The adoption of STMs could significantly reduce that burden by providing ways to make it easier to submit DMCA takedown notices and making it easier to report a single work to multiple OSPs without having to send notices multiple times.

The process for identifying STMs should not be much different than the process for developing voluntary agreements (as discussed above), with one big difference. STMs should be developed with government support. The U.S. Copyright Office should take the lead in facilitating these discussions, as well as recognizing existing STMs that have been developed in the marketplace. Other government agencies that have expertise in this area, like the National Institute of Standards and Technology (NIST), could also be included in the process as advisors who can assist the Office with input on technological aspects. This fall, the Office took its first steps towards facilitating the development of STMs and we support their ongoing efforts. But if OSPs do not support the Copyright Office process, and refuse to be willing participants in it, then Congress should vest the Copyright Office with the regulatory authority to proceed without them.

In closing, I would like to once again thank the Subcommittee for holding the year-long series of DMCA hearings. During the course of these hearings I hope members were able to get a real sense of the struggles of independent creators and small businesses and the tremendous harm they suffer from online infringement. The act of sending notice after notice for years on end, with little if any effect, only to see their works continue to be infringed takes a real mental and emotional toll on creators. As one creator put it, "The anger of that circumstance quickly gives way to hopelessness because I know that I don't stand much of a chance against a corporate behemoth, whether that's YouTube or any of the companies stealing my work and using YouTube's platform to display it and to co-monetize it with YouTube." The hopelessness that

this creator describes is one reason that so many creators, faced with the insurmountable burden of online infringement, eventually give up their work to pursue careers with more stability and certainty. This is not the outcome that anyone wants. As the Subcommittee review of the DMCA draws to a close and members of the Subcommittee ponder legislative or other actions, we ask that you keep the creators whose work enriches our lives at the forefront of your minds. Service providers have flourished under the DMCA. If the DMCA is to achieve the balance that Congress intended, then like these service providers, creators too deserve the support necessary to thrive.

Thank you again for the opportunity. I am happy to answer any questions.