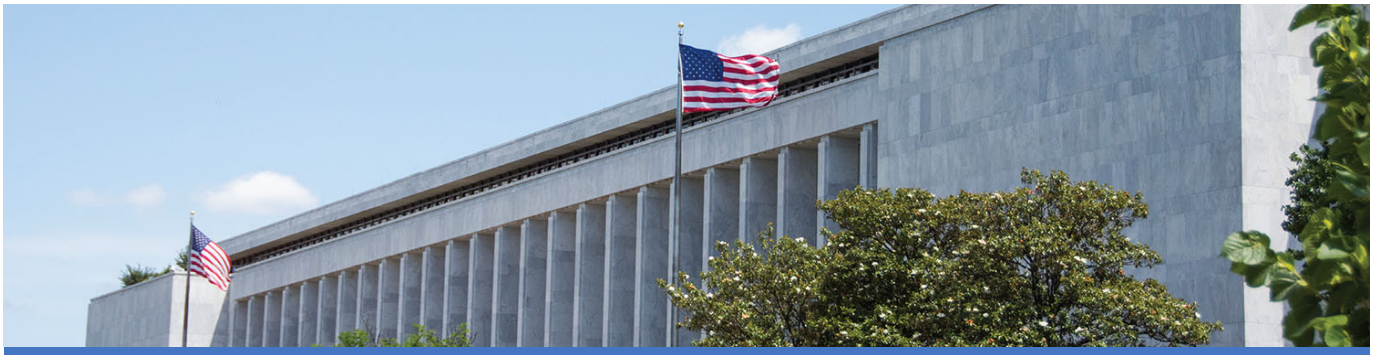
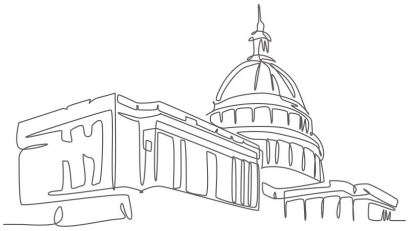


Copyright Small Claims and the Copyright Claims Board

In December 2020, Congress passed the Copyright Alternative in Small-Claims Enforcement Act of 2020 (CASE Act), which directed the Copyright Office to establish the Copyright Claims Board (CCB). The CCB will be a three-member tribunal within the Office that will provide an efficient and user-friendly option to resolve certain copyright disputes that involve less than $30,000 (called "small claims"). The Office is in the process of developing the CCB, which should begin hearing claims by spring 2022. In the meantime, read about what the CCB is, why you might want to use it, and our implementation progress.



Subscribe for Email Updates

CCB Key Facts and Benefits

From streamlined proceedings to expert decision makers, the CCB will be designed to be efficient and easy to use.

- **It will be user-friendly**. CCB proceedings will be designed for people to understand and navigate. This will make it easier for parties to represent themselves.
- **There will be streamlined procedures**. Discovery will be limited and mostly paper-based, and parties will rely primarily on written materials. CCB proceedings generally will not include formal motions unless requested by the parties or the CCB. As a result, CCB proceedings will require far fewer resources (in money and time) than federal court lawsuits.
- **Monetary damages will be capped at $30,000**. No one will be able to bring a proceeding in the CCB seeking more than $30,000 total (with lower per-work limits if someone is seeking statutory damages). If a party is seeking statutory damages, the CCB will not consider whether an infringement is willful. This means that respondents will be assured that they cannot face damages as high as those available in federal court (which can be up to $150,000 per work infringed).
- **It will be voluntary**. You will not be required to bring your claims in the CCB and you will be able to opt out of the CCB if you receive a claim. Note, however, that you must make a choice between the CCB and federal court; you cannot file the same claim or counterclaim in both venues. If you opt out, however, the other party can still bring a federal lawsuit against you, which would likely be more expensive and time consuming. If that happens, the fact that you opted out won't be held against you in the federal court proceeding.
- **There will be safeguards against abusive practice**. Parties bringing claims in bad faith may have to pay the other party's reasonable costs and attorneys' fees (generally up to $5,000). In certain situations, the CCB will also ban bad faith parties from filing any new matters for one year and may dismiss all of a bad faith party's pending claims. There may also be a limit on the number of cases that any one party can file in one year.

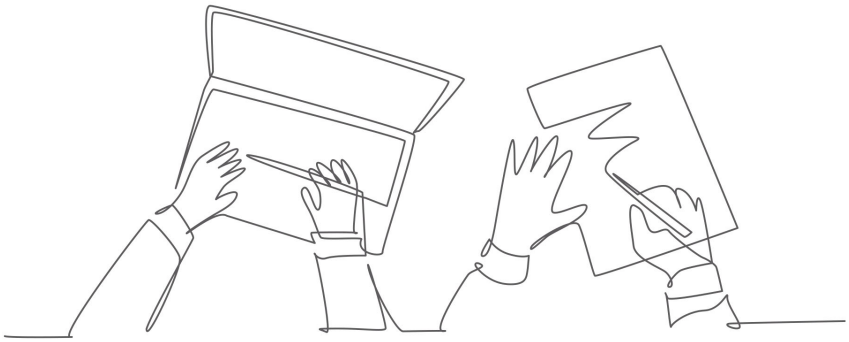
Why did Congress Pass the CASE Act and Create the Copyright Claims Board?

Copyright law requires that copyright lawsuits be brought in federal court. Federal litigation, however, can require a lot of time and money. When disputes about small copyright claims arise, the cost and effort of a federal lawsuit can outweigh possible relief and make it very difficult for people to get a legal resolution. Congress recognized this issue and passed the CASE Act, creating the CCB, to provide a more efficient and economical option to resolve small copyright disputes. If you want to learn more about the challenges that federal litigation presents in small copyright claims, see the Office's Copyright Small Claims report.

Related Resources

Copyright Alternative in Small-

- **CCB decisions will be posted online**. You will be able to review CCB decisions online. These decisions will not be precedential, meaning that the CCB won't have to follow them in later cases, and they will have no impact on unrelated federal court proceedings.
- **There will be limited review of CCB decisions**. If you disagree with a CCB decision in your case, you will be able to seek review, both in the Copyright Office and federal court. It is important to know, however, that the types of issues the Office or a federal court could consider when you challenge a CCB decision will be more limited than if you bring or defend against a case in federal court.
- **CCB Officers will be independent experts in copyright law**. The CCB will have three Officers who have deep expertise in copyright law, making them well-suited to determine a variety of copyright matters. The Officers' performance appraisals cannot be based on the outcome of specific proceedings. There will be no ex parte communications regarding active cases (meaning that neither party can speak to the CCB without including the other party).



Getting the CCB's Operations Started

The Copyright Office is in the process of setting up the CCB. As part of implementation, we will address daily operations and procedures related to issues like the following:

- Setting fees
- Filing claims
- Notifying parties when a claim is brought against them
- Opting out of proceedings, including by developing a standing opt out option for libraries and archives
- Expediting registration decisions for claims pending with the CCB
- Setting standards for limited motions practice and discovery
- Defaulting parties (which means a party did not or stopped responding to a claim)
- Reviewing CCB decisions in certain situations
- Making some CCB proceeding records publicly available

The Office will develop these and other procedures through rulemaking processes that will result in regulations. The rulemaking proceedings will allow for public participation, which the Office strongly encourages. You can track the Office's implementation progress by checking our implementation tracker, following the Office's rulemaking proceedings on our Rulemaking page, and signing up for our NewsNet service.

Interested in more information? Take a look at our responses to Copyright Claims Board Frequently Asked Questions.

Claims Enforcement Act of 2020 (CASE Act)

Copyright Small Claims Report

CCB FAQs

CCB Quick Facts

Section 512

Rulemaking Page

Legislative History

Statements to Congress

Implementation Tracker

As we implement the CASE Act and establish the CCB, we will include updates on staffing and regulations here.

Legislation

- ✔ **CASE Act passes** December 21, 2020
- ✔ **CASE Act signed** December 27, 2020

Staffing

- ✔ **Copyright Claims Officers Selected** (announced July 20, 2021)
- ✔ **Supervisory Attorney-Advisor Selected**
- ✔ **Attorney-Advisors Selected**
- ✔ **Program Specialist Selected**
- ✔ **Paralegal Selected**

Rulemaking

- ✔ **Notification of Inquiry on CASE Act Regulations** (NOI comment period closed May 10, 2021)
- ✔ **Expedited Registration and FOIA** (Final Rule published August 18, 2021)
- ✔ **Small Claims Procedures for Library and Archives Opt-Outs and Class Actions** (Final Rule published March 9, 2022)
- ☐ **Copyright Claims Board: Initiation of Proceedings and Related Procedures** (Comment period closed December 15, 2021) (Partial Final Rule published March 8, 2022)
- ☐ **Copyright Claims Board: Active Proceedings and Evidence** (Comment period closed February 22 , 2021)

Copyright Claims Board: Representation by Law Students and of Business Entities
(Comment period closed February 18, 2022)

Available to receive claims Spring 2022*

* May be extended to June 25, 2022, for good cause.

To bring a claim with the CCB, you will need to either (1) have a registration from the Copyright Office for the work(s) at issue, or (2) have filed an application with the Copyright Office to register the work(s) at issue either before or simultaneously with filing a claim with the CCB.

U.S. Copyright Office
101 Independence Ave. S.E.
Washington, D.C.
20559-6000
(202) 707-3000 or
1 (877) 476-0778 (toll-free)

Section 512 Study

The United States Copyright Office has completed its public study to evaluate the impact and effectiveness of the safe harbor provisions contained in section 512 (/title17/92chap5.html#512) of title 17, *United States Code*. This is the first government study of the effectiveness of the notice-and-takedown system since its enactment over twenty years ago.

Enacted in 1998 as part of the Digital Millennium Copyright Act (DMCA), section 512 established a system for copyright owners and online entities to address online infringement, including limitations on liability for compliant service providers to help foster the growth of internet-based services. Congress intended for copyright owners and internet service providers to cooperate to detect and address copyright infringements. To qualify for protection from infringement liability, a service provider must fulfill certain requirements, generally consisting of implementing measures to expeditiously address online copyright infringement.

While Congress understood that it would be essential to address online infringement as the internet continued to grow, it may have been difficult to anticipate the online world as we now know it, where each day users upload hundreds of millions of photos, videos, and other items, and service providers receive over a million notices of alleged infringement. These developments, as well as technological and business model changes that have occurred over the years, resulted in changes to the internet ecosystem that the Copyright Office believed would benefit from further study. As recommended by the then-Register of Copyrights in testimony and requested by the then-Ranking Member of the House Judiciary Committee at an April 2015 hearing, the Office initiated a study evaluating the impact and effectiveness of section 512.

The Office published an initial Notice of Inquiry on December 31, 2015, seeking written comments to thirty questions covering eight categories of topics. The Office received over 92,000 written submissions in response. In May 2016, the Office held two-day public roundtables in New York and San Francisco. The Office then published a second Notice of Inquiry on November 8, 2016, seeking written comments to sixteen questions covering four topics, in addition to inviting the submission of empirical research studies assessing the operation of the safe harbor provisions on a quantitative or qualitative basis. The Office received seventy-nine written comments and nine empirical studies in response. The Office held another roundtable in Washington, DC, on April 8, 2019. Among many issues, the Office considered the costs and burdens of the notice-and-takedown process on large- and small-scale copyright owners, online service providers, and the general public. The Office also reviewed how successfully section 512 addresses online infringement and protects against improper takedown notices.

The final Report was published on May 21, 2020. In reviewing the section 512 system, the Copyright Office identified five important principles that guided its analysis:

- copyright protection online must be meaningful and effective;

- online service providers operating in good faith must be afforded legal certainty and leeway to innovate;
- Congress intended to incentivize cooperation between online service providers and rightsholders, but cooperation cannot be the only answer;
- to the extent possible, government decision-making should be based on evidence; and
- internet policy in the twenty-first century cannot be one-size-fits-all.

The Copyright Office concluded that the operation of the section 512 safe harbor system today is unbalanced. The Report highlights areas where current implementation of section 512 is out of sync with Congress' original intent, including: eligibility qualifications for the service provider safe harbors, repeat infringer policies, knowledge requirement standards, specificity within takedown notices, non-standard notice requirements, subpoenas, and injunctions. The Office does not recommend any wholesale changes to section 512, but instead identifies certain areas where Congress may wish to fine-tune section 512's current operation in order to better balance the rights and responsibilities of online service providers and rightsholders in the creative industries.

On May 29, 2020, Senators Tillis and Leahy, both members of the Senate Judiciary Committee Subcommittee on Intellectual Property, sent a letter to the Copyright Office asking a series of follow-up questions about the Report and requesting technical assistance. The Office sent its response to the Senators on June 29.

Information about the Study, including the final Report, the Office's response to Senators Tillis and Leahy, Notices of Inquiry, public comments, and transcripts of public roundtables, may be accessed via the drop-down menu on the right of this page.

Full Report

May 21, 2020 – Full Report (/policy/section512/section-512-full-report.pdf)

Notices of Inquiry

Public Comments

Public Roundtables

Response to Congress

Additional Resources

UNITED STATES COPYRIGHT OFFICE

SECTION 512 OF TITLE 17

A REPORT OF THE REGISTER OF COPYRIGHTS

MAY 2020

UNITED STATES COPYRIGHT OFFICE

SECTION 512 OF TITLE 17

A REPORT OF THE REGISTER OF COPYRIGHTS

MAY 2020

ACKNOWLEDGEMENTS

The publication of this Report is the final output of several years of effort by the Copyright Office to assist Congress with evaluating ways to update the Copyright Act for the 21st century. The genesis of this Report occurred in the midst of the two years of copyright review hearings held by the House Judiciary Committee that spanned the 113th and 114th Congresses. At the twentieth and final hearing in April 2015, the Copyright Office proposed several policy studies to aid Congress in its further review of the Copyright Act. Two studies already underway at the time were completed after the hearings: *Orphan Works and Mass Digitization* (2015), which the Office later supplemented with a letter to Congress on the "Mass Digitization Pilot Program" (2017), and *The Making Available Right in the United States* (2016). Additional studies proposed during the final hearing that were subsequently issued by the Office included: the discussion document *Section 108 of Title 17* (2017), *Section 1201 of Title 17* (2017), and *Authors, Attribution, and Integrity: Examining Moral Rights in the United States* (2019). The Office also evaluated how the current copyright system works for visual artists, which resulted in the letter to Congress titled "Copyright and Visual Works: The Legal Landscape of Opportunities and Challenges" (2019). Shortly after the hearings ended, two Senators requested a review of the role of copyright law in everyday consumer products and the Office subsequently published a report, *Software-Enabled Computer Products* (2016). Finally, two of our prior studies that were highlighted at that April 2015 hearing, *Copyright Small Claims* (2013) and *Copyright and the Music Marketplace* (2015), turned into legislative opportunities, with the 2018 passage of the Orrin G. Hatch-Bob Goodlatte Music Modernization Act (MMA), and the 2019 passage by the House of Representatives of the Copyright Alternative in Small-Claims Enforcement Act (CASE Act).

This Report on section 512 is the final study to emerge from that set of congressional hearings. It is also the first comprehensive study issued by a U.S. government agency on the operation of section 512. Complex issues are involved: the operation of copyright liability in the online environment has tremendous legal, social, economic, and technological implications. Courts have been issuing decisions on various elements of section 512 for two decades. Changes in technology and business models used to create and disseminate copyrighted materials continues to grow in ways that could not have been imagined in 1998 when the Digital Millennium Copyright Act was passed. It should surprise no one that this issue and this docket have generated considerable public interest. I would like to thank the many individuals and organizations who participated in roundtables and provided comments and empirical studies to aid the Office in this process. This Report is the culmination of years of work; we have looked at the past, evaluated the present, and identified important issues, themes, and consideration for next steps.

The laboring oar on this Report has been wielded by the legal staff of the Office of Policy and International Affairs, who helped write the very first Federal Register notice, attended all of the roundtables, reviewed the record, developed its structure, researched the issues and identified paths forward, and wrote the bulk of this Report. This endeavor has involved many discussions

with, and has benefited greatly from, colleagues throughout the Office. The input and assistance of the Office of General Counsel, in particular, helped to guide and structure this Study, including through their participation in all of the roundtables and work on Federal Register notices and early drafts of the Report. Indeed, this Report represents the contributions of numerous current colleagues as well as those who have since left the office, including: senior leaders, staff attorneys, Ringer Program Fellows, law clerks serving in both Policy and International Affairs and the Office of General Counsel, as well as support assistants and production designers.

To be certain, this Report, like all of the reports, studies, and legal opinions issued by the Copyright Office, is the work of the Copyright Office. For more than half of the time this docket was open, the Copyright Office has been led by an Acting Register of Copyrights. That fact does not change the nature of any document issued by the Office. We are driven by our commitment to provide expert legal advice to Congress on domestic and international copyright matters. 17 U.S.C. § 701(b)(1).

It is an honor to work with our team of professionals dedicated to public service. Given the current COVID-19 challenges, they have done a spectacular job to complete and produce this Report. While we will not be able to distribute print versions to Congress at this time, this Report, as with our prior reports, will be posted online at www.copyright.gov/policy/section512/.

Maria Strong
Acting Register of Copyrights and Director,
U.S. Copyright Office

May 21, 2020

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EXECUTIVE SUMMARY

Since its establishment in 1998, as part of the Digital Millennium Copyright Act ("DMCA"), section 512 of title 17 has both provided critical guideposts for the expansion of the internet and produced widespread disagreement over its operation. This Report is the first full analysis of whether section 512 is working effectively in achieving its aim of balancing the needs of online service providers ("OSPs")[1] with those of creators.

In enacting section 512, Congress sought to create a balance between two goals. One is providing important legal certainty for OSPs, so that the internet ecosystem can flourish without the threat of the potentially devastating economic impact of liability for copyright infringement as a result of their users' activity. The other is protecting the legitimate interests of authors and other rightsholders against the threat of rampant, low-barrier online infringement. Congress balanced these interests through a system where OSPs can enjoy limitations on copyright liability—known as "safe harbors"—in exchange for meeting certain conditions, while giving rightsholders an expeditious and extra-judicial method for addressing infringement of their works. Thus, for some types of OSPs, their safe harbors are conditioned on taking down infringing content expeditiously upon notification by a rightsholder.

In the twenty-plus years since section 512 went into effect, the question has often been asked whether the balance that Congress sought has been achieved, particularly in the light of the enormous changes that the internet has undergone. Indeed, that is the question that motivated the Study that led to the present Report. Pursuant to a request from the then-Ranking Member of the House Committee on the Judiciary in 2015, the Copyright Office undertook a multi-year Study resulting in two notices of inquiry, tens of thousands of written responses, nine empirical studies, and public roundtables in New York, San Francisco, and Washington, DC.

Through these efforts, the Office received dramatically varied opinions on whether section 512's intended balance has been achieved. Roughly speaking, many OSPs spoke of section 512 as being a success, enabling them to grow exponentially and serve the public without facing debilitating lawsuits. Rightsholders reported a markedly different perspective, noting grave concerns with the ability of individual creators to meaningfully use the section 512 system to address copyright infringement and the "whack-a-mole" problem of infringing content re-appearing after being taken down. Based upon its own analysis of the present effectiveness of section 512, the Office has concluded that Congress' original intended balance has been tilted askew.

---

[1] While the Office is aware that many stakeholders and members of the public use the terms online service provider ("OSP") and internet service provider ("ISP") interchangeably, given the statutory differences between how section 512 treats mere conduit service providers (those that fall under section 512(a)) and other types of online service providers, the Office believes that there is a benefit to easily differentiating mere conduits from other types of online service providers. For this reason, the Office uses "ISP" herein to refer *solely* to mere conduit service providers under section 512(a), and uses "OSP" to refer to all online service providers covered by section 512, including mere conduits.

One of the Office's goals in conducting this Study was to make recommendations for how Congress might amend the statute if the initial balance was no longer working for all concerned parties.[2] A summary of the Office's conclusions and recommendations appears below, but first the guiding principles followed by the Office in conducting the Study and making its recommendations bear mentioning. First, copyright protection online must be meaningful and effective, so that rightsholders can appropriately enforce their rights when they are infringed. Second, OSPs operating in good faith must be afforded legal certainty and leeway to innovate, for the benefit of not only their shareholders, but the public and the content industry as well. Third, while Congress intended to incentivize cooperation between OSPs and rightsholders, cooperation cannot be the only answer; voluntary initiatives certainly have their place, but experience shows that they are no substitute for balanced legislation. Fourth, whenever possible, government decision-making should be based on facts. But because much of the data underlying the (largely private) operation of the section 512 system remains inaccessible, this limits the ability of policymakers to consider such data in order to inform and develop solutions. Fifth, and finally, internet policy in the 21st century cannot be one-size-fits-all. Policymakers must address differences within and among stakeholder classes.

With the above guiding principles in mind, the Copyright Office makes the following conclusions and recommendations, in twelve areas:

- Eligible Types of OSPs. Congress intended the four categories of OSPs to be quite broad, in order to accommodate new, unforeseen technologies. It appears that courts have generally construed the categories of safe harbors in harmony with Congress' original intent. The Office notes, however, that the current contours of the section 512(c) safe harbor are in tension with the original balance Congress sought to achieve. Specifically, the section 512(c) safe harbor shields an OSP from liability for monetary relief "for infringement of copyright by reason of the storage at the direction of a user of material that resides on a system or network controlled or operated by or for the service provider."[3] As currently interpreted, "by reason of the storage" has been expanded to cover many activities "related to" hosting in a manner that Congress did not likely anticipate. Other eligibility questions have arisen that Congress may want to clarify, including the amount of time that qualifies as "temporary" for the section 512(b) safe harbor, and whether technology services beyond providing internet infrastructure—such and peer-to-peer ("P2P") systems and payment processors—should appropriately be included under section 512(a).
- Repeat Infringer Policies. While there is significant disagreement among stakeholders regarding the meaning of "repeat infringer," the Fourth Circuit has held that a "repeat infringer" under section 512 means repeat *alleged* infringer, not repeat *adjudicated*

[2] Note that in this Report the Office has limited itself to consideration of the existing section 512 system. The Office does not address larger questions regarding the appropriate liability scheme for OSPs.

[3] 17 U.S.C. § 512(c)(1).

infringer. This Report identifies two other aspects of section 512's repeat infringer requirements for OSPs that Congress may want to monitor and potentially address. First, in order to qualify for a safe harbor, an OSP must have "adopted and reasonably implemented . . . a policy that provides for the termination in appropriate circumstances of subscribers and account holders of the service provider's system or network who are repeat infringers."[4] As currently interpreted, OSPs may be found in compliance if they adopt and reasonably implement an unwritten policy, the specifics of which are never shared with the OSP's users. In the Office's view, such unwritten and uncommunicated policies are unlikely to have the deterrent effect on infringing conduct that Congress initially intended. Given the broad scope of the safe harbors, having a clear, documented, and publicly available repeat infringer policy seems like the appropriate minimum requirement in order to comply with the statute, as well as to act as a deterrent to infringement. Second, Congress may wish to consider whether it is advisable to provide further legislative guidance on what constitutes "appropriate circumstances" for termination of a user's account based upon repeated acts of infringement, and whether such circumstances can ever arise in the absence of a formal takedown notice from a rightsholder.

- Knowledge Requirements for OSPs. This Report identifies three areas where current interpretations of the section 512 knowledge requirements for OSPs may be narrower than Congress initially intended.
    - First is the question of "actual knowledge" vs. "red flag knowledge," which drew a notably large number of comments during the Study. The statute requires that, in order to qualify for the section 512(c) or (d) safe harbors, an OSP must both lack actual knowledge that material or activity on its service is infringing, and "not [be] aware of facts or circumstances from which infringing activity is apparent," which is known as red flag knowledge.[5] The Office believes that this question, in particular, could benefit from Congressional attention to reiterate or clarify the distinction between actual and red flag knowledge. Relatedly, the Office notes that courts have struggled to articulate the appropriate relationship between section 512(m)'s intent to avoid the imposition of a duty to monitor on OSPs, with section 512(c) and (d)'s knowledge requirements. A fuller articulation of the intended balance between this provision and other provisions in section 512 would be valuable for stakeholders and courts. The Office further notes that the knowledge requirements could benefit from statutory language that incorporates a reasonableness standard to explicitly take into account differences among OSPs.

[4] 17 U.S.C. § 512(i)(1)(A).

[5] 17 U.S.C. §§ 512(c), (d).

- The second knowledge requirement issue the Office considered is that of the application of the "willful blindness standard." This is a common law doctrine that asks whether an OSP deliberately blinded itself to knowledge of infringing activity by its users. If an OSP is found to have engaged in willful blindness, it will be charged with the equivalent of actual knowledge and lose its safe harbor. The Copyright Office notes that courts have adopted a standard for willful blindness that is modified from the traditional common law standard and requires that the willful blindness involve deliberate avoidance of *specific* incidences of infringement, rather than avoidance of acts of infringement generally. While courts have reached this conclusion in an effort to reconcile the doctrine with section 512(m), the result may be in some tension with what appears to be Congress' original intent. The Office believes that section 512 could benefit from Congressional action to further clarify the intended scope of willful blindness and interaction between this doctrine and section 512(m).
- The third knowledge requirement issue the Office reviewed concerns the common law vicarious liability standard, which was imported into the DMCA through section 512(c)(1)(B)'s provision that hosting OSPs are not liable "for infringement of copyright by reason of the storage at the direction of a user . . . if the service provider . . . does not receive a financial benefit directly attributable to the infringing activity, in a case in which the service provider has the right and ability to control such activity."[6] Currently, courts require a showing of "something more than the ability to remove or block access to [infringing] materials."[7] While the Office does not favor a significant tightening of this standard, Congress may want to evaluate if current interpretations are in line with the intended balance.

- Representative List and Identification of Location. In sending a compliant takedown notice, a rightsholder must identify the *work allegedly infringed*, "or, if multiple copyrighted works at a single online site are covered by a single notification, a representative list of such works at that site."[8] The rightsholder must also include "information reasonably sufficient to permit the service provider to locate" the *infringing material*.[9] This statutory language is ambiguous, with the result that it is often difficult for courts to ascribe separate meaning to these two requirements. For this reason, Congress may want to consider providing additional statutory clarity. Similarly, the Office notes that there is a tension between Congress' apparent intent behind the "information reasonably sufficient . . . to locate" provision and the degree

[6] 17 U.S.C. § 512(c)(1)(B).

[7] *Viacom Int'l, Inc. v. YouTube, Inc.*, 676 F.3d 19, 38 (2d Cir. 2012).

[8] 17 U.S.C. § 512(c)(3)(A)(ii).

[9] 17 U.S.C. § 512(c)(3)(A)(iii).

of specificity that many OSPs and some courts require. The Office concludes that Congress may wish to consider whether the "information reasonably sufficient . . . to locate" provision is appropriately interpreted as requiring that a rightsholder must submit a unique, file-specific URL for every instance of infringing material on an OSP's service.

- Knowing Misrepresentation and Abusive Notices or Counter-Notices. Senders of both takedown notices and counter-notices are liable for damages if they make knowing material misrepresentations regarding whether the material to be taken down is infringing, or has been removed or disabled by mistake or misidentification.[10] Courts have appropriately interpreted this provision by requiring actual knowledge or willful blindness of falsity, not merely negligent or unreasonable misrepresentation. The Office notes, however, that many stakeholders called for increased penalties for misrepresentations to serve a deterrent effect.
- Knowing Misrepresentation and Fair Use. The Copyright Office questions the test for knowing misrepresentation under section 512(f) adopted by the *Lenz* court, which had the effect of imputing the good faith requirement in section 512(c)(3) for notice sending into the analysis of section 512(f)'s knowing misrepresentation requirement.[11] Such an analysis could result in placing potential liability on rightsholders who fail to undertake a fair use inquiry before sending a takedown notes, without regard to whether or not the material is actually infringing. The Office suggests that Congress monitor the impact of *Lenz*, and consider any clarifying statutory language that may be necessary.
- Standard & Non-standard Notice Requirements. Based on the information obtained during the course of the Study, the Copyright Office notes that the mechanisms for submission of takedown notices, adopted in recent years by many of the larger OSPs, are no longer in sync with the notice requirements set forth in section 512(c). The proliferation of new web-based submission forms and OSP-imposed requirements for substantiation of takedown notices in order to ensure the efficiency of the process has had the effect of increasing the time and effort that smaller rightsholders must expend to send takedown notices. At the same time, some of the current notification standards set forth in section 512(c) could be on their way to becoming obsolete. The Copyright Office therefore recommends that Congress consider shifting the required minimum notice standards for a takedown notice to a regulatory process, enabling the Copyright Office to set more flexible rules and "future-proof" the statute against changing communications methods.

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[10] 17 U.S.C. § 512(f).

[11] *See Lenz v. Universal Music Corp.*, 801 F.3d 1126, 1154 (9th Cir. 2015).

- Time Frames Under Section 512. The statutory requirement that OSPs "expeditiously" remove or disable access to infringing material upon becoming aware of it has been interpreted by the courts using a flexible approach that takes into consideration the varying circumstances of each case. The Copyright Office largely agrees that such flexibility is needed. In contrast, the Office notes that the current statutory timeframes to resume providing access to content following receipt of a counter-notice currently ill serves both users and rightsholders given current business models and the realities of federal litigation. Ten to fourteen days is both too long for legitimate speech to be blocked, and too short for a rightsholder to realistically prepare and file a federal lawsuit to prevent the return of infringing materials. For this reason, Congress may want to look into an alternative dispute resolution model to address these questions instead.
- Subpoenas. Section 512(h) permits a rightsholder to subpoena an OSP to identify an alleged infringer. However, this provision has proven to be little-used by rightsholders, in part because of how restrictively courts have interpreted it and in part because the information gleaned from such subpoenas is often of little use. Additionally, section 512(h) is ambiguous as to whether it applies to mere conduit ISPs, who may be the only source of information regarding the identity of users engaged in activities like P2P filesharing. Hence, the Office recommends that Congress consider clarifying the language of section 512(h).
- Injunctions. Section 512, while it bars monetary relief against OSPs, does allow limited forms of injunctive relief, specified under section 512(j). Courts, however, have largely interpreted the section 512(j) forms of injunctive relief in a way that is largely co-extensive with the notice-and-takedown system. While the Office believes such a reading is narrower than Congress may have intended and that several forms of section 512(j) injunctive relief remain available after a takedown, the Office does not believe that the issue currently requires Congressional intervention. However, if Congress believes that the range of injunctive relief available to rightsholders should be broader than it currently is in practice, it may want clarify the distinction between notice-and-takedown relief and section 512(j) injunctive relief.
- Non-statutory Approaches. In addition to the foregoing list of approaches that Congress may wish to consider, the Copyright Office notes that there is untapped potential for additional approaches that would not require congressional intervention. Accordingly, the Office plans to prepare and launch educational materials to inform all participants in the section 512 system of their rights and responsibilities, and encourages stakeholders to participate. In addition, the Office will look into ways to facilitate additional voluntary initiatives to address online infringement, as well as to help identify standard technical measures that can be adopted in certain sectors.

- Alternative Stakeholder Proposals: This Report includes illustrative information on developments involving online intermediary liability in other countries. It also identifies several proposals submitted by commenters on new approaches that the Office sees as going beyond the original construct of the DMCA. For those issues—specifically notice-and-staydown and website blocking—the Office believes that additional study, including of potential non-copyright implications, with public input, would be needed in order to explore the possible contours of any such future proposals.

The Office is not recommending any wholesale changes to section 512, instead electing to point out where Congress may wish to fine-tune section 512's current operation in order to better balance the rights and responsibilities of OSPs and rightsholders in the creative industries. Should Congress choose to continue to support the balance it devised the DMCA and move forward on the issues identified in this Report, then the Office harbors some optimism that a path toward rebuilding the section 512 balance could be found.

Finally, the Office is also mindful that the opportunities and challenges faced by everyone in the online environment—creators (large, medium, and small), OSPs (large, medium, and small), and users (of all sizes and in many sectors) —are very different today than in 1998. Congress also could choose to reevaluate how it perceives any balancing factors in the current environment, as well as other measures that would go beyond the current constructs of section 512. Those kinds of legislative decisions are in the hands of Congress and the Office makes no recommendations with respect to such larger questions about possible future balancing approaches. The Copyright Office stands ready to continue its work to provide additional advice to Congress.

I. INTRODUCTION AND STUDY HISTORY

Enacted in 1998 as part of the Digital Millennium Copyright Act ("DMCA"),[12] section 512 of title 17 sought to address the increasing conflict between two economically important industries precipitated by the growth of the commercial internet in the 1990s. Traditional content industries faced what many came to view as an existential threat, from the convergence of newly dominant and near-lossless digital media formats with a world-wide, interconnected network that facilitated the distribution of digital files of any type.[13] At the same time, the nascent internet service industry faced potentially crippling liability for acts of infringement committed by their users as a result of the strict nature of copyright infringement liability.[14] Congress recognized that such fears could dissuade investment in internet technologies and services just as the vast potential of such innovations was becoming widely apparent.[15] Accordingly, Congress crafted section 512 with a dual purpose: (1) to enable copyright owners to effectively address the infringement of their works online and (2) to facilitate the development of internet-based platforms by clarifying the obligations and limiting the liability of OSPs with respect to infringement committed by third-party users of their systems.[16] In exchange for cooperating with copyright owners to expeditiously remove infringing content, OSPs received a series of limitations on copyright liability under section 512—referred to as "safe harbors"—so long as they met certain conditions.

Section 512 contains four separate safe harbors, each of which has its own set of eligibility requirements.[17] All OSPs must adopt and reasonably implement "a policy that provides for the termination in appropriate circumstances of subscribers and account holders of the service provider's system or network who are repeat infringers," and accommodate and not interfere with the use of standard technical measures by copyright owners to identify or protect their

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[12] Pub. L. No. 105-304, 112 Stat. 2860 (1998).

[13] *See, e.g.*, John Naughton, *Farewell Then, iTunes, and Thanks for Saving the Music Industry from Itself*, GUARDIAN (Jun. 9, 2019), https://www.theguardian.com/commentisfree/2019/jun/09/farewell-itunes-thanks-for-saving-music-industry-from-itself (after the shutdown of Napster in 2001, "[d]ozens of filesharing systems had come into being and the record business found itself facing an existential threat"); Anne Eisenberg, *What's Next: Legal Squabbles in Path of Internet*, N.Y. TIMES (Dec. 9, 1999), https://www.nytimes.com/1999/12/09/technology/what-s-next-legal-squabbles-in-path-of-internet.html; Jon Pareles, *The Media Business: Industry Plan Is Aimed at Selling Music Over the Internet*, N.Y. TIMES (Dec. 16, 1998), https://www.nytimes.com/1998/12/16/business/the-media-business-industry-plan-is-aimed-at-selling-music-over-the-internet.html.

[14] *See, e.g.*, *Religious Tech. Ctr. v. Netcom On-Line Commc'n Servs., Inc.*, 907 F. Supp. 1361 (N.D. Cal. 1995) ("*Netcom*"); *Sega Enters. Ltd. v. MAPHIA*, 948 F. Supp. 923 (N.D. Cal. 1996); *Playboy Enters., Inc. v. Frena*, 839 F. Supp. 1552 (M.D. Fla. 1993) ("*Frena*").

[15] *See The Copyright Infringement Liability of Online and Internet Service Providers: Hearing Before the S. Comm. on the Judiciary*, 105th Cong. 2 (1997) (statement of Chairman Sen. Orrin G. Hatch) ("In the past few years alone, the Internet has more than tripled in size . . . . Do we want this growth to be retarded by a series of adverse court rulings or because content providers are reluctant to make full use of the Internet?") ("*Senate Copyright Infringement Liability Hearing*").

[16] *See* S. REP. NO. 105-190, at 40 (1998); H.R. REP. NO. 105-551, pt. 2, at 49–50 (1998).

[17] 17 U.S.C. §§ 512(a)–(d).

works.[18] In addition, most OSPs must also maintain a "notice-and-takedown" process whereby the OSP responds expeditiously to remove or disable access to material claimed to be infringing upon receipt of a proper notice from a copyright owner.[19] An OSP that meets the eligibility criteria under one of the safe harbors is not liable for monetary relief resulting from copyright infringement committed by its users and is subject to only limited injunctive relief.[20] Through this system, Congress aimed to create incentives for OSPs and copyright owners to address online infringement cooperatively and efficiently, outside the context of costly and protracted federal court litigation, while encouraging the further development of the internet.[21]

Over the past two decades, as the internet has transformed virtually every facet of the copyright ecosystem, section 512 of title 17 has provided the critically important legal rules that govern the rights and responsibilities of stakeholders in the online environment. Partially as a result of this, the internet of today looks dramatically different from that of 1998, when the DMCA was enacted. With those changes has come widespread debate over section 512's continued effectiveness at meeting its underlying goals in the twenty-first century. On the one hand, the explosive growth in the number and variety of online services, both within and outside of traditional copyright industries, is powerful evidence that the statute has succeeded in creating legal conditions under which an innovative digital marketplace can thrive. These developments have done much to advance the goals of the copyright system: authors have new tools with which to produce original works and to reach wide audiences; creative industries have built a host of groundbreaking distribution and licensing models; and consumers, researchers, educators, and others can access more copyrighted content, through a greater number of lawful channels, than at any other time in history. [22]

On the other hand, there are substantial questions over whether the current statutory framework is adequate to address the sheer volume of copyrighted material online, some of it unauthorized. Today, internet users post hundreds of millions of authorized and unauthorized photos, videos, sound recordings, and other works on a daily basis. In 2015, YouTube alone had

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[18] 17 U.S.C. § 512(i).

[19] 17 U.S.C. §§ 512(b)–(d).

[20] 17 U.S.C. §§ 512(b)–(d), (j).

[21] *See* S. REP. NO. 105-190, at 20 (1998); H.R. REP. NO. 105-551, pt. 2 at 49–50 (1998).

[22] *See, e.g.* Electronic Frontier Foundation ("EFF"), Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015, Notice of Inquiry at 4 (Apr. 1, 2016) ("EFF Initial Comments") ("The Internet has become the most revolutionary platform for the creation and dissemination of speech that the world has ever known. Interactive platforms like video hosting services and social networking sites have become vital not only to democratic participation but also to the ability of users to forge communicates, access information instantly, and discuss issues of public and private concern."); Organization for Transformative Works ("OTW"), Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015, Notice of Inquiry at 2 (Apr. 1, 2016) ("OTW Initial Comments") ("There are many predicates for successful markets, but § 512 is one of them because it has helped many new services thrive and compete, allowing both service providers and copyright owners—large and small—to experiment with various ways of finding their audiences.").

almost 400 hundred hours of video uploaded every minute,[23] and by May 2019, that figure was up to 500 hours.[24] As online activity and third party uses of creators' content have increased, so too has the pressure on the notice-and-takedown system's ability to serve the needs of all stakeholders. Many of the larger rightsholders have come to rely on automated processes to search for unauthorized material and generate takedown notices on a mass scale unimagined by Congress in 1998, but these stakeholders still express continued concerns regarding the impact of infringement on their bottom lines.[25] Similarly, while many of the larger internet platforms have augmented or sidestepped use of traditional notice-and-takedown processes by either licensing content or by building bespoke systems allowing large copyright owners to identify and manage instances of their content on the platform's system,[26] discussions of these efforts are often bundled with discussions about the time and resources required to create and manage these interventions.[27] In contrast, smaller creators report devoting significant time and resources to

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[23] *See Industry Keynote with YouTube CEO Susan Wojcicki (VidCon 2015)*, YOUTUBE 10:48–57 (Sept. 29, 2015), https://www.youtube.com/watch?v=O6JPxCBlBh8; *see also* Sirena Bergman, *We Spend a Billion Hours a Day on YouTube, More Than Netflix and Facebook Video Combined*, FORBES, (Feb. 28, 2017), https://www.forbes.com/sites/sirenabergman/2017/02/28/we-spend-a-billion-hours-a-day-on-youtube-more-than-netflix-and-facebook-video-combined/.

[24] J. Clement, *Hours of Video Uploaded to YouTube Every Minute 2007–2019*, STATISTA (Aug. 9, 2019), https://www.statista.com/statistics/259477/hours-of-video-uploaded-to-youtube-every-minute/.

[25] *See, e.g.*, Association of American Publishers ("AAP"), Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015, Notice of Inquiry at 6 (Apr. 1, 2016) ("AAP Initial Comments") ("Rights holders send millions of notifications, yet these collectively have had little impact toward reducing the volume of infringing material available."); Content Creators Coalition ("c3"), Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015, Notice of Inquiry at 4 (Apr. 1, 2016) ("c3 Initial Comments") ("The notice and takedown system requires creators and copyright holders to police millions of infringements. This year, Google believes they will receive over 1 billion takedown notices. Notice and takedown today barely staunches illegal content, and music removed is uploaded again immediately after it is taken down. This process foists huge costs on creators, yet with no effect in stopping infringement."); *cf.* Ernesto Van der Sar, *Top 3 Copyright "Owners" Sent Google a Billion Takedown Requests*, TORRENTFREAK (Dec. 25, 2018), https://torrentfreak.com/top-3-copyright-owners-sent-google-a-billion-takedown-requests-181225/. Google posts searchable statistics on takedown requests and removals, including the number of unique URLs to be delisted, the number of copyright owners requesting removal, and the top requesting organizations. As of May 2020, Google had received requests to remove over 4.6 trillion URLs. Three rights owners collectively requested over 1 billion removals, and the top ten rightsholders, out of over 206,000, collectively accounted for slightly over 2 billion URL removal requests. *Content Delistings Due to Copyright*, GOOGLE: TRANSPARENCY REPORT, http://transparencyreport.google.com/copyright/overview.

[26] Development of these licensing and technological approaches to online infringement did not arise in a vacuum, or even solely from the incentives built into section 512, however. Introduction of YouTube's Content ID system in 2007 came amid a series of lawsuits brought against the video platform by the likes of Viacom, Mediaset, the Premier League, and others, both in the United States and abroad. *See, e.g.*, *Viacom Int'l, Inc. v. YouTube, Inc.*, No. 07 Civ. 2103 (S.D.N.Y. 2007), *consolidated with The Football Assoc. Premier League Ltd. et al. v. YouTube, Inc.*, No. 07 Civ. 3582 (S.D.N.Y. 2007); *RTI Reti Televisive Italiane SpA vs. YouTube LLC*, (Tribunale Ordinario di Roma, 16 dicembre 2009) (It.).

[27] Copyright Alliance, Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015, Notice of Inquiry at 9 (Apr. 1, 2016) ("Copyright Alliance Initial Comments") ("Individual creators who file notices lack the resources of larger copyright owners to make a meaningful impact. Eighty-five percent of those we surveyed said they issue takedown notices all by themselves, taking time away from their creative pursuits, which pushes many to give up

identifying instances of their content online and sending takedown notices, to little effect,[28] while some smaller OSPs express concern about facing an increasing amount of takedown notices without the benefit of the technological resources deployed by the largest incumbents.[29] Without the technological or administrative support available to the larger rightsholders and OSPs, some smaller creators and OSPs struggle to operate within the current section 512 framework, which, coincidently or not, they did not have the opportunity to shape.[30] Meanwhile, some observers worry that the system's growth and increasing reliance on automation may render it more susceptible to errors and abuses that chill lawful online speech.[31]

In light of these and related concerns, the House Committee on the Judiciary held a hearing on section 512 in March 2014, featuring stakeholders representing rightsholders, OSPs,

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enforcement efforts all together."); Warner Music Group ("WMG"), Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015, Notice of Inquiry at 8 (Apr. 1, 2016) ("WMG Initial Comments").

[28] *See, e.g.*, Maria Schneider, Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015, Notice of Inquiry at 5 (Apr. 1, 2016) ("Schneider Initial Comments") ("The current takedown scheme is a constant whack-a-mole game."); Tr. at 15:7–10 (May 2, 2016) (Lisa Hammer, independent film director) ("That's taking up a lot of my time, where I could be actually working on my art instead and it's very time consuming to keep searching for all the torrents that I now have to take down"). In particular, visual artists report that they are deeply concerned about online infringement due to the widespread confusion among users concerning when to seek permission to use visual works and the ease of perfectly copying and using a digital image without compensation to the owner. *See* Letter from Karyn A. Temple, Acting Register of Copyrights & Dir., U.S. Copyright Office, to Lindsey Graham, Chairman, Comm. on the Judiciary, U.S. Senate, and Dianne Feinstein, Ranking Member, Comm. on the Judiciary, U.S. Senate 15–17 (Jan. 18, 2019), https://www.copyright.gov/policy/visualworks/senate-letter.pdf; Letter from Karyn A. Temple, Acting Register of Copyrights & Dir., U.S. Copyright Office, to Jerrold Nadler, Chairman, Comm. on the Judiciary, H.R., and Doug Collins, Ranking Member, Comm. on the Judiciary, U.S. House of Representatives 15–17 (Jan. 18, 2019), https://www.copyright.gov/policy/visualworks/house-letter.pdf ("Visual Works Letters").

[29] *See, e.g.*, Engine Advocacy et al., Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015, Notice of Inquiry at 6 (Apr. 1, 2016) ("Engine et al. Initial Comments") ("[C]ompliance can be rather burdensome for startups without vast resources given the obligations involved (e.g., expeditiously processing requests for removal of content, establishing and implementing a reasonable repeat infringer policy, designating and registering an agent to receive notices of infringement, etc.)."); The Internet Association, Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015 Notice of Inquiry at 15 (Apr. 1, 2016) ("Internet Association Initial Comments") ("[T]he problems of scale are true for Internet platform creators: startups and small businesses lack the sophisticated resources of larger, more established businesses in responding to takedown requests."); OTW Initial Comments at 5 ("The OTW doesn't have the resources to double-check the work of thousands of copyright claimants if they send notices based on metadata such as work titles.").

[30] *See, e.g.*, *Senate Copyright Infringement Liability Hearing*, 105th Cong. 6 (statement of Chairman Sen. Orrin G. Hatch) (noting that the day's panelists "represent the major industries and interests affected by the issues we will be discussing throughout the course of this debate"); *WIPO Copyright Treaties Implementation Act; and Online Copyright Liability Limitation Act: Before the Subcomm. on Courts & Intellectual Prop. of the H. Comm. on the Judiciary*, 105th Cong. III-IV (1997) (list of witnesses and letters/statements for the record) ("*House WCT Implementation Act Hearing*").

[31] *See, e.g.*, EFF Initial Comments at 15 ("[W]e agree with many service providers that filtering technologies are an expensive approach to policing infringement, and one that is likely to lead to collateral damage to free speech and innovation."); Public Knowledge, Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015, Notice of Inquiry at 3 (Apr. 1, 2016) ("PK Initial Comments") ("[T]he rise of automation on both the copyright owner and online service provider sides of the equation raise a number of questions and concerns.").

and the legal community.[32] The Register of Copyrights later advised the Committee in April 2015, as part of the Committee's comprehensive review of U.S. copyright law, that a formal study of section 512 would be advisable to consider the statute's current impact and effectiveness, along with potential improvements.[33] In response, the Ranking Member of the Committee requested that the Office undertake such a study and provide a report to the Committee.[34]

The Office began this process by publishing a notice of inquiry in the Federal Register on December 31, 2015 ("First Notice"), requesting public comment on thirty questions relating to the general effectiveness of the safe harbors, the notice-and-takedown process, counter notifications, legal standards, repeat infringers, standard technical measures, and remedies.[35] The Office received more than 92,000 written responses from a wide range of parties, including rightsholders OSPs, technology companies, libraries, legal scholars, public interest groups, and individual members of the public.[36] The Office then held two initial public roundtables over four days in May 2016, in New York and San Francisco, to seek further input on the topics raised in the First Notice, as well as on other relevant issues.[37]

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[32] *Section 512 of Title 17: Hearing Before the Subcomm. on Courts, Intellectual Prop. & the Internet of the H. Comm. on the Judiciary*, 113th Cong. (2014).

[33] *Register's Perspective on Copyright Review: Hearing Before the H. Comm. on the Judiciary*, 114th Cong. 30 (2015) (written statement of Maria A. Pallante, Register of Copyrights and Dir., U.S. Copyright Office) ("*House Register's Perspective Hearing*").

[34] *House Register's Perspective Hearing*, 114th Cong. 49 (statement of Rep. John Conyers, Jr., Ranking Member, H. Comm. on the Judiciary).

[35] Section 512 Study: Notice and Request for Public Comment, 80 Fed. Reg. 81,862 (Dec. 31, 2015). This notice is attached in Appendix A. The same month it launched the present Study, the Office issued Notices of Inquiry for three additional studies: U.S. COPYRIGHT OFFICE, SOFTWARE ENABLED CONSUMER PRODUCTS (2016), https://www.copyright.gov/policy/software/software-full-report.pdf; U.S. COPYRIGHT OFFICE, SECTION 1201 OF TITLE 17 (2017), https://www.copyright.gov/policy/1201/section-1201-full-report.pdf; mass digitization; and U.S. COPYRIGHT OFFICE, AUTHORS, ATTRIBUTION, AND INTEGRITY: EXAMINING MORAL RIGHTS IN THE UNITED STATES (2019), https://www.copyright.gov/policy/moralrights/.

[36] The Office received over 92,000 comments in response to the first NOI. Many of these were submitted by individual users via a comment form and template text provided by a third party. For ease of review, the Office sorted all comments into three categories: (i) Long Form [LF], comments that were submitted as attachments and contained unique content (less than 0.2% of comments), (ii) Short Form [SF], comments typed directly into the Regulations.gov form that provided short statements on section 512 that were comprised of either unique content, or content where at least 40% of the text differed from the text in the third party's template (slightly more than 5.3% of comments), and (iii) Template Form [TF], comments typed directly into the Regulations.gov form that largely tracked the third party template, with less than 40% original text (more than 94.3% of comments). The comments received in response to the First Notice are available online at https://www.regulations.gov/docketBrowser?rpp=25&so=ASC&sb=title&po=0&dct=PS&pd=ALL-07%7C01%7C16&D=COLC-2015-0013. References to these comments are by party name (abbreviated where appropriate) followed by "Initial Comments."

[37] Section 512 Study: Announcement of Public Roundtables, 81 Fed. Reg. 14,896 (March 18, 2016). The Federal Register notice announcing the roundtables is attached in Appendix A. The agendas for each of the roundtables are attached in Appendix B. Transcripts of the New York roundtables are available at https://www.copyright.gov/policy/section512/public-roundtable/transcript_05-02-2016.pdf and https://www.copyright.gov/policy/section512/public-

On November 8, 2016, the Office published a second notice of inquiry ("Second Notice") requesting additional public input on sixteen questions relating to issues raised in the written comments and during the roundtables.[38] Noting that commenters had expressed a desire for more comprehensive empirical data in this area, the Second Notice also invited parties to submit empirical research studies assessing the operation of the safe harbor provisions on a quantitative or qualitative basis.[39] The Office received seventy-nine written comments and nine empirical studies in response to the Second Notice.[40]

The Copyright Office held its final roundtable meeting for the Section 512 Study on April 8, 2019, in Washington, D.C.[41] Over fifty individuals representing a variety of companies and organizations participated in the discussion on domestic case law and international legal and policy developments since 2017.

II. HISTORY AND DEVELOPMENT OF SECTION 512

A. Pre-DMCA Legal and Policy Landscape

In the 1990s, the rapid growth of the internet gave rise to a host of new concerns for parties throughout the copyright system. Stakeholders recognized that the internet not only posed unprecedented risks for the protection of creative works,[42] but also raised complex legal questions about liability, damages, and the responsibility of third-party intermediaries.[43] Prior to

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roundtable/transcript_05-03-2016.pdf. Transcripts of the San Francisco roundtables are available at https://www.copyright.gov/policy/section512/public-roundtable/transcript_05-12-2016.pdf and https://www.copyright.gov/policy/section512/public-roundtable/transcript_05-13-2016.pdf.

[38] Section 512 Study: Request for Additional Comments, 81 Fed. Reg. 78,636 (Nov. 8, 2016).

[39] Section 512 Study: Request for Additional Comments, 81 Fed. Reg. 78,636, 78,642 (Nov. 8, 2016).

[40] The comments received in response to the Second Notice are available online at https://www.regulations.gov/docketBrowser?rpp=25&so=ASC&sb=title&po=0&s=Additional%2BComments&pd=02%7C01%7C17-03%7C17%7C17&D=COLC-2015-0013. References to these comments are by party name (abbreviated where appropriate) followed by "Additional Comments." The empirical studies received in response to the Second Notice are available online at https://www.regulations.gov/docketBrowser?rpp=25&so=ASC&sb=title&po=0&s=%5BES%5D&dct=PS&pd=03%7C23%7C17-03%7C23%7C17&D=COLC-2015-0013. References to these studies are by party name (abbreviated where appropriate) followed by "Empirical Study."

[41] Section 512 Study: Announcement of Public Roundtable, 84 Fed. Reg. 1233 (Feb. 1, 2019). The Federal Register notice announcing the roundtable is attached in Appendix A. Transcripts of the Washington, D.C. roundtable are available at https://www.copyright.gov/policy/section512/public-roundtable/transcript_04-08-2019.pdf. A Glossary of acronyms and terms used in this Report is attached in Appendix C.

[42] *See, e.g.*, *Senate Copyright Infringement Liability Hearing*, 105th Cong. 1–2 (statement of Chairman Sen. Orrin G. Hatch) (stating that the internet had the potential to "recklessly facilitate infringement" and that Congress aimed to "best combat the risk of copyright infringement facing content providers on the Internet"); Marybeth Peters, Lecture, *Copyright Enters the Public Domain*, 51 J. COPYRIGHT SOC'Y. 701, 705–717 (2004) (address by Register of Copyrights); Tim Wu, *When Code Isn't Law*, 89 VA. L. REV. 679, 724–726 (2003).

[43] *See* Eric Schlachter, *Cyberspace, The Free Market and the Free Marketplace of Ideas: Recognizing Legal Differences in Computer Bulletin Board Functions*, 16 HASTINGS COMM./ENT. L.J. 87, 95 (1993) ("The power of this new technology has

the internet, music infringement primarily occurred in the form of the distribution of physical media which, when committed on a commercial scale, could be prosecuted as criminal infringement.[44] The average consumer's ability to reproduce music directly was limited to recording songs from the radio or making small numbers of copies of works, as the limits of technology at that time restricted the scale and quality of both reproduction and distribution.[45] Copyright owners were concerned, however, that the internet, combined with the smaller file sizes enabled by the newly rediscovered MP3 format, would enable ordinary users to easily spread unauthorized near-perfect digital copies of copyrighted works to other users across the globe, at a pace limited only by download speeds, creating new opportunities for infringement that were not available before the digital age.[46]

At the same time, OSPs had difficulty addressing the growing issue of digital piracy, especially with balancing the appropriate degree of oversight and control over their users'

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caused some private and state actors to respond aggressively, overreacting to weak threats and inhibiting legitimate conduct. Ambiguities arise as old law is applied to new technologies. With the inherent ambiguities of cyberspace, the need to define its boundaries for legal purposes becomes even more critical.").

[44] *See* 17 U.S.C. § 506(a), *as amended by* No Electronic Theft Act of 1997, Pub. L. No. 105-147, 111 Stat. 2678 (1997).

[45] See Robert T. Baker, *Finding a Winning Strategy Against the MP3 Invasion: Supplemental Measures the Recording Industry Must Take to Curb Online Piracy*, 8 U.C.L.A. ENT. L. REV. 1, 3–4 (2000). Congress sought to address any economic threat posed by such low-level consumer copying by levying a tax on blank media in order to compensate rightsowners for the lost sales resulting from these reproductions, but the levy did not apply to hard drives or other digital storage devices. *See* Audio Home Recording Act, Pub. L. No. 102-563, 106 Stat. 4237 (1992).

[46] *See* NICHOLAS NEGROPONTE, BEING DIGITAL 58 (1995) ("In the digital world, not only is the ease [of copying] at issue, but also the fact that the digital copy is as perfect as the original and, with some fancy computing, even better."); *see also* Authors Guild, Inc., Comments Submitted in Response to the U.S. Copyright Office's Dec. 31, 2015, Notice of Inquiry at 3 (Apr. 1, 2016) ("Authors Guild Initial Comments") ("Congress acknowledged the need for protection against digital piracy in the Internet age, due to the ease of copying and distributing perfect copies."); Independent Film & Television Alliance ("IFTA"), Comments Submitted in Response to the U.S. Copyright Office's Dec. 31, 2015, Notice of Inquiry at 2 (Apr. 1, 2016) ("IFTA Initial Comments") ("Congress[] recogni[zed] that the same innovative advances in technology that would expand opportunities to reproduce and disseminate content could also facilitate exponential growth in copyright infringement."); *Senate Copyright Infringement Liability Hearing*, 105th Cong. 17 (testimony of Cary H. Sherman, Senior Executive Vice President and General Counsel of the Recording Industry Association of America ("RIAA")) ("Songs by artists such as Mariah Carey, the Rolling Stones, the Police, Sheryl Crow—they are all available for download in near CD quality and they are all unauthorized."); Michael J. Meurer, *Price Discrimination, Personal Use and Piracy: Copyright Protection of Digital Works*, 45 BUFF. L. REV. 845, 846 (1997) ("Publishers prefer that each user of a digital work purchase an original. Users often find it is convenient and economical to purchase a single original and share it within their social group . . . . All publishers worry about pirates making cheap and precise digital copies and easily transmitting the copies throughout the world via the Internet.").

activities[47] with the need to minimize their own liability for copyright infringement.[48] The OSPs' concerns stemmed in part from several cases in the early- to mid- 1990s in which courts concluded that OSPs could, in at least some circumstances, be liable for infringing activity by their users.[49] One of the earliest of these cases, *Playboy Enterprises, Inc. v. Frena*, involved an operator of a computer bulletin board service to which a subscriber uploaded the plaintiff's copyrighted photographs.[50] Although the operator stated that he removed the photographs as soon has he became aware of the matter, and subsequently monitored the service to prevent further uploads, the court found him directly liable for infringing the plaintiff's rights to publicly distribute and display copies of its works.[51] The court held that "[i]t does not matter that [the operator] may have been unaware of the copyright infringement," as "[i]ntent to infringe is not needed to find copyright infringement."[52]

Two years later in *Religious Technology Center v. Netcom On-line Communication Services, Inc.*, copyright holders sued both the operator of an online bulletin board service and the service's

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[47] A similar tension, between balancing the ability to restrict access to certain content without making the OSP legally liable as a publisher for a user's content, led to the passage, a few years before the DMCA, of section 230 of the Communication Decency Act. *See* 47 U.S.C. § 230; S. REP. NO. 104-230, at 194 (1996) ("One of the specific purposes of this section is to overrule *Stratton-Oakmont v. Prodigy* and any other similar decisions which have treated such providers and users as publishers or speakers of content that is not their own because they have restricted access to objectionable material.").

[48] *See* CTIA, Comments Submitted in Response to the U.S. Copyright Office's Dec. 31, 2015, Notice of Inquiry at 4 (Apr. 1, 2016) ("CTIA Initial Comments") ("Congress recognized that the very nature of a service provider's day-to-day activities (*e.g.*, transmitting, hosting, storing, caching, an directing) could subject it to potential copyright infringement liability for the acts of its users and other third parties."); EFF Initial Comments at 2 ("Congress correctly understood that the application of ambiguous copyright doctrines to new Internet technologies would put service providers in an impossible position.").

[49] While copyright is generally a strict liability statute, OSPs were particularly concerned that they could be subject to direct, in addition to indirect or secondary, forms of copyright infringement liability. Secondary liability doctrines enable copyright owners to bring claims against third parties that have some relationship to persons who themselves commit acts of infringement (i.e., "direct" infringers). The "dance hall" cases provide commonly cited examples of vicarious liability in the pre-internet context. The cases "are legion which hold the dance hall proprietor liable for the infringement of copyright resulting from the performance of a music composition by a band or orchestra whose activities provide the proprietor with a source of customers and enhanced income. He is liable whether the bandleader is considered, as a technical matter, an employee or an independent contractor, and whether or not the proprietor has knowledge of the compositions to be played or any control over their selection." *Shapiro, Bernstein & Co. v. H.L. Green Co.*, 316 F.2d 304, 307 (2d Cir. 1963) (holding that a store owner that leased floor space to a phonograph record concessionaire was liable for the concessionaire's sales of "bootleg" records due to the store owner's receipt of a portion of the sales despite the absence of actual knowledge of infringement); *see also, e.g.*, *Famous Music Corp. v. Bay State Harness Horse Racing & Breeding Ass'n, Inc.*, 554 F.2d 1213 (1st Cir. 1977); *Dreamland Ball Room, Inc. v. Shapiro, Bernstein & Co.*, 36 F.2d 354 (7th Cir. 1929); *KECA Music, Inc. v. Dingus McGee's Co.*, 432 F. Supp. 72 (W.D. Mo. 1977).

[50] *Frena*, 839 F. Supp. at 1554.

[51] *Id.* at 1559.

[52] *Id*. The *Frena* decision has been criticized on the ground that the court failed to consider whether the operator was the party who should be deemed to have engaged in the unauthorized distribution and display—a required showing for direct liability. *See* 4 MELVILLE B. NIMMER & DAVID NIMMER, NIMMER ON COPYRIGHT § 12B.01[A][1] (2017).

internet access provider, Netcom, based on a subscriber's posting of allegedly infringing content to the bulletin board.[53] The court found that neither the bulletin board service nor Netcom could be directly or vicariously liable for the infringement, but allowed claims for contributory infringement against both defendants to move forward. As for Netcom, the court found that it may have had sufficient knowledge of the user's infringing postings and sufficient ability to prevent further damage to the plaintiffs' copyrighted works to satisfy the requirements for contributory liability.[54]

A year after the *Netcom* decision, the court in *Sega Enterprises Ltd. v. MAPHIA* found the operator of a bulletin board service liable for contributory infringement where it facilitated and solicited the uploading and downloading of infringing copies of the plaintiff's video games.[55] The court concluded that the operator's participation in his users' activities—including "actively solicit[ing] users to upload unauthorized games, . . . provid[ing] a road map . . . for easy identification" of games available for download, and "offer[ing] copiers for sale to facilitate playing the downloaded games"—established a *prima facie* case of contributory copyright infringement.[56] These case law developments raised significant questions as to the scope of OSPs' potential liability for infringement committed by users of their systems, with some OSPs fearing the prospect of being "sued out of existence for involvement in purportedly aiding copyright infringement."[57]

In response to these concerns by OSPs, as well as broader concerns over the integration of developing computer technologies into the existing information infrastructure, the United States began to consider possible updates to the copyright laws to address infringement over the internet in 1993, when the Clinton Administration established the Information Infrastructure Task Force ("IITF").[58] In 1995, the IITF's Working Group on Intellectual Property Rights issued the report *Intellectual Property and the National Information Infrastructure*, which examined the application of existing copyright law in the online context and recommended a number of legislative changes. Many of the changes proposed by the IITF were less favorable for OSPs than

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[53] *Netcom*, 907 F. Supp. at 1365–66.

[54] *Id*. at 1374–75.

[55] *Sega Enters., Ltd. v. MAPHIA*, 948 F. Supp. 923, 927 (N.D. Cal. 1996).

[56] *Id.* at 933.

[57] 4 NIMMER ON COPYRIGHT, § 12B.01[C][1]. *See also* S. REP. NO. 105-190, at 8 (1998) ("At the same time, without clarification of their liability, service providers may hesitate to make the necessary investment in the expansion of the speed and capacity of the Internet."); H.R. REP. NO. 105-551, pt. 1, at 11 (1998) ("While several judicially created doctrines currently address the question of when liability is appropriate, providers have sought greater certainty through legislation as to how these doctrines will apply in the digital environment.").

[58] S. REP. NO. 105-190, at 2 (1998).

the provisions that would later be enacted as part of the DMCA.[59] Commonly known as the "White Paper," the report concluded that "the best policy is to hold the service provider liable" for infringing activity facilitated by its services.[60] It argued that the market should be allowed to freely regulate such behavior, which would create incentives for online services providers to "make their subscribers more of aware of copyright law" through the implementation of preventative measures against infringement.[61] That same year, legislation to implement these proposals was introduced in Congress, but it ultimately stalled in part due to a failure to reach stakeholder agreement on "the contentious issue of the scope of liability of service providers for the infringing acts of their users."[62]

During the same period, similar efforts took place at the international level under the auspices of the World Intellectual Property Organization ("WIPO"). In the early 1990s, WIPO member countries, including the United States, began formal consideration of possible changes to the international copyright treaty framework to respond to emerging digital technologies.[63] That work led to the December 1996 adoption of two new treaties, collectively known as the "WIPO Internet Treaties." The WIPO Copyright Treaty ("WCT")[64] updated the protections for authors established by the Berne Convention for the Protection of Literary and Artistic Works to reflect the needs of the digital age,[65] while the WIPO Performances and Phonograms Treaty ("WPPT")[66] established new protections for performers and producers of phonograms (*i.e.*, sound recordings). Both treaties provided protections for new anti-circumvention technologies[67] and rights management information,[68] but neither included specific obligations concerning service provider

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[59] INFO. INFRASTRUCTURE TASK FORCE, INTELLECTUAL PROPERTY AND THE NATIONAL INFORMATION INFRASTRUCTURE: THE REPORT OF THE WORKING GROUP ON INTELLECTUAL PROPERTY RIGHTS (1995), https://files.eric.ed.gov/fulltext/ED387135.pdf (the "White Paper").

[60] White Paper at 117.

[61] White Paper at 124.

[62] S. REP. NO. 105-190, at 4 (1998); *see also* NII Copyright Protection Act of 1995, H.R. 2441, 104th Cong. (1995); NII Copyright Protection Act of 1995, S. 1284, 104th Cong. (1995).

[63] *See* SAM RICKETSON & JANE C. GINSBURG, INTERNATIONAL COPYRIGHT AND NEIGHBORING RIGHTS: THE BERNE CONVENTION AND BEYOND ¶¶ 4.15–19, at 143-49 (2d ed. 2006).

[64] WIPO Copyright Treaty, Dec. 20, 1996, S. TREATY DOC. NO. 105-17, 2186 U.N.T.S. 121 ("WCT").

[65] Berne Convention for the Protection of Literary and Artistic Works, Sept. 9, 1886, *as revised* July 24, 1971, *and as amended* Sept. 28, 1979, S. TREATY DOC. NO. 99-27, 1161 U.N.T.S. 3 (1986) ("Berne Convention").

[66] WIPO Performances and Phonograms Treaty, Dec. 20, 1996, S. TREATY DOC. NO. 105-17, 2186 U.N.T.S. 203 ("WPPT").

[67] The U.S. Copyright Office completed the *Section 1201 Study* in 2017 to assess the operation of section 1201 of title 17, which addresses these technologies. Enacted as part of the DMCA, section 1201 prohibits the circumvention of technological measures employed by or on behalf of copyright owners to protect access to their works (also known as "access controls"), as well as the trafficking in technology or services that facilitate such circumvention. It also prohibits trafficking in technologies or services that facilitate circumvention of technological measures that protect the exclusive rights granted to copyright owners under title 17. *See generally* SECTION 1201 OF TITLE 17.

[68] In 2019, the U.S. Copyright Office published its report on moral rights, which included an analysis of the rights management information provisions of section 1202. *See* U.S. COPYRIGHT OFFICE, AUTHORS, ATTRIBUTION, & INTEGRITY:

liability. During the diplomatic conference for the WIPO Internet Treaties, the issue of service provider liability was raised but not considered ripe for adoption of a normative rule in a treaty.[69]

B. Congress Sought to Achieve a Balance with the DMCA

After the President forwarded the WIPO Internet Treaties to the Senate for advice and consent to ratification, Congress introduced several bills to implement the Treaties' provisions regarding anti-circumvention technologies and protection of rights management information.[70] This legislation was premised on the assumption that existing U.S. copyright law was largely consistent with the treaties' other obligations.[71] Contemporaneous with the WIPO Internet Treaties bills, Congress also introduced legislation addressing the potential liability of OSPs.[72] Many stakeholders, including those representing creators, the technological and telecommunications industries, and educational institutions, argued that uncertainty resulting in protracted litigation to determine who is liable for online infringement by users was not a sustainable business practice, and should be resolved by legislation.[73] Under the oversight of the Senate Judiciary Committee and the Subcommittee on Courts and Intellectual Property of the

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EXAMINING MORAL RIGHTS IN THE UNITED STATES 83–99 (2019), https://www.copyright.gov/policy/moralrights/full-report.pdf. Rights management information includes information conveyed in connection with a work, such as the title or other information identifying the work, the name of or other identifying information of the author of the work, the name of or other identifying information of the copyright owner of the work, and terms and conditions for use of the work. Enacted as part of the DMCA, section 1202 of title 17 prohibits the intentional removal or alteration of "copyright management information." *See* 17 U.S.C. § 1202(b).

[69] The issue was addressed only in an agreed statement accompanying the WCT, which provided that "the mere provision of physical facilities for enabling or making a communication does not in itself amount to a communication within the meaning of this Treaty or the Berne Convention." WCT, S. TREATY DOC. NO. 105-17, 2186 U.N.T.S. 121 (1996), Agreed Statement Concerning Art. 8, at 9 n.8. This agreed statement was included as the result of lobbying by organizations representing OSPs and telecommunication companies who wanted to include in the text of the WIPO Internet Treaties some guarantees concerning the limitation of liability for infringement committed by their users. *See* MIHÁLY FICSOR, THE LAW OF COPYRIGHT AND THE INTERNET: THE 1996 WIPO TREATIES, THEIR INTERPRETATION AND IMPLEMENTATION, § C8.24, at 509 (2002).

[70] WIPO Copyright and Performances and Phonograms Treaty Implementation Act of 1997, S. 1121, 105th Cong. (1st Sess. 1997); Digital Millennium Copyright Act, H.R. 2281, 105th Cong. (1st Sess. 1997); Digital Copyright Clarification and Technology Education Act of 1997, S. 1146, 105th Cong. (1st Sess. 1997); Digital Era Copyright Enhancement Act, H.R. 3048, 105th Cong. (1st Sess. 1997).

[71] S. REP. NO. 105-190, at 65 (1998); *see also* H.R. REP. NO. 105-551, pt. 1, at 9–10 (1998) ("The treaties do not require any change in the substance of copyright rights or exceptions in U.S. law. They do, however, require two technological adjuncts to the copyright law, intended to ensure a thriving electronic marketplace for copyrighted works on the Internet.").

[72] On-Line Copyright Liability Limitation Act, H.R. 2180, 105th Cong. (1st Sess. 1997); On-Line Copyright Infringement Liability Limitation Act, H.R. 3209, 105th Cong. (2nd Sess. 1998).

[73] *See Senate Copyright Infringement Liability Hearing*, 105th Cong. 98 (responses of George Vradenburg III to questions for the record from Sen. Leahy); *House WCT Implementation Act Hearing*, 105th Cong. 87 (written statement of Roy Neel, U.S. Telephone Association).

House Judiciary Committee, these stakeholders led the negotiations for provisions addressing service provider liability and the use of copyrighted works on the internet.[74]

In 1998, Congress passed, and the President signed, the DMCA, which included provisions to implement the WIPO Internet Treaties and to clarify service provider liability in the context of the internet and infringing works.[75] Title II of the DMCA, separately titled the "On-Line Copyright Infringement Liability Limitation Act," added section 512 to title 17. The Senate Judiciary Committee Report on the legislation notes that although the latter issue "is not expressly addressed in the actual provisions of the WIPO treaties, the Committee is sympathetic to the desire of . . . service providers to see the law clarified in this area."[76] As detailed below, the new section created a "safe harbor" framework under which OSPs can obtain a limitation on liability for infringement occurring on their systems by satisfying certain statutory conditions, generally consisting of implementing measures to expeditiously address infringing activity.[77] While encouraging OSPs to continue the growth and development of internet services, Congress simultaneously intended these provisions to encourage creators "to make their works available to legitimate consumers in the digital environment" by "protecting intellectual property rights."[78] With these copyright law amendments, Congress "believe[d] [that] it [had] appropriately balanced the interests of content owners, on-line and other service providers, and information users in a way that will foster the continued development of electronic commerce and the growth of the Internet."[79]

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[74] *See Senate Copyright Infringement Liability Hearing*, 105th Cong. 3 (statement of Chairman Sen. Orrin G. Hatch) ("It is my hope that at the very least we can begin a productive dialog wherein innovative solutions are considered and agreed to so that an appropriate balance can be struck among the property interests of content providers, the desire for a predictable and fair liability scheme for service providers, and the public's desire and need to access information.").

[75] Pub. L. No. 105-304, 112 Stat. 2860 (1998). Title I of the DMCA, entitled the WIPO Copyright and Performances and Phonograms Treaties Implementation Act of 1998, added a new Chapter 12 to Title 17, which provides copyright owners with protections against the circumvention of technological protection measures used to control access to or use of their works, as well as instituting protections for copyright management information. 112 Stat. at 2863–77 (codified at 17 U.S.C. §§ 1201–1205); *see generally* SECTION 1201 OF TITLE 17. Title III, the Computer Maintenance Competition Assurance Act, amended section 117 to clarify that it is not infringement for the owner or lessee of a machine to make or authorize the making of a copy of a computer program if the copy is made solely by virtue of activating the machine for purposes of maintenance and repair, and certain additional requirements are met. 112 Stat. at 2886–87 (codified at 17 U.S.C. § 117(c)). Title IV contained miscellaneous provisions relating to the duties and functions of the Register of Copyrights, ephemeral recordings of digital broadcasts, exemptions for the preservation activities of libraries and archives in the digital environment, statutory licenses for making ephemeral recordings and transmissions of digital sound recordings, and the assumption of contractual obligations relating to motion picture collective bargaining agreements. 112 Stat. at 2887–2905 (codified in scattered sections of 17 U.S.C.). Title V, the Vessel Hull Design Protection Act, added a new Chapter 13 to Title 17, which provides a *sui generis* form of protection for boat hull designs. 112 Stat. at 2905–18 (codified at 17 U.S.C. §§ 1301–1332).

[76] S. REP. NO. 105-190, at 19 (1998).

[77] Pub. L. No. 105-304, 112 Stat. 2877–86 (1998).

[78] H.R. REP. NO. 105-551, pt. 2 at 23 (1998).

[79] H.R. REP. NO. 105-551, pt. 2 at 21 (1998).

Congress opted for this approach in lieu of "embarking upon a wholesale clarification of [secondary liability] doctrines," believing it preferable to leave the law in that area "in its evolving state."[80] As the House Commerce Committee explained:

> [N]ew Section 512 does not define what is actionable copyright infringement in the on-line environment, and does not create any new exceptions to the exclusive rights under copyright law . . . . Even if a service provider's activities fall outside the limitations on liability specified in the bill, the service provider is not necessarily an infringer; liability in these circumstances would be adjudicated based on the doctrines of direct, vicarious or contributory liability for infringement as they are articulated in the Copyright Act and in the court decisions interpreting and applying that statute, which are unchanged by new Section 512 . . . . New Section 512 simply defines the circumstances under which a service provider, as defined in this new Section, may enjoy a limitation on liability for copyright infringement.[81]

The Senate Report notes that "[i]n the ordinary course of their operations service providers must engage in all kinds of acts that expose them to potential copyright infringement liability."[82] Thus, "without clarification of their liability, service providers may hesitate to make the necessary investment in the expansion of the speed and capacity of the Internet."[83] By providing OSPs with greater certainty regarding their copyright infringement liability, Congress intended section 512 to "ensure[] that the efficiency of the Internet will continue to improve and that the variety and quality of services on the Internet will expand" from the purview of a limited number of hobbyists to a "thriving electronic marketplace."[84] Section 512 accordingly was aimed at "attract[ing] the substantial investments necessary to continue the expansion and upgrading of the Internet."[85]

At the same time, Congress intended section 512 to serve the needs of copyright owners by protecting their legitimate interests against the threat of rampant, lower-barrier infringement by the users of good-faith OSPs. Congress specifically excluded from the new safe harbor framework "pirate directories" or other piracy-focused websites where unauthorized works are downloaded or transmitted.[86] Section 512, coupled with the technical protection measures provisions of section 1201, sought to provide protection, and thereby encouragement, for copyright owners to create and share their works in the digital environment. In an effort to

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[80] S. REP. NO. 105-190, at 19 (1998).

[81] H.R. REP. NO. 105-551, pt. 2 at 64 (1998).

[82] S. REP. NO. 105-190, at 8 (1998).

[83] S. REP. NO. 105-190, at 8 (1998).

[84] S. REP. NO. 105-190, at 2 (1998); H.R. REP. NO. 105-551, pt. 2 at 23 (1998).

[85] 144 CONG. REC. 24,466 (1998) (statement of Sen. Orrin G. Hatch).

[86] *See* S. REP. NO. 105-190, at 48 (1998) (internal quotations omitted); H.R. REP. NO. 105-551, pt. 2 at 58 (1998).

mediate among various stakeholders' concerns, Congress also acknowledged the need to include certain provisions to protect consumer privacy and free speech interests: a provision stating that ISPs are not obligated to monitor their systems, and a counter-notice process for restoring access to erroneously removed context.[87]

The legislative history of section 512 thus acknowledges two key components of the balance that Congress sought to achieve:[88] the assurance that good faith actions to address internet piracy by OSPs would qualify for safe harbors, providing "greater certainty" regarding their liability,[89] and the preservation of "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," providing creators with viable remedies against online infringement.[90]

C. General Overview of Section 512

Section 512 provides safe harbors from infringement liability for OSPs that are engaged in qualifying activities and meet certain eligibility requirements. The following section provides an overview of the particular safe harbors and their requirements, beginning with a brief discussion about the various secondary liability doctrines that underpin an OSP's potential liability for allegedly infringing content.

1. Secondary Liability

Because OSPs generally provide the means for their users to upload and distribute content, rather than provide the content themselves, content owners are more likely to claim that the OSP is secondarily liable, instead of directly liable, for copyright infringement.[91] Secondary

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[87] *See* H.R. REP. NO. 105-551, pt. 1 at 12 (1998). *See also* PK Initial Comments at 2.

[88] *See, e.g.*, Google Inc., Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015, Notice of Inquiry at 1 (Apr. 1, 2016) ("Google Initial Comments") ("Congress intended that the DMCA safe harbors serve two objectives: (1) to stimulate investment in an Internet economy that would otherwise be discouraged by overbroad copyright infringement liability; and (2) to provide remedies against online infringement while facilitating collaboration between online service providers ('OSPs') and rightsholders."); Kernochan Center for Law, Media and the Arts Columbia Law School, Comments Submitted in Response to the U.S. Copyright Office's Dec. 31, 2015, Notice of Inquiry at 2 (Apr. 1, 2016) ("Kernochan Initial Comments") ("Congress hoped that section 512 would strike a balance between copyright owners and ISPs, allowing for the detection and removal of copyrighted works posted online without the copyright holder's permission, while also providing ISPs greater certainty regarding their exposure to copyright infringement lawsuits.").

[89] H.R. REP. NO. 105-551, pt. 2 at 49–50 (1998).

[90] H.R. REP. NO. 105-796, at 72 (1998) (Conf. Rep.); *see also* Universal Music Group ("UMG"), Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015, Notice of Inquiry at 3 (Apr. 1, 2016) ("UMG Initial Comments") ("Congress also expected that copyright owners and service providers would work together to share the burden of identifying and preventing infringement.").

[91] *But see Goldman v. Breitbart News Network, LLC*, 302 F. Supp. 3d 585, 595 (S.D.N.Y. 2018) (holding that a website may face direct liability under particular circumstances for embedding a copyrighted work in a website; declining to apply the "server test" (described *infra* n.492)).

liability doctrines enable copyright owners to bring claims against third parties that have some relationship to persons who themselves commit infringement (i.e., "direct" infringers). As the Supreme Court has noted, "[a]lthough 'the Copyright Act does not expressly render anyone liable for infringement committed by another,' these doctrines of secondary liability emerged from common law principles and are well established in the law."[92] Generally, courts have relied upon three forms of secondary liability: contributory infringement, vicarious liability, and inducement of infringement. A person may be liable for contributory infringement if he or she has "knowledge of the infringing activity, [and] induces, causes or materially contributes to the infringing conduct of another."[93] A court may find a person vicariously liable if he or she "profit[s] from direct infringement while declining to exercise a right to stop or limit it."[94] In *Metro-Goldwyn-Mayer Studios, Inc. v. Grokster, Ltd*., the Supreme Court imported the doctrine of inducement of infringement from patent law, holding that "one who distributes a device with the object of promoting its use to infringe copyright, as shown by clear expression or other affirmative steps taken to foster infringement, is liable for the resulting acts of infringement by third parties."[95] As noted above, prior to passage of the DMCA, courts had found OSPs potentially liable under either direct or contributory infringement theories; however, as website management became increasingly automated, it became more difficult to apply the knowledge

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[92] *Metro-Goldwyn-Mayer Studios Inc. v. Grokster, Ltd*., 545 U.S. 913, 930 (2005) ("*Grokster*") (internal citation omitted) (quoting *Sony Corp. of Am. v. Universal City Studios*, 464 U.S. 417, 434 (1984) ("*Betamax*")).

[93] *A&M Records, Inc. v. Napster*, 239 F.3d 1004, 1019 (9th Cir. 2001) (quoting *Gershwin Publ'g Corp. v. Columbia Artists Mgmt., Inc.*, 443 F.2d 1159, 1162 (2d Cir. 1971)).

[94] *Grokster*, 545 U.S. at 930.

[95] *Grokster*, 545 U.S. 913, 936–37 (2005). Courts have divided over whether the inducement doctrine articulated in *Grokster* is properly understood as a standalone theory of secondary liability or as merely a subcategory of contributory infringement. *Compare, e.g., UMG Recordings, Inc. v. Shelter Capital Partners LLC*, 718 F.3d 1006, 1031–33 (9th Cir. 2013) ("*Veoh IV*") (inducement analyzed as a separate claim from contributory infringement), *and Abbey House Media, Inc. v. Apple Inc*., 66 F. Supp. 3d 413, 419–22 (S.D.N.Y. 2014) (same), *and Sarvis v. Polyvore, Inc*., No. Civ. A. 12-12233, 2015 U.S. Dist. LEXIS 39448, at *23–*28 (D. Mass. Mar. 2, 2015) (same), *with, e.g., Columbia Pictures Indus., Inc. v. Fung*, 710 F.3d 1020, 1029–31 (9th Cir. 2013), *cert. denied sub nom., Fung v. Colombia Pictures Indus., Inc*., 571 U.S. 1007 (2013) ("*Fung*") (treating inducement as a subcategory of contributory infringement), *and Io Grp., Inc. v. Jordon*, 708 F. Supp. 2d 989, 999 (N.D. Cal. 2010) ("[T]he Court finds that [inducement] is not a separate cause of action but is more properly considered a species of contributory infringement."), *and KBL Corp. v. Arnouts*, 646 F. Supp. 2d 335, 345–46 (S.D.N.Y. 2009) ("The plaintiff has not identified any legal authority indicating that the Copyright Act provides for an inducement to infringe claim that is distinct from contributory infringement. Indeed, the case law supports the opposite conclusion."), *and Roof & Rack Prod., Inc. v. GYB Inv'rs, LLC*, No. 13-80575-CV, 2014 WL 3183278, at *5 (S.D. Fla. July 8, 2014) ("[I]nducement is but a subset of contributory copyright infringement."). The *Nimmer on Copyright* treatise argues that the former reading is preferable:

> [I]nsofar as inducement plays a role in contributory infringement, a plaintiff who would hold a defendant culpable must show that the latter's conduct actually induced infringement. By contrast, it suffices for a plaintiff invoking *Grokster*'s innovation to demonstrate through objective evidence that the defendant harbored a subjective intent to induce infringement, even if no such inducement actually occurred—albeit there still must be direct infringement for liability to arise.

3 NIMMER ON COPYRIGHT § 12.04[A][4][b].

requirements for the contributory and inducement theories to a system where the interface between OSPs and users was increasingly mediated by technology.

2. OSPs and Safe Harbors

There are four distinct safe harbors, detailed in sections 512(a), (b), (c), and (d). These safe harbors are available when a "service provider"[96] engages in one or more of the following corresponding activities: (a) serving as a conduit for the automatic online transmission of material as directed by third parties ("mere conduit");[97] (b) temporarily storing material that is being transmitted automatically over the internet from one third party to another ("caching"); (c) storing material at the direction of a user on an OSP's system or network ("hosting"); or (d) referring or linking users to online sites using information location tools, such as a search engine ("linking").[98] An OSP's eligibility for a given safe harbor depends on the activity. For example, a mere conduit ISP may be eligible for the section 512(a) safe harbor for its conduit activities and may separately be eligible for the section 512(c) safe harbor for hosting websites, but those limitations on liability would be distinct and carry with them separate statutory requirements.[99]

The legislative history provides some insight into the specific types of OSPs that Congress believed at the time would qualify for each respective safe harbor. Congress intended to exclude from the mere conduit safe harbor services that exercise "the editorial function of determining what material to send, or the specific sources of material to place on-line" or those that go beyond making "transient copies that occur en route."[100] For caching OSPs, Congress intended to cover technology that serves "as an intermediary between the originating site and the ultimate user" for the "caching" or temporary storage of material, in order to "increase network performance and to

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[96] Section 512(k) separately provides two definitions for "service provider." An "entity offering the transmission, routing, or providing of connections for digital online communications, between or among points specified by a user, of material of the user's choosing, without modification to the content of the material as sent or received" applies to service providers that qualify as section 512(a) mere conduits. 17 U.S.C. § 512(k)(1)(A). The second definition more broadly applies to other service providers as well as mere conduits: "a provider of online services or network access, or the operator of facilities therefor." 17 U.S.C. § 512(k)(1)(B).

[97] Mere conduit service providers will be referred to herein as "ISPs."

[98] Mere conduit, caching, hosting, and linking OSPs will be collectively referred to herein as "OSPs." These categories are not mutually exclusive; it is possible for an OSP to offer products that fall into more than one category. For example, Alphabet offers Google search services (accompanied by web cashing of some indexed websites) and Blogger and YouTube hosting services, along with other services like advertising networks that do not easily fall into any of the section 512 categories. Similarly, some current web service models blur the lines between hosting and mere conduit services.

[99] Congress also carved out a separate limitation on liability for nonprofit and educational institutions acting as OSPs, providing that knowledge of infringing activity by faculty members and graduate students will not be imputed to the institution under certain circumstances. *See* 17 U.S.C. § 512(e). For a discussion of the importance of this carve out, see *supra* nn.581–83 and accompanying text.

[100] H.R. REP. NO. 105-551, pt. 2, at 51 (1998).

reduce network congestion generally."[101] Congress mentioned examples of storage OSPs under section 512(c) as those that "provid[e] server space for a user's web site, for a chatroom, or other forum in which material may be posted at the direction of users."[102] Congress also cited specific examples of service providers that provide "information location tools" under section 512(d), including directories, search engines, "list[s] of recommended sites," "pointer[s] that stand[] for an Internet location or address," and "hypertext link[s] which allow users to access material without entering its address."[103]

3. Limitations on Relief and Eligibility for Safe Harbors

An OSP that meets the relevant eligibility requirements for one or more of the safe harbors is not liable for monetary relief and is subject only to limited injunctive relief for infringing activities conducted on or through its system or network within the scope of the applicable safe harbor(s).[104] In the case of an OSP that qualifies for a safe harbor under sections 512(b), (c), or (d), this injunctive relief is limited to: (1) disabling access to infringing material; (2) terminating the infringer's account(s); and (3) providing such other relief as may be necessary to address infringement at a particular online location; provided, however, that the relief is "the least burdensome [form of relief] to the service provider."[105] For an ISP that qualifies for the section 512(a) safe harbor, the court may order only the termination of an infringer's account(s) or the blocking of access to a "specific, identified, online location outside the United States."[106]

In order to qualify for the limitation on liability provided under sections 512(a), (b), (c), or (d), the OSP must comply with certain threshold requirements. Two of these requirements apply to all four safe harbors: (1) the adoption and reasonable implementation of a policy to terminate "repeat infringers;"[107] and (2) the accommodation of and non-interference with "standard technical measures'' that identify or protect copyrighted works and have been developed according to broad consensus between copyright owners and OSPs, to the extent any such measures exist.[108] An ISP that acts as a mere conduit for online transmissions qualifies for the limitation on liability provided by section 512(a) if the provider satisfies these two threshold

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[101] H.R. REP. NO. 105-551, pt. 2, at 52 (1998).

[102] H.R. REP. NO. 105-551, pt. 2, at 53 (1998).

[103] H.R. REP. NO. 105-551, pt. 2, at 56–57 (1998).

[104] 17 U.S.C. §§ 512(a)–(d).

[105] 17 U.S.C. § 512(j)(1)(A).

[106] 17 U.S.C. § 512(j)(1)(B).

[107] An OSP must adopt, "reasonably implement[]," and inform subscribers and account holders of a policy "that provides for the termination in appropriate circumstances of . . . repeat infringers." 17 U.S.C. § 512(i)(1)(A).

[108] 17 U.S.C. §§ 512(i)(1)(B), (i)(2).

requirements, without having to participate in a notice-and-takedown process, as described below.

4. Notice-and-Takedown Process

OSPs seeking protection under the safe harbors in sections 512(b), (c), or (d), must, in addition to the section 512(i) requirements, maintain a compliant notice-and-takedown process by responding expeditiously to remove or disable access to material claimed to be infringing upon receipt of proper notice from a copyright owner or the owner's authorized agent.[109] The OSP must in good faith remove, or disable access to, the allegedly infringing content and take reasonable steps to promptly notify the user.[110] An OSP seeking to avail itself of the section 512(c) safe harbor for user-posted content, section 512(b) for caching activities, or section 512(d) for search activities is further required to designate an agent to receive notifications of claimed infringement and provide contact information for the agent on its website and to the Copyright Office, which, in turn, is to maintain a public directory of such agents. Although sections 512(b) and (d) do not themselves expressly require OSPs to designate an agent to receive notifications of infringement, they both incorporate the notice provisions of section 512(c)(3), which require that notices be sent to ''the designated agent of the service provider.'' The statutory scheme thus indicates that OSPs operating under section 512(b) and/or (d) would also have to designate agents to receive takedown notices.[111]

a) Takedown Notice

The statute mandates that a copyright owner's takedown notice must include "substantially the following": (i) the signature of the copyright owner or an authorized agent (*i.e.*, the "complaining party"); (ii) identification of the copyrighted work claimed to have been infringed, or, if multiple works are on a single site, "a representative list of such works"; (iii) identification of the infringing material or activity (or the reference or link to such material) and "information reasonably sufficient" to permit the OSP to locate the material (or the reference or link); (iv) contact information for the complaining party; (v) a statement that the complaining party has "a good faith belief that use of the material in the manner complained of is not authorized by the copyright owner, its agent, or the law"; and (vi) a statement that the information in the notice is accurate and, under penalty of perjury, that the complaining party is

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[109] 17 U.S.C. §§ 512(b)(2)(E), (c)(1)(C), (d)(3). The process for notification under the section 512(c) and (d) safe harbors is set out in section 512(c)(3); the process differs somewhat under the section 512(b) safe harbor in that, in addition to following the requirements of section 512(c)(3), the complaining party must also confirm that the content or link has been removed or disabled by the originating site or that a court has ordered that it be removed or disabled. *Id.* § 512(b)(2)(E).

[110] *Id.* §§ 512(g)(1)–(2). If the OSP does so, it will not be held liable for removal, even if the content is later found to be non-infringing. *Id.*

[111] *See* 17 U.S.C. §§ 512(b)(2)(E), (d)(3).

authorized to act on behalf of the copyright owner.[112] Under section 512(f), "[a]ny person who knowingly materially misrepresents . . . that material or activity is infringing" in a takedown notice can be held liable for any damages, including costs and attorneys' fees, incurred by an alleged infringer who is injured by the misrepresentation.[113]

b) Knowledge and Financial Benefit

In addition to responding to takedown notices, OSPs that seek protection under the section 512(c) and (d) safe harbors must also act expeditiously to remove or disable access to material when they have "actual knowledge" of infringement or, in the absence of such actual knowledge, when they have "aware[ness] of facts or circumstances from which infringing activity is apparent"—the "awareness" standard often referred to as "red flag" knowledge.[114] But, while OSPs are not free to ignore infringement of which they have actual or red flag knowledge, section 512 at the same time provides that an online entity has no duty to "monitor[] its service or affirmatively seek[] facts indicating infringing activity, except to the extent consistent with a standard technical measure."[115]

Finally, to qualify for the section 512(c) and (d) safe harbors, an OSP must not "receive a financial benefit directly attributable to the infringing activity, in a case in which the OSP has the right and ability to control such activity."[116] The statutory financial benefit/right to control test does not incorporate a knowledge element.[117]

In addition to the general limitations on infringement liability, the statute outlines specific protections for OSPs that remove material in response to takedown notices. Under section 512, an OSP is not liable for "any claim based on the service provider's good faith disabling of access to, or removal of material claimed to be infringing or based on facts or circumstances from which infringing activity is apparent"—even material not ultimately found to be infringing.[118] This protection from liability does not apply to material removed pursuant to a takedown notice unless the provider (i) takes reasonable steps to promptly notify the user who posted the material that it has been removed and (ii) complies, as applicable, with the statutory counter-notification process.[119]

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[112] 17 U.S.C. § 512(c)(3)(A)(i)–(vi).

[113] 17 U.S.C. § 512(f).

[114] *See* 17 U.S.C. §§ 512(c), (d); *see also*, *Capitol Records, LLC v. Vimeo LLC*, 826 F.3d 78 (2d Cir. 2016); *Viacom Int'l v. YouTube, Inc.*, 676 F.3d 19 (2d Cir. 2012).

[115] 17 U.S.C. § 512(m)(1).

[116] 17 U.S.C. §§ 512(c)(1)(B), (d)(2).

[117] *See* 17 U.S.C. §§ 512(c)(1)(B), (d)(2).

[118] 17 U.S.C. § 512(g)(1).

[119] 17 U.S.C. § 512(g)(2).

5. Counter-Notification

Section 512(g) allows a user whose content has been removed in response to a takedown notice to submit a counter-notification to an OSP's designated agent requesting that the content be reposted, if the user believes that the content was improperly removed, such as due to the OSP's error or content posted pursuant to a valid license or another copyright exception or limitation. The counter notice, like the initial notice, must be in writing and must include: (i) the signature of the subscriber (*i.e.*, the counter-notifying party); (ii) identification of the material that was removed or to which access was disabled, as well as the location where it previously appeared; (iii) a statement under penalty of perjury that the subscriber has a "good faith belief that the material was removed or disabled as a result of mistake or misidentification of the material to be removed or disabled"; and (iv) the subscriber's contact information, as well as a statement that the subscriber consents to the jurisdiction of the federal district court for the relevant judicial district and agrees to accept service of process from the party who provided the takedown notice (or that party's agent).[120]

Section 512(f) also applies to counter-notifications, providing that any person who "knowingly materially misrepresents" that "material or activity was removed or disabled by mistake or misidentification" may be held liable for monetary damages, including costs and attorneys' fees.[121] To preserve its safe harbor immunity, an OSP that receives a counter-notice must then repost the content in question no fewer than 10 but no more than 14 business days after receiving the counter notification, unless the OSP first receives notice from the party who provided the takedown notice that a judicial action has been filed "seeking . . . to restrain the subscriber from engaging in infringing activity relating to the material on the service provider's system or network."[122] An OSP is not liable for reposting infringing content upon receipt of a valid counter notification, in the absence of such a notice.[123] If the rightsholder files a lawsuit, the content is not replaced and the user must mount a legal defense for their use.[124]

III. POST-DMCA CHANGES TO THE ONLINE ECOSYSTEM

A. Technological Changes Since the 1990s Have Changed the Landscape in which Section 512 Operates

Congress enacted the DMCA with a contemporary understanding of internet technology, but the internet ecosystem has grown significantly in the past two decades. These technological

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[120] 17 U.S.C. § 512(g)(3).

[121] 17 U.S.C. § 512(f).

[122] 17 U.S.C. § 512(g)(2)(C). This amount of time is presumably intended to provide enough time for the party alleging infringement to file an infringement action in a federal court before the allegedly infringing material is put back online.

[123] *Id*. §§ 512(g)(2)(C), (g)(4).

[124] *Id*. § 512(g)(2)(C).

changes have altered the effectiveness of the DMCA statutory scheme, and were a major motivator of the public Study that led to this Report. As the Office heard throughout this Report, the internet of today is not the internet of 1998. That change is due, in part, to the DMCA, which helped foster the growth of the internet.[125] But the internet's maturity and evolution also have put new stresses on the regime that Congress created.

At the time the DMCA was crafted and then enacted, the internet had only recently evolved beyond the "walled gardens" of AOL and CompuServe.[126] Yahoo!, Amazon, and eBay were each a few years old, and "social media," to the extent it existed was mainly instant messaging services, on-line dating sites, and Classmates.com.[127] There was no Facebook or YouTube or Twitter; the first MP3 player had just been launched, and Napster, which popularized peer-to-peer ("P2P") file-sharing, would not exist until the following year.[128] Today, the internet is a rich tapestry of social media sites and niche networked communities,[129] online retail giants

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[125] *See, e.g.*, Amazon.com, Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015, Notice of Inquiry at 3 (Apr. 1, 2016) ("Amazon Initial Comments") ("A key principle of both federal Internet policy and the DMCA is that online service providers should not be required to police the activities of their users or make difficult legal determinations about the nature of any particular content on the service provider's system. Lawful services like Amazon and other U.S. Internet companies could not have flourished without such a policy. This principle is crucial to the growth of the Internet where today, a single service can facilitate real-time discourse among over three billion worldwide users."); BSA | The Software Alliance ("BSA"), Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015, Notice of Inquiry, at 3 (Apr. 1, 2016) ("BSA Initial Comments") ("The DMCA's balanced framework has played a key role in catalyzing the explosive growth of the Internet as a medium for free expression and digital commerce.").

[126] *See* Martin Hughes, *Walled Gardens: The Past, Present & Future of How We Use the Internet*, MEDIUM (May 3, 2016), https://medium.com/@universityboy/the-return-of-walled-gardens-on-paywalls-the-public-and-the-publishers-282e08e54669; *AOL's 'Walled Garden,'* WALL ST. J. (Sept. 4, 2000, 11:57 PM), https://www.wsj.com/articles/SB968104011203980910.

[127] Jerry Yang and David Filo started what was to become Yahoo! in 1994. Dan Tynan, *The Glory that Was Yahoo*, FASTCOMPANY (Mar. 21, 2018), https://www.fastcompany.com/40544277/the-glory-that-was-yahoo. Amazon.com opened for business in 1995. *Amazon Opens for Business*, HISTORY.COM: THIS DAY IN HISTORY (July 27, 2019), https://www.history.com/this-day-in-history/amazon-opens-for-business. Pierre Omidyar launched the site that would later be rebranded as eBay in 1995; the millionth item was sold on eBay in 1997. *Our History*, EBAY, https://www.ebayinc.com/company/our-history; danah m. boyd & Nicole B. Ellison, *Social Network Sites: Definition, History, and Scholarship*, 13 J. COMPUTER-MEDIATED COMM. 210, 214–15 (2007).

[128] *See, e.g.*, Richard Nieva, *Ashes to Ashes, Peer to Peer: An Oral History of Napster*, FORTUNE (Sept. 5, 2013), https://fortune.com/2013/09/05/ashes-to-ashes-peer-to-peer-an-oral-history-of-napster/; David Kravets, *10 Years Later, Misunderstood DMCA is the Law That Saved the Web*, WIRED (Oct. 27, 2008), https://www.wired.com/2008/10/ten-years-later/ ("Blogs, search engines, e-commerce sites, video and social-networking portals are thriving today thanks in large part to the notice-and-takedown regime ushered in by the much-maligned copyright overhaul. A decade ago, when the DMCA was enacted, these innovations were unheard of, embryonic or not yet conceived."); Eliot Van Buskirk, *Bragging Rights to the World's First MP3 Player*, CNET (Jan. 25, 2005, 3:20 PM), https://www.cnet.com/news/bragging-rights-to-the-worlds-first-mp3-player/ (discussing the MPMan's launch in spring 1998); *see generally* REBECCA GIBLIN, CODE WARS: 10 YEARS OF P2P SOFTWARE LITIGATION (2011).

[129] *See* Cal Newport, *Thinkspot and the Rise of Long Tail Social Media* (July 15, 2019), http://www.calnewport.com/blog/2019/07/15/thinkspot-and-the-rise-of-long-tail-social-media/; Callum Booth, *The Most Popular Social Media Networks Each Year, Gloriously Animated*, NEXT WEB (June 11, 2019), https://thenextweb.com/tech/2019/06/11/most-popular-social-

and e-commerce side businesses,[130] as well as an almost endless amount of music and audiovisual entertainment from major studios and publishers, indie artists, and future stars.[131] Every day countless new internet services join the mix. And new artists continue to find an audience without having to first convince a third party that there is a demand for what they do.[132]

The technological landscape also has shifted dramatically since the DMCA's passage—from dial-up, to fiber and WiFi, to the early stages of 5G.[133] Download times today are but a fraction of what they were in 1998. A thirty-second movie clip would have taken thirty minutes to download in 1998; today users with a the lowest tier of broadband connection (defined as a minimum download speed of 25 Mbps) can download a 4 GB movie file in approximately twenty minutes.[134] A four-minute song would have taken eighty minutes to download; today, it needs about one second. Consumers have become accustomed to webpages loading near

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media-networks-year-animated/ (charting the usage of the most popular social media sites from 2003 through 2018); Andrew Perrin & Monica Anderson, *Share of U.S. Adults Using Social Media, Including Facebook, Is Mostly Unchanged Since 2018*, PEW RESEARCH CTR.: FACTTANK (Apr. 10, 2019), https://www.pewresearch.org/fact-tank/2019/04/10/share-of-u-s-adults-using-social-media-including-facebook-is-mostly-unchanged-since-2018/ (reporting on U.S. social media usage).

[130] *See, e.g.*, Adam Levy, *The 7 Largest E-Commerce Companies in the World*, THE MOTLEY FOOL (Aug. 23, 2019, 5:13 PM), https://www.fool.com/investing/the-7-largest-e-commerce-companies-in-the-world.aspx; William Harris, *Step-by-Step You Can Turn Your Ecommerce Side Hustle Into a Real Company*, ENTREPRENEUR (June 23, 2017), https://www.entrepreneur.com/article/294919.

[131] *See, e.g.*, Rob Arcand, *Streaming Now Accounts for 80 Percent of the Music Industry's Overall Revenue*, SPIN (Sept. 6, 2019), https://www.spin.com/2019/09/music-streaming-80-percent-of-music-industry-overall-revenue/; Judy Berman, *There's Officially Too Much Netflix. What Happens Next?*, TIME (Dec. 21, 2018, 9:29 AM), https://time.com/5484106/too-much-netflix-content/; David Pierce, *We're Drowning in Content; Recommendations Are What We Need,* WIRED (April 26, 2016, 1:00 PM), https://www.wired.com/2016/04/youtube-app-redesign-recommendations/.

[132] Examples include Queen Naija, who hit No. 45 of the *Billboard* Hot 100 after she self-released the song "Medicine" while an unsigned social media star, and E.L. James's *Fifty Shades of Grey* series of best-selling books, which began as a fan fiction ebook. *See* Tatiana Cirisano, *How YouTube Vlogger Queen Naija's Viral Breakup Inspired Her Hot 100 Breakthrough*, BILLBOARD (Apr. 18, 2018), https://www.billboard.com/articles/columns/hip-hop/8344128/queen-naija-medicine-hot-100-youtube-breakup-interview; Hannah Ellis-Petersen, *Fifty Shades of Grey: The Series That Tied Publishing Up in Knots*, THE GUARDIAN (June 18, 2015, 1:00 PM), https://www.theguardian.com/books/2015/jun/18/fifty-shades-of-grey-the-series-that-tied-publishing-up-in-knots; Bethany Sales, *Fifty Shades of Grey: The New Publishing Paradigm*, HUFFPOST (Apr. 18, 2013), https://www.huffpost.com/entry/fifty-shades-of-grey-publishing_b_3109547.

[133] For a window into what it would be like to use 1997 internet technology twenty years later, see Brad Jones, *What's It Like to Use AOL Dial-up Internet in 2017?*, DIGITAL TRENDS (Apr. 1, 2017), https://www.digitaltrends.com/cool-tech/aol-dial-up-a-relic-of-the-past/. *See also* Mike Murphy, *You Can Now Browse the Web Like It's 1999 Again*, QUARTZ (Dec. 14, 2015), https://qz.com/572992/you-can-now-browse-the-web-like-its-1999-again/.

[134] *See* Roger Bambino, *How Long Does It Take to Download a Movie? Well, We Did Some Tests*, TECHJAJA (Aug. 1, 2019), https://techjaja.com/how-long-does-it-take-to-download-a-movie-well-we-did-some-tests/; David Anders, *Internet Speed Classifications: What's Fast, What's Slow and What is a Good Internet Speed?*, ALLCONNECT (July 18, 2019), https://www.allconnect.com/blog/internet-speed-classifications-what-is-fast-internet. The most recent 2018 data from Ookla's Speedtest.net shows that the average broadband user's download speed was almost four times the minimum, at 96.25 Mbps. Ookla, *Fixed Broadband Speedtest Data: Q2–Q3 2018 United States*, SPEEDTEST: REPORTS (Dec. 12, 2018), https://www.speedtest.net/reports/united-states/2018/#fixed.

instantaneously and box office films streaming seamlessly; delays like buffering have become an infrequent annoyance to most consumers, not a daily fact of life online.[135] Faster internet speeds have made possible the dissemination of vast amounts of content via streaming—that in turn has given a rise to new types of film and television studios and new means of consuming content. Cloud computing, which allows software, services, and data storage to be accessed remotely, also plays a critical role in today's internet but was almost nonexistent for the general public in 1998.[136]

At the same time that broadband has become much more accessible throughout the world, internet use also has grown exponentially. In 1998, many Americans were still waking up to the internet, entering the online world through the gateway of a free AOL trial compact disc arriving in their physical mailbox.[137] Thirty-five percent of Americans adults had email, and 24% checked it daily;[138] surfing the web was something many did in libraries and internet cafes.[139] Now, 81% of Americans have internet on their phone (which more than half look at least several times an hour), and 34% check their email "throughout the day";[140] 28% of Americans report being "almost

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[135] *See* Andrew Spaulding, *I Used a 56K Modem for a Week and It Was Hell on Earth*, GIZMODO (Mar. 23, 2015, 2:06 PM), http://gizmodo.com/i-used-a-56k-modem-for-a-week-and-it-was-hell-on-earth-1693124620.

[136] *See* Hannah Williams, *The History of Cloud Computing: A Timeline of Key Moments from the 1960s to Now*, COMPUTERWORLD (Mar. 13, 2018, 2:00 AM), https://www.computerworld.com/article/3412271/the-history-of-cloud-computing--a-timeline-of-key-moments-from-the-1960s-to-now.html; Keith D. Foote, *A Brief History of Cloud Computing*, DATAVERSITY (June 22, 2017), https://www.dataversity.net/brief-history-cloud-computing/. One area, software as a service ("SaaS"), has seen substantial growth in recent years. Worldwide public cloud service revenue is forecast to growth from 145.3 billion dollars in 2017 to 278.3 billion dollars in 2021. *See* Natalie Gagliordi, *Gartner Predicts SaaS Revenues to Reach $85 Billion in 2019*, ZDNET (Sept. 12, 2018, 2:46 PM), https://www.zdnet.com/article/gartner-predicts-saas-revenues-to-reach-85-billion-in-2019/. The first SaaS company went public in 1998. *See A SaaS History Lesson—The First SaaS Company's Exceptional Journey*, TOMASZ TUNGUZ (Apr. 28, 2015), https://tomtunguz.com/the-first-saas-company/.

[137] *See* Jay Serafino, *You've Got Mail: A History of AOL's Free Trial CDs*, MENTAL FLOSS (Oct. 14, 2016), http://mentalfloss.com/article/87291/youve-got-mail-history-aols-free-trial-cds.

[138] *See* PEW RESEARCH CNTR., THE INTERNET NEWS AUDIENCE GOES ORDINARY (1999), http://www.people-press.org/1999/01/14/the-internet-news-audience-goes-ordinary/.

[139] *See* Bryan Lufkin, *The Weird, Sketchy History of Internet Cafes*, GIZMODO (Nov. 20, 2015, 4:50 PM), http://gizmodo.com/the-weird-sketchy-history-of-internet-cafes-1741978937; JOHN CARLO BERTOT & CHARLES R. MCCLURE, THE 1998 NATIONAL SURVEY OF U.S. PUBLIC LIBRARY OUTLET INTERNET CONNECTIVITY: FINAL REPORT (1998), http://surface.syr.edu/cgi/viewcontent.cgi?article=1123&context=istpub.

[140] Matt Rosoff, *People Either Check Email All the Time, or Barely at All*, BUS. INSIDER (Aug. 17, 2015, 1:26 PM), http://www.businessinsider.com/how-often-do-people-check-their-email-2015-8 (reporting that more than a third of Americans check email more than 10 times a day); *see also* MONICA ANDERSON, MOBILE TECHNOLOGY AND HOME BROADBAND 2019, PEW RESEARCH CTR. (2019), https://www.pewresearch.org/internet/2019/06/13/mobile-technology-and-home-broadband-2019/ (reporting that 81 percent of American adults owned a smart phone in 2016, up from 35 percent in 2011); Frank Newport, *Most U.S. Smartphone Owners Check Phone at Least Hourly*, GALLUP (July 9, 2015), http://www.gallup.com/poll/184046/smartphone-owners-check-phone-least-hourly.aspx ("About half of U.S. smartphone owners check their devices several times an hour or more frequently, including 11% who say they check it every few minutes.").

constantly" online.[141] Globally, internet access has grown from about 3.14% of the world in 1998 to over 50% today.[142]

Internet piracy has evolved alongside these substantial gains in internet services, speed, and access. The technology that allows copyright owners to distribute content directly to consumers' living rooms via streaming services also enables new forms of piracy: streaming of unlicensed content and stream-ripping—that is, using software to make an unlicensed copy of streamed content that would otherwise be licensed.[143] The cloud also presents new challenges for combating piracy. Cyberlockers, for instance, enable a user to upload content—with or without the copyright owner's permission—that they can then access remotely or share with others; cyberlockers, because they are not routinely indexed by search crawlers, can be much more difficult for copyright owners to monitor for infringing activity than publicly searchable P2P networks.[144] With the growth of internet use, some argue that the backbone of the section 512 safe

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[141] *See* Andrew Perrin & Madhu Kumar, *About Three-in-Ten U.S. Adults Say They Are "Almost Constantly" Online*, PEW RESEARCH CTR.: FACTTANK (July 25, 2019), https://www.pewresearch.org/fact-tank/2019/07/25/americans-going-online-almost-constantly/.

[142] *See* ITU TELECOMM. DEV. BUREAU, MEASURING DIGITAL DEVELOPMENT FACTS AND FIGURES 2019, 1 (2019), https://www.itu.int/en/ITU-D/Statistics/Documents/facts/FactsFigures2019.pdf; *Internet Usage Statistics: World Internet Users and 2020 Population Stats*, INTERNET WORLD STATS, http://www.internetworldstats.com/stats.htm (last visited May 1, 2020); *Internet Growth Statistics*, INTERNET WORLD STATS, https://www.internetworldstats.com/emarketing.htm (last visited May 1, 2020).

[143] Stream-ripping in particular has been a growing problem for the music industry. *See, e.g.*, Joan E. Solsman, *YouTube Cracks Down on Stream-Ripping Sites that Pirate Music*, CNET (July 18, 2019, 6:00 AM), https://www.cnet.com/news/google-youtube-crack-down-on-stream-ripping-mp3-sites-pirating-music-songs/; Ernesto Van der Sar, *YouTube "Blocks" Popular MP3 Stream-Ripping Sites*, TORRENTFREAK (July 10, 2019), https://torrentfreak.com/youtube-blocks-popular-mp3-stream-ripping-sites-190710/ ("While YouTube's efforts, intentional or not, are effective, they will likely trigger a cat-and-mouse game. The operator of a popular stream-ripper, who prefers to remain anonymous, managed to get around the blockade by deploying several proxy servers."); Chris Eggertsen, *Stream-Ripping Music Piracy Up 13% Annually, Says MusicWatch Report*, BILLBOARD (May 30, 2019), https://www.billboard.com/articles/business/8513646/stream-ripping-music-piracy-13-percent-increase-musicwatch-report.

[144] *See, e.g.*, American Association of Independent Music ("A2IM") et al., Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015, Notice of Inquiry at 16 (Apr. 1, 2016) ("A2IM Music Community Initial Comments") ("In 2014, RIAA noticed over 278,000 instances of music infringement to just one site that claims to comply with the DMCA Section 512(c) safe harbors, 4shared.com, a cyberlocker and file sharing hub. Of those, 97% were for repeat infringements of a previously noticed sound recording. In the five months prior to Grooveshark being shut down for willful copyright infringement, RIAA sent the service nearly 300,000 infringement notices; 94% were for repeat infringements of a previously noticed track."); Tr. at 313:21–314:7 (May 2, 2016) (Troy Dow, Disney) ("Now, we have sites like Hotfile that caused significant trouble for us. We sent 35,000 notices over the course of three months on The Avengers, one single movie to one single cyberlocker site. That did not remove that movie from the site. It was a consistent effort that we had to undertake. And that was a site that was designed to ensure the persistent availability of that content. That persistent availability of the content impacts how much people are willing to pay, whether you're a consumer or whether you're a retailer, for that content and it impacts licensing discussions."); *see also* Ross Drath, Comment, *Hotfile, Megaupload, and the Future of Copyright on the Internet: What Can Cyberlockers Tell Us About DMCA Reform?*, 12 J. MARSHALL REV. INTELL. PROP. L. 205, 216–17 (2012) ("Many cyberlockers allow users with no connection to a file's uploader to download that file. Though many of them disaggregate search functionality, copyright owners argue that this tactic has little practical effect on the user who is looking to find a specific file. That is, instead of using a search tool on the website itself, a user can just search on a regular search engine for the name of a work along with the

harbors—the notice-and-takedown system—has been overwhelmed by the sheer scale of notices of infringement being sent.[145] For example, between 1998 and 2010, Google received notices for less than three million URLs containing content that allegedly infringed a copyrighted work.[146] The scale of notices grew with time, and in 2013, Google received notices for approximately three million URLs—more than the total received by Google during the previous twelve years.[147] Since then, the volume of infringement notices has rocketed up. In 2017, Google received notices identifying about 882 million URLs,[148] and has processed requests to delist more than 4.6 billion URLs for copyright violations to date.[149] The increased volume of notices put additional burdens on the rightsholders who sent them and on the OSPs who must respond to them under their safe harbor requirements.

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name of a cyberlocker (e.g. 'hunger games mediafire') and out will pop a series of links, both to download pages themselves and to third-party sites that aggregate download links to files hosted by cyberlockers.").

[145] *See, e.g.*, Computer & Communications Industry Association ("CCIA"), Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015, Notice of Inquiry at 11 (Apr. 1, 2016) ("CCIA Initial Comments"); Microsoft Corporation, Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015, Notice of Inquiry at 9 (Mar. 31, 2016) ("Microsoft Initial Comments") ("In 2012, Microsoft received notices targeting under 1.8 million links to alleged infringing works appearing in Bing's search results. In 2015, that number grew to over 82 million alleged links to infringing works appearing in Bing's search results, with more than 99% of such notices sent using Microsoft's online forms. Processing this volume of notices without the benefit of automated tools and processes, using human review, would not be viable."); Motion Picture Association of America, Inc. ("MPAA"), Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015, Notice of Inquiry at 18 (Apr. 1, 2016) ("MPAA Initial Comments") ("For smaller owners, the phenomenon may well make the notice-and-takedown exercise cost prohibitive. One independent film maker, for example, had to send 56,000 takedown notices regarding her film, and that volume of notices did not result in the film's permanent removal."); Tr. at 194:21–195:2 (Apr. 8, 2019) (Richard James Burgess, A2IM) ("Notice and takedown hasn't helped much with staydown. We still have repeat infringers, and we will have to send amazing amounts of notices to get anything done."); Tr. at 110:5–7 (Apr. 8, 2019) (Caleb Donaldson, Google) ("We've processed 693 million requests from URLs from search results last year."); Tr. at 66:6–12 (Apr. 8, 2019) (Mike Lemon, Internet Association) ("For example, Reddit, between 2016 and 2018, had a 725 percent increase in the number of notices that it received. They went from 610 takedowns in 2016 to 26,234 takedowns, content removals."); Tr. at 116:11–19 (Apr. 8, 2019) (Peter Midgley, Brigham Young University) ("[W]e are also service providers and we manage a very large network to support our students, our faculty, staff and even visitors to our campus. In that context, we've received numerous [section] 512(c) notices and the imposition that it presents for us, the administrative burden in processing those notices and the uncertainty associated . . . are somewhat problematic for us as universities.").

[146] *See* GOOGLE, HOW GOOGLE FIGHTS PIRACY 15 (2013), https://docs.google.com/file/d/0BwxyRPFduTN2dVFqYml5UENUeUE/edit.

[147] *See* GOOGLE, HOW GOOGLE FIGHTS PIRACY 15 (2014), https://drive.google.com/file/d/0BwxyRPFduTN2NmdYdGdJQnFTeTA/view.

[148] *See* GOOGLE, HOW GOOGLE FIGHTS PIRACY 14 (2018), https://www.blog.google/documents/27/How_Google_Fights_Piracy_2018.pdf. As of May 2020, Google had not yet published an update of this report reflecting data from 2018 or later.

[149] *Content Delistings Due to Copyright*, GOOGLE: TRANSPARENCY REPORT, https://transparencyreport.google.com/copyright/overview (last visited May 11, 2020). The last announced update to the Google Transparency Report is dated Dec. 13, 2018. *The Latest News, Updates, and Data from Google's Transparency Report*, GOOGLE: TRANSPARENCY REPORT, https://transparencyreport.google.com/about (last visited May 11, 2020).

Additionally, many rightsholders argue that the scale of notices sent makes section 512(g)'s requirement of court action to contest a counter-notice infeasible, especially coupled with the ten-day deadline to file suit following a counter-notice.[150] Moreover, the volume of notices demonstrates that the notice-and-takedown system does not effectively remove infringing content from the internet; it is, at best, a game of whack-a-mole.[151] Further, the use of automated notice-generating technologies, which ease copyright owners' monitoring for infringing content and facilitate more rapid response, raise concerns related to speech.[152] As does the length of time mandated for "put back"—with both politically sensitive and timely content, the delay can leave a user in a position where their counter-notice prevails and the content is put back up, but the audience for that content has moved on.[153] And the increased access to broadband around the world raises new enforcement challenges that Congress could not have anticipated in 1998.[154]

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[150] *See, e.g.*, A2IM Music Community Initial Comments at 44 ("Based on that study on one month of data, even though the number of counter-notices received was tiny compared to the number of notices sent, the percentage of those counter-notices that appeared erroneous was over 80%. In that study, under Section 512(g)(2)(C), the rights holder would be obligated to bring over 500 lawsuits in order to protect its intellectual property . . . . Most artists simply do not have the resources to engage in such a costly, and time compressed litigation.").

[151] This phrase—a reference to the classic arcade game in which the player holds a padded mallet and attempts to bop mechanical moles as they pop out of their holes—has been used for years by copyright owners to describe the notice-and-takedown process. *See, e.g.*, Tr. at 28:19–23 (May 2, 2016) (Richard Burgess, A2IM) ("We have labels with 250 staff and we have labels with five staff who are clearly at the lower end, who simply do not have the resources to be able to send these notices and to be able to police those. But even if you do, it is the whack-a-mole game that you talk about. You just simply cannot win."); Tr. at 108:13–16 (Apr. 8, 2019) (Stephen Carlisle, Nova Southeastern University) ("The whack-a-mole problem on its own makes it simply unaffordable from a time standpoint and a financial standpoint, to send out the number of notices required."); Tr. at 397:2–5 (Apr. 8, 2019) (Keith Kupferschmid, Copyright Alliance) ("Because the notices they send basically have very little effect. The material goes back up on line . . . and it's sort of this game of whack-a-mole."); Ernesto Van der Sar, *Google Asked to Remove 100,000 'Pirate Links' Every Hour*, TORRENTFREAK (Mar. 6, 2016), https://torrentfreak.com/google-asked-to-remove-100000-pirate-links-every-hour-160306/.

[152] *See, e.g.*, Floor64, Inc. d/b/a/ The Copia Institute, Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015, Notice of Inquiry at 4 (Apr. 1, 2016) ("Copia Institute Initial Comments") ("The irony is that while the DMCA makes it possible for service providers to exist to facilitate online speech, it does so at the expense of the very speech they exist to facilitate due to the notice and takedown system."); Tr. at 34:17–35:15 (May 12, 2016) (Jennifer Urban, University of California-Berkeley School of Law) (noting that automated detection and notice-sending systems are essential for copyright owners dealing with a large volume of infringement but stating that it should not "operate in isolation without some kind of human review").

[153] *See, e.g.*, Tr. at 150:10–16 (May 12, 2016) (Cathy Gellis, Digital Age Defense) ("We've seen evidence in political situations of people who don't like content and just sent a takedown notice to have the political content they don't like deleted. And even if it is restored, it's restored after a delay, and that delay might be significant if there's something newsworthy or timely about that particular content."); Tr. at 153:3–154:20 (May 2, 2016) (Rebecca Prince, Becky Boop).

[154] *See, e.g.*, c3 Initial Comments at 15 ("[G]iven the increased availability of higher broadband speeds and low-cost server space, coupled with the continued misinterpretation of the DMCA by the courts and those that want to take advantage of its safe harbors, the DMCA regime fails to accomplish the balance sought by Congress."); Digimarc Corporation, Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015, Notice of Inquiry at 1 (Apr. 1, 2016) ("Digimarc Initial Comments") ("But the advent and growth of consumer broadband internet and the increased adoption of digital media have rendered the notice-and-takedown process anachronistic and incapable of dealing with the amount of online infringement occurring today.").

Finally, rightsholders say that other developments that obscure the identity of internet users have further complicated the notice-and-takedown process and, more generally, copyright enforcement online.[155] These take two forms. The first is technologies that anonymize user data or mask the location of hosting services. These include reverse proxy services that sit between the internet and the web servers that make up the internet, forwarding requests from internet users to web servers and collecting responses from those web servers so that web servers never communicate directly with internet users.[156] The second development comes from new foreign laws that limit how OSPs may use and share user information.[157] Though there may be technological reasons for anonymizing data or masking location or important policy considerations that support increasing internet user privacy, these business and policy decisions tip the balance away from copyright owners by making it more difficult for them to identify infringers.[158]

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[155] *See, e.g.*, Arts and Entertainment Advocacy Clinic at George Mason University School of Law ("Mason Clinic"), Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015, Notice of Inquiry at 10 (Apr. 1, 2016) ("Mason Clinic Initial Comments") ("After the notice is submitted, platforms, including YouTube, send an email to the user who posted the work stating that the material has been taken down upon the request of the artist. The email includes the artist's name and address. The artist, however, is not informed about the real identity of the user who posted her copyrighted work, and such users also often hide behind made up usernames."); Digimarc Initial Comments at 8 ("Online Service Providers can avoid accountability by not requiring the creation of a public-facing account to use their services. Thus, [OSPs] have little incentive to aggressively police their user bases . . . . [to say] nothing of the ease with which individuals can obscure their digital identity to avoid existing repeat infringer policies."); Elnar Mukhamediarov, Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015, Notice of Inquiry at 2 (Apr. 1, 2016) ("There is no identity verification in the case of DMCA counter-notifications, which means that users can submit fake information and get away with it."); Schneider Initial Comments at 19; Tr. at 314:2–3 (May 13, 2016) (Ira Siegel, Copyright Enforcement Group ("CEG")).

[156] *See Finding the IP Address of a Website Behind Cloudflare*, SECURITYTRAILS (Feb. 21, 2018), https://securitytrails.com/blog/ip-address-behind-cloudflare ("By using a reverse proxy service, it can be very difficult or even impossible for someone on the outside to figure out who the hosting provider is that's originating the website."). Reverse proxy services like Cloudflare claim that they "increase security, performance, and reliability." *What Is a Reverse Proxy? Reverse Proxies Explained*, CLOUDFLARE, https://www.cloudflare.com/learning/cdn/glossary/reverse-proxy/ (last visited May 8, 2020).

[157] In 2018, for example, the European Union brought into force the General Data Protection Regulation ("GDRP"), which requires controllers and processors of personal data to, among other things, obtain the consent of subjects for data processing, to anonymize collected data and to provide data breach notifications. *See generally EU Data Protection Rules*, EUROPEAN COMMISSION, https://ec.europa.eu/info/priorities/justice-and-fundamental-rights/data-protection/2018-reform-eu-data-protection-rules/eu-data-protection-rules_en (last visited May 5, 2020); *see also* Ivana Kottasová, *What Is GDPR? Everything You Need to Know About Europe's New Data Law*, CNN BUSINESS (May 21, 2018), https://money.cnn.com/2018/05/21/technology/gdpr-explained-europe-privacy/index.html.

[158] *See* Tr. at 299:9–16 (Apr. 8, 2019) (Steve Rosenthal, McGraw-Hill Education) ("We have seen a number of instances where identifying data previously available on a WHOIS or similar search result was suddenly redacted and hidden from public view. At the same time, we have seen a proliferation of content delivery networks such as Cloudflare providing services that anonymize the identity of online service providers in the pretext of furthering security interests. This impacts the rights owners' ability to enforce against the bad actors.").

B. Past Efforts to Address Changes to the Online Landscape

In response to the above concerns about the strains on the section 512 regime that have begun to show as the internet has grown, stakeholders have engaged in various efforts to address such landscape changes while retaining the notice-and-takedown system. These initiatives reflect the challenges both of achieving successful collaboration among the various stakeholders within the copyright ecosystem and, implicitly, reaching consensus on legislative changes to section 512. Many stakeholders have pursued voluntary agreements[159] and other private initiatives to improve the functioning of the notice-and-takedown system.[160] Government actors, too, have made efforts to address these issues both through greater coordination of enforcement activities and through facilitation of stakeholder dialogues. While the life cycles of some of these efforts have already ended, many of these approaches will continue to support the evolution of efforts to address online infringement.

1. Voluntary Agreements Adopted by the Marketplace

Since the enactment of section 512, stakeholders have acknowledged perceived gaps in the enforcement framework for online infringement that cannot be addressed by legislative action.[161] Stakeholders have thus developed a range of voluntary initiatives to address online infringement, from best practices to formal, binding agreements. These initiatives can be unilateral or can involve a collaborative effort among several parties across industries.

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[159] *See Role of Voluntary Agreements in the U.S. Intellectual Property System: Hearing Before the Subcomm. on Courts, Intellectual Prop., & the Internet of the H. Comm. on the Judiciary*, 113th Cong. (2013) ("*House Role of Voluntary Agreements Hearing*"); Konstantinos Komaitis, *Voluntary Initiatives as a Source of Policy-Making on the Internet*, INTERNET SOCIETY (July 29, 2013), https://www.internetsociety.org/blog/2013/07/voluntary-initiatives-as-a-source-of-policy-making-on-the-internet/ (noting that "self-regulation is more prompt, flexible and effective than government regulation").

[160] *See* Pinterest, Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015, Notice of Inquiry at 2–3 (Apr. 1, 2016) ("Pinterest Initial Comments") ("Because Section 512 enabled content owners to request the removal of their content from our platform at any time, we found that we had to provide value to our partners to keep their content on our platform. As a result, Section 512 encouraged us to form creative partnerships with content creators and publishers. It incentivized voluntary cooperation and respect, which led to better business outcomes for us and our partners."); *House Role of Voluntary Agreements Hearing*, 113th Cong. 12 (statement of Cary H. Sherman, Chairman and CEO, RIAA) ("For the digital marketplace to truly work, we must ensure that . . . vibrant new services are not undermined by illegal activity. Voluntary initiatives with Internet businesses are a key component of that objective.").

[161] *See, e.g.*, CCIA Initial Comments at 3 ("Congress recognized that cooperation would lead to the most beneficial, effective enforcement of the law."); Google Initial Comments at 8 ("[T]he notice-and-takedown framework has not been a silver bullet solution to online infringement; it was always meant to be one part of a larger collaborative strategy, led by rightsholders and buttressed by other efforts. The safe harbors have been supplemented by additional voluntary efforts, including supply-based initiatives (making lawful content available to users online) and 'follow the money' measures (drying up the financial incentives for rogue sites). These voluntary efforts are exactly what Congress envisioned the DMCA safe harbors would encourage.").

Congress has acknowledged the important role that voluntary initiatives and agreements can play in the online environment.[162] Stakeholders likewise note that such agreements offer the advantage of allowing parties "to learn from the marketplace what is working and what is not . . . [, to] modify the agreement [that resulted in the drafting of section 512] . . . [and] learn from experience."[163]

a) Examples of Best Practices

Several stakeholder groups have developed and implemented industry best practices for addressing online infringement. Payment processors and advertising networks, in particular, have utilized best practices in an effort to cut off payments and advertising revenues for web services offering infringing material, by using "follow the money" strategies that are "aimed at cutting off the supply of revenue flowing to rogue sites."[164] These initiatives generally began as best practice statements that provided guidelines for conducting business and have evolved into more robust programs. While some stakeholders acknowledge the benefits of best practices guidelines, they also commente on the limitations, including the limited scope of influence and the lack of any force of law.[165]

The creative industries and OSPs, including CBS, Disney, Fox, Microsoft, MySpace, NBC Universal, Sony Pictures, Veoh, and Viacom, have worked together to establish best practices related to user generated content ("UGC") websites.[166] In 2007, these internet and media companies created the Principles for User Generated Content Services ("UGC Principles"), a set of

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[162] *See Section 512 of Title 17: Hearing Before the Subcomm. on Courts, Intellectual Prop., & the Internet of the H. Comm. on the Judiciary*, 113th Cong. 6 (2014) ("*House Section 512 Hearing*") (statement of Rep. John Conyers, Jr., Ranking Member, H. Comm. on the Judiciary) (stating that rightsholders, OSPs, and users "are in the best position to assess practices with respect to online copyright material"); *House Role of Voluntary Agreements Hearing*, 113th Cong. 2 (statement of Rep. Howard Coble, H. Comm. on the Judiciary) (stating that voluntary measures may be "more efficient and effective than some regulation handed down by the Federal Government").

[163] *House Role of Voluntary Agreements Hearing*, 113th Cong. 58 (statement of Cary H. Sherman, Chairman and CEO, RIAA); *see also* Internet Commerce Coalition ("ICC"), Additional Comments Submitted in Response to U.S. Copyright Office's Nov. 8, 2016, Notice of Inquiry at 5 (Feb. 21, 2017) ("ICC Additional Comments") (stating that that "voluntary measures . . . are far more likely to achieve the goals of all stakeholders"); *House Role of Voluntary Agreements Hearing*, 113th Cong. 59 (statement of Randall Rothenberg, President and CEO, International Advertising Bureau) ("[T]he voluntary agreement, self-regulation by industry has the benefit of being able to be more flexible in the pursuit of its objectives. Legislation and regulation have a tendency to fix in stone certain methods by which infringements have to be identified and punished. And technology, especially the infringers and especially those infringers outside our borders, will find new ways to evade them.").

[164] Google Initial Comments at 4, 8. *See also* Microsoft Initial Comments at 10 ("[V]oluntary measures demonstrate how copyright owners and online service providers can effectively team up to help curb online piracy. These include 'follow the money' approaches designed to impact both advertising revenues and payments received by sites that are dedicated to online piracy.").

[165] *See infra* section VI.B.2. (discussing limitations of best practices).

[166] Press Release, The Walt Disney Co. et al., Internet and Media Industry Leaders Unveil Principles to Foster Online Innovation While Protecting Copyrights (Oct. 18, 2007), http://www.ugcprinciples.com/press_release.html.

guidelines designed to address "the proliferation of uploaded content that infringes copyrighted works."[167] The principles call for UGC websites to implement filtering technology that can recognize copyrighted works and notify rightsholders of any matches; rightsholders may then determine how the match should be treated.[168] The principles state that the technology must be used in a way that effectively balances rightsholders' legitimate interest in blocking infringing content with the interests of OSPs and users in allowing lawful uploads and accommodating fair use.[169] The companies driving these principles intended that cooperation across industries would "address the challenge of developing new modes of distribution while protecting intellectual property."[170]

Soon after the UGC Principles were released, the Electronic Frontier Foundation ("EFF")[171] published Fair Use Principles for User Generated Video Content ("Fair Use Principles"), a set of guidelines "meant to provide concrete steps" to be taken to "minimize the unnecessary, collateral damage to fair use" in light of the techniques advocated in the UGC Principles.[172] The Fair Use Principles urge companies to (1) allow "a wide berth for transformative, creative uses"; (2) incorporate protections for fair use into any content filtering system (such as human review); (3) require a DMCA notice before removing any content; (4) give notice to the user when an OSP receives a takedown notice concerning the user's content; (5) "create a mechanism by which the user . . . can easily and informally request reconsideration of the content owner's decision to issue a . . . takedown notice"; and (6) provide a streamlined mechanism to repost content when a takedown notice is retracted.[173] According to the EFF, these "parameters are intended to help ameliorate the harms of over-filtering."[174] It is unclear to what extent OSPs have adopted either the UGC Principles or the Fair Use Principles.

Advertising companies have also developed best practices to combat piracy by working to prevent their advertisements from appearing on websites dedicated to distributing infringing content. In 2012, advertising networks[175] issued a series of best practice statements pledging to

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[167] *Id*.

[168] *See Principles for User Generated Content Services*, UGC PRINCIPLES, http://www.ugcprinciples.com/.

[169] *See id*.

[170] Press Release, The Walt Disney Co. et al., Internet and Media Industry Leaders Unveil Principles to Foster Online Innovation While Protecting Copyrights (Oct. 18, 2007), https://ugcprinciples.com/press_release.html.

[171] EFF was later joined by the Center for Social Media, School of Communications, American University; the Program on Information Justice and Intellectual Property, Washington College of Law, American University; Public Knowledge; the ACLU of Northern California' and the Berkman Center for Internet and Society, Harvard Law School. *See Fair Use Principles for User Generated Video Content*, EFF, https://www.eff.org/pages/fair-use-principles-user-generated-video-content.

[172] *See id*.

[173] *See id.*

[174] EFF Initial Comments at 15.

[175] Companies that connect advertisers to websites that want to host ads.

take affirmative steps to avoid placing advertisements on sites dedicated to online infringement.[176] Going a step further, the Interactive Advertising Bureau ("IAB") released Quality Assurance Guidelines ("QAG"),[177] which created a certification process for advertisers. Under the QAG, certified advertisers must make disclosures to ad buyers concerning their relationship to the inventory, content categories, and content ratings of websites, as well as agree not to sell any inventory within categories of illegal content like drugs, bombs, spyware, and copyright infringement.[178] The QAG also provide for a formal, peer-enforced complaint process that permits non-compliance and intellectual property complaints to be lodged against certified companies.[179]

The Trustworthy Accountability Group ("TAG")[180] launched its Brand Integrity Program Against Piracy in 2015 to address similar issues related to online piracy and the lack of transparency that digital advertisers encounter.[181] The program "helps advertisers and their ad agencies avoid damage to their brands from ad placement on websites and other media properties that facilitate the distribution of pirated content and/or illegal dissemination of counterfeit goods."[182] Companies voluntarily participate in the program by using certain validated tools and services to identify and prevent ads from running on infringing sites.[183] In its Study comments, Google reported that it has "worked closely with TAG's cross-industry accountability working group to ensure that the . . . audit program upholds the highest standards of transparent and responsive investigation of anti-piracy complaints."[184] CreativeFuture, a partner with TAG in these "follow the money" strategies, has reported that such outreach to

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[176] The Association of National Advertisers and the American Association of Advertising Agencies issued a joint Statement of Best Practices in 2012. *See Statement of Best Practices to Address Online Piracy and Counterfeiting*, ASSOC. OF NAT'L ADVERTS., http://www.ana.net/content/show/id/bestpractices-piracy. In 2013, the Intellectual Property Enforcement Coordinator ("IPEC") supported the creation of best practices between 24/7 Media, Adtegrity, AOL, Condé Nast, Google, Microsoft, SpotXchange, and Yahoo!, with the support of the IAB. *See* Victoria Espinel, *Coming Together to Combat Online Piracy and Counterfeiting*, WHITE HOUSE BLOG (July 15, 2013, 8:33 AM), https://obamawhitehouse.archives.gov/blog/2013/07/15/coming-together-combat-online-piracy-and-counterfeiting.

[177] *See* INTERACTIVE ADVERT. BUREAU, TAG QUALITY ASSURANCE GUIDELINE (QAG): VERSION 2.0 (2013), https://www.iab.com/wp-content/uploads/2015/08/SimplifiedInventoryQualityGuidelines.pdf.

[178] *See id*.

[179] *See id.*; *see also House Role of Voluntary Agreements Hearing*, 113th Cong. 31–32 (statement of Randall Rothenberg, President and CEO, IAB).

[180] TAG was founded by IAB and other advertising associations. Representatives of OSPs, rightsholders, and the telecommunications industry serve on the TAG Leadership Council. *About Us*, TRUSTWORTHY ACCOUNTABILITY GRP., https://www.tagtoday.net/aboutus/.

[181] Press Release, Trustworthy Accountability Grp., Advertising Industry Launches Initiative to Protect Brands Against Piracy Websites, (Feb. 10, 2015), https://tagtoday.net/advertising-industry-launches-initiative-to-protect-brands-against-piracy-websites/.

[182] *Id*.

[183] *See id*.

[184] Google Initial Comments at 4.

advertisers has resulted in a 90% reduction in impressions of advertisements on pirate sites over two years, with no premium advertisers identified on high volume pirate sites in 2018.[185]

b) Examples of Formal Agreements

Formal agreements between various parties generally develop out of the best practices described in the previous section. While these agreements do not have the force of law, they do further emphasize the commitment to a shared goal in facilitating the operations within the notice-and-takedown framework. The Copyright Office has found during the Study, however, that these formal agreements traditionally have not included small creators and individual users in their creation and implementation, limiting the success of these agreements in some cases.[186]

In 2012, the International AntiCounterfeiting Coalition ("IACC") launched its RogueBlock program, a "collaborative effort of the IACC and the payment industry to create a streamlined, simplified procedure for members to report online sellers of counterfeit or pirated goods directly to credit card and financial services companies."[187] At least ten major financial institutions participate in RogueBlock.[188] Rightsholder representatives can submit report forms identifying unauthorized sellers through a RogueBlock portal; the IACC reviews and forwards the reports to payment processors (*i.e.*, credit card and/or financial services companies) for remedial action.[189] Since its launch, the program "has terminated over 5,000 individual counterfeiters' merchant accounts, which has impacted over 200,000 websites."[190] One commenter, however, notes that the costs of participating in the program may exclude smaller rightsholders from taking advantage of the benefits.[191] In 2019, several stakeholders from the larger IP community praised the recent

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[185] *Follow the Money Update*, CREATIVEFUTURE (Jan. 24, 2019), https://creativefuture.org/follow-the-money-update/.

[186] *See infra* section VI.B.2.

[187] *IACC RogueBlock*, INT'L ANTICOUNTERFEITING COAL., https://www.iacc.org/online-initiatives/rogueblock.

[188] MasterCard, Visa International, Visa Europe, Paypal, MoneyGram, American Express, Discover, PULSE, Diners Club, and Western Union all participate. *See id*.

[189] *See id.*; *House Role of Voluntary Agreements Hearing*, 113th Cong. 55 (written statement of Robert C. Barchiesi, President, IACC).

[190] *IACC RogueBlock*, IACC, http://www.iacc.org/online-initiatives/rogueblock. The program launched in 2012 after the IPEC facilitated the establishment of a set of best practices among payment processors. *See House Role of Voluntary Agreements Hearing*, 113th Cong. 50 (statement of Robert C. Barchiesi, President, IACC). In April 2017, IACC announced that it was expanding its RogueBlock program to target .uk domain names. *See* Press Release, Int'l AntiCounterfeiting Coal., The International AntiCounterfeiting Coalition and City of London Police Partner to Protect Consumers from Online Counterfeits (Apr. 3, 2017), http://www.iacc.org/media/the-international-anticounterfeiting-coalition-and-city-of-london-police-partner-to-protect-consumer.

[191] *See* AAP Initial Comments at 17 ("Like the Copyright Alert System, this voluntary regime [IACC] requires participants to 'pay to play.' For many smaller rights holders, the price of admission (or participation) is simply too high.").

work of the IACC in disrupting online payment processing to online sites that list counterfeit goods.[192]

Formal agreements between rightsholders and OSPs have taken the form of graduated response systems. Used most frequently for P2P networks, graduated response systems address online infringement by requiring an OSP to take a series of steps with respect to a user when it detects that that user has engaged in infringing activity. Such protocols generally involve "a system of educational notifications and warnings, culminating in deterrent sanctions for those who refuse to stop infringing."[193] In July 2011, the Recording Industry Association of America ("RIAA"), the Motion Picture Association of America ("MPAA"), and several ISPs signed a voluntary memorandum of understanding creating a graduated response system known as the Copyright Alert System ("CAS"), which was administered by a new entity called the Center for Copyright Information ("CCI").[194]

Under the CAS, a participating ISP that received notice from a copyright owner of alleged infringement occurring on its service would send a copyright alert to the subscriber associated with that activity.[195] A maximum of six alerts would be sent to each subscriber, and each alert's severity increased as the unlawful conduct continued.[196] The first alerts were meant to be educational and to inform the subscriber of the unlawful activity, give instructions on how to prevent the activity, and provide information on how to access content legally.[197] If unlawful activity continued on the subscriber's account, then the ISP would send additional alerts and impose mitigation measures such as a temporary reduction in internet speed, a temporary downgrade in internet service tier, or suspension of service.[198] Once the ISP imposed these mitigation measures, the customer would be given the chance to undergo an independent review if he or she believed the alerts were sent in error or that allegations were untrue.[199]

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[192] *See* Carrie Hansen, *Everything about the IOffer Shutdown and Counterfeiting*, VIZACA, (June 8, 2019), https://www.vizaca.com/ioffer-shutdown-counterfeiting/.

[193] INTERNATIONAL FEDERATION OF THE PHONOGRAPHIC INDUSTRY, DIGITAL MUSIC REPORT 2011: MUSIC AT THE TOUCH OF A BUTTON 18 (2011), https://www.musikindustrie.de/fileadmin/bvmi/upload/06_Publikationen/DMR/ifpi_digital-music-report-2011.pdf.

[194] *See* CNTR. FOR COPYRIGHT INFO., *Memorandum of Understanding* (2011) ("CCI Memorandum of Understanding"), *reposted at* https://www.musikindustrie.de/fileadmin/bvmi/upload/06_Publikationen/DMR/ifpi_digital-music-report-2011.pdf. Participants in the system were AT&T, Comcast, Cablevision, Verizon, Time Warner Cable, RIAA, A2IM, MPAA, and IFTA. *Id*. at 21–23

[195] *See id*. at § 4(G).

[196] *See id*.

[197] *See id*. at § 4(G)(i).

[198] *See id*. at § 4(G)(iii).

[199] *See id*. at § 4(H).

The CAS generated mixed reactions among stakeholders. Some criticize the program for involving only larger players in the negotiations and for failing to involve representatives of user interests.[200] One commenter notes that the system's reliance on automated measures was "beyond the technical and financial capability of many smaller and mid-sized providers."[201] Some rightsholders lament that the CAS was "nothing more than a[n] educational effort, with no real consequences suffered by any of [the ISP's] infringing customers."[202] Overall, while several commenters commend the CAS as being "effective at educating subscribers and incentivizing them to cease infringing behavior,"[203] others argue that it made little impact, particularly with respect to repeat infringers outside the P2P context.[204]

The CAS was first implemented in February in 2013[205] and remained in effect for approximately four years. In January 2017, the CCI announced that the program was being

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[200] *See, e.g.*, Ernesto Van der Sar, *Has Your ISP Joined the US "Six Strikes" Anti-Piracy Scheme?*, TORRENTFREAK (Aug. 3, 2012), https://torrentfreak.com/isp-six-strikes-anti-piracy-scheme-120803/; Corynne McSherry & Eric Goldman, *The "Graduated Response" Deal: What if Users Had Been At the Table?*, ELEC. FRONTIER FOUND. (July 18, 2011), https://www.eff.org/deeplinks/2011/07/graduated-response-deal-what-if-users-had-been. *See also* American Cable Association ("ACA"), Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015, Notice of Inquiry at 11 (Apr. 1, 2016) ("ACA Initial Comments") (recognizing that the CAS was established by "a handful of the larger stakeholders" to "deal with alleged instances of repeat infringement"); Copyright Alliance Initial Comments at 26 ("[E]fforts [such as CAS] should be expanded to include other stakeholders and additional categories of creative works.").

[201] ACA Initial Comments at 11.

[202] CEG, Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015, Notice of Inquiry at 9–10 (Apr. 1, 2016); *see also* IFTA Initial Comments at 10 ("Existing voluntary initiatives such as the Copyright Alert System to address peer-to-peer piracy . . . are useful to set the table for an improved digital environment in which copyright is respected. However, in practice, such voluntary measures do not mitigate the damage from specific illegal acts or offer any immediate mechanism to stop the instant proliferation of infringing material online.") (emphasis omitted).

[203] ICC, Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015, Notice of Inquiry at 6 (Apr. 1, 2016) ("ICC Initial Comments"); *see also* Copyright Alliance Initial Comments at 16 ("[A] CCI study found that 57% of users would stop infringing immediately if they received an alert."); Microsoft Initial Comments at 10–11; MPAA Initial Comments at 5 (Apr. 1, 2016) ("Now in its fourth year, the Copyright Alert System has sent out millions of 'alerts,' and the CCI continues to work to improve it. Unfortunately, these cooperative activities, which are outside the section 512 system, remain the exception rather than the rule.").

[204] AAP Initial Comments at 16 ("While the system appears to have some utility, it is designed to address only infringing activity occurring on P2P platforms.") (citation omitted); Tr. at 111:6–14 (May 3, 2016) (Mary Rasenberger, Authors Guild) ("The Copyright Alert System—we haven't seen that it works. Six strikes seems to be too far, too much."); *see also* Ted Johnson, *Internet Service Providers, Studios and Record Labels Call It Quits on Copyright Alert System*, VARIETY (Jan. 27, 2017, 2:44 PM), https://variety.com/2017/digital/news/copyright-alerts-piracy-mpaa-comcast-att-1201971756/ (quoting MPAA executive vice president Steven Fabrizio as saying, "These repeat infringers are the ones who drive ongoing and problematic P2P piracy . . . . [The CAS] was simply not set up to deal with the hard-core repeat infringer problem.").

[205] *See* Ian Paul, *ISPs Roll out Six Strikes Program this Week*, PCWORLD (Feb. 25, 2013, 10:45 AM), https://www.pcworld.com/article/2029336/isps-roll-out-six-strikes-program-this-week.html.

discontinued.[206] The CCI notes, however, that "[w]hile this particular program is ending, the parties remain committed to voluntary and cooperative efforts to address these issues."[207]

2. Private Initiatives

In addition to cooperative agreements, some rightsholders and OSPs have embarked on private initiatives, in the form of educational outreach or technological tools, to address the use and dissemination of pirated content.

a) Educational Outreach about Access to Legal Content

Developed by the RIAA and the Music Business Association, "Whymusicmatters.com," serves as a resources for users to learn about the various authorized digital music services available in the marketplace.[208] Services are listed on the site if they have an agreement with at least one of the three major record companies in the United States.[209] "Just Watch" offers a similar service for television and film by allowing users to search various streaming platforms to watch certain content legally.[210] These websites offer users helpful information to navigate the various options in today's marketplaces while emphasizing the importance of proper compensation for rightsholders.

b) Filtering

Some larger OSPs have implemented voluntary filtering systems to identify potentially infringing material uploaded to their platforms. YouTube's Content ID program is one of the more robust filtering systems on the internet.[211] The system scans videos that are uploaded to YouTube against a database of files that have been submitted by content owners participating in the program. When a match is made, the owner is notified and has the option to block the entire video from being viewed, monetize the video by running advertisements against it, or solely track the video's viewership statistics.[212] Users who believe a claim against an uploaded file is invalid

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[206] Jeff Baumgartner, *Copyright Alert System Comes to an End,* MULTICHANNEL NEWS (Jan. 27, 2017), https://www.multichannel.com/news/copyright-alert-system-comes-end-410471 (quoting *Statement on the Copyright Alert System*, CNTR. FOR COPYRIGHT INFO. (Jan. 27, 2017)).

[207] *Id*.

[208] *See About Us,* MUSIC MATTERS, https://whymusicmatters.com/about-us/.

[209] *See FAQ*, MUSIC MATTERS, https://whymusicmatters.com/faq/.

[210] *See What We Do,* JUSTWATCH, https://www.justwatch.com/us/about.

[211] Other platforms have developed content matching technology similar to YouTube's. Scribd, a service that provides access to literary works and allows users to self-publish, established BookID to filter uploaded works. The program compares reference samples of works in their database with uploaded materials, and a matched upload is blocked. *See BookID*, SCRIBD, https://www.scribd.com/copyright/bookid.

[212] *See How Content ID Works*, YOUTUBE HELP, https://support.google.com/youtube/answer/2797370. These options can be country-specific, giving the copyright owner the ability to block a file in one country and monetize it in another. *Id.*

or believe their video was misidentified can dispute the claim, at which time the video will be temporarily available on YouTube until the owner responds.[213] If the owner chooses to uphold his claim, the user can appeal once more.[214] At any point, the owner can bypass this process and issue a section 512 takedown notice.[215]

As of 2020, over 9,000 rightsholders were participating in Content ID, claiming over 800 million videos.[216] Over the past five years, YouTube had paid $2 billion to participants who chose to monetize files using Content ID.[217] Some stakeholders praise Content ID for automating rights management, and for "creat[ing] an entirely new revenue stream for the music industry by allowing rightsholders, if they wish, to leave fan videos up and earn revenue from them."[218]

Participation in the Content ID program is limited to rightsholders who "own exclusive rights to a substantial body of original material that is frequently uploaded by the YouTube creator community."[219] Some commenters complain that this policy unfairly excludes smaller copyright owners; in their view, "every artist should be entitled to this service, to register their music once and for all."[220] Similarly, a number of rightsholders urge Google to permit other OSPs

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[213] *See Dispute a Content ID Claim*, YOUTUBE HELP, https://support.google.com/youtube/answer/2797454.

[214] *See id.*

[215] *See id.*

[216] *See YouTube for Press*, YOUTUBE, https://www.youtube.com/yt/about/press/ (click "View all YouTube statistics") (last visited May 1, 2020).

[217] *See id.*; *see also* Google Initial Comments at 3 ("To date, Content ID has generated more than $1 billion in revenue for the content industry."); *House Section 512 Hearing*, 113th Cong. 75 (statement of Katherine Oyama, Senior Copyright Policy Counsel, Google Inc.) (stating that the majority of rightsholders chose to leave the matched file on YouTube and monetize it instead of having it blocked).

[218] Tr. at 34:3–13 (May 3, 2016) (Michael Petricone, Consumer Technology Association ("CTA")), *see also*, c3 Initial Comments at 13 ("It is important that online intermediaries, not just right holders, fully engage in the fight against digital theft . . . . For example, YouTube's Content ID system now enables rights holders to limit infringing files, which are technologically matched via fingerprint-based content recognition technology, from being made available via YouTube."); Intellectual Property Owners Association ("IPO"), Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015, Notice of Inquiry at 4 (Apr. 1, 2016) ("IPO Initial Comments") ("YouTube's Content ID filtering system illustrates that commercially reasonable upload filtering can complement the growth of legitimate content-driven websites. YouTube has become enormously successful with legitimate user generated content videos and revenue models with rights holders.").

[219] *How Content ID Works*, YOUTUBE HELP, https://support.google.com/youtube/answer/2797370; *see also Qualifying for Content ID*, YOUTUBE HELP, https://support.google.com/youtube/answer/1311402.

[220] *House Section 512 Hearing*, 113th Cong. 54 (statement of Maria Schneider, Grammy Award Winning Composer/Conductor/Producer, Member of the Board of Governors, New York Chapter of the Recording Academy); *see also* Directors Guild of America ("DGA"), Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015, Notice of Inquiry at 8 (Apr. 1, 2016) ("DGA Initial Comments") ("[I]ndividual creators usually do . . . not have any access to, or in many cases awareness of . . . [content-filtering technologies]. That . . . needs to be rectified."); Future of Music Coalition ("FMC"), Initial Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015, Notice of Inquiry at 17 (Apr. 1, 2016) ("FMC Initial Comments") ("[M]any of these technologies are frequently inaccessible or unaffordable to both small content creators and tech developers. A small independent record label may only be able to

to use its Content ID technology for purposes such as image recognition.[221] One creative industry group also notes that, given YouTube's market strength, it can force participants to "accept[] licensing terms that some rightsholders find objectionable or that provide compensation at levels far below market rates on competing services."[222]

Commenters also raise substantive complaints about Content ID.[223] Some rightsholders argue that it fails to capture a significant percentage of unauthorized uploads, forcing content owners to independently search YouTube for infringements.[224] On the other hand, user advocacy groups expresse concern that the system is "prone to false positives and cannot properly take fair use considerations into account."[225]

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afford a third-party service for its most high-profile anticipated releases, and then only for a short window before and after its release."); IFTA Initial Comments at 7 ("Use of updated technology should not be optional for online service providers and they should not be allowed to continue to offer new solutions only to large or preferred rights holders."); Schneider Initial Comments at 3 ("Basically, that means the little guy need not apply. That's wrong."). Google has since launched a Content Verification Program, which offers a more limited feature set. *Content Verification Program*, YOUTUBE HELP, https://support.google.com/youtube/answer/2797370.

[221] Getty Images, Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015, Notice of Inquiry at 6 (Mar. 31, 2016) ("Getty Initial Comments") ("It is also worth noting that despite repeated requests by the photography community and the availability of image-recognition technology, Google has refused to make Content ID available for photographs and still images."); The National Academy of Recording Arts & Sciences ("Recording Academy"), Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015, Notice of Inquiry at 6 (Apr. 1, 2016) ("Recording Academy Initial Comments") ("Google's Content ID system for YouTube shows that it's possible to protect against online infringement and block unauthorized works. But this protection is only available on one platform, YouTube, and only if you meet Google's criteria.").

[222] FMC, Additional Comments Submitted in Response to U.S. Copyright Office's Nov. 8, 2016, Notice of Inquiry at 6 (Feb. 21, 2017) ("FMC Additional Comments").

[223] *See, e.g.*, Tr. at 63:10–13 (May 3, 2016) (Victoria Sheckler, RIAA) ("Content ID is a helpful tool. It is not a silver bullet, and there are a variety of problems with Content ID that could be addressed, in our view."); Tr. at 262:19–20 (May 3, 2016) (Rebecca Tushnet, OTW) ("The biggest users of Content ID can't say a good word about it.").

[224] *See, e.g.*, Sony Music Entertainment, Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015, Notice of Inquiry at 3 (Apr. 1, 2016) ("Sony Initial Comments") ("Sony is essentially forced to pay a third party contractor to search for and claim or block otherwise infringing videos on YouTube that are not caught by YouTube's Content ID system. Since December 2012 this contractor has identified and claimed or blocked 1,488,035 infringing copies of Sony Recordings not identified by Content ID. The failure of Content ID to identify the videos that Sony identified and claimed through its contractor's work would have cost Sony and its artists $7.7 million dollars in revenue from approximately 10 billion plays were it not for Sony's contractor's independent efforts."); WMG Initial Comments at 5 ("Content ID would not identify live versions of performances by WMG artists, even if WMG had exclusive rights to recordings of those performances under its recording contracts with the artists. Accordingly, WMG also deployed substantial and costly human resources to manually identify and request takedown of recordings that slipped by Content ID, as a copyright owner would need to do in a pure Section 512 context without Content ID.").

[225] Wikimedia Foundation, Additional Comments Submitted in Response to U.S. Copyright Office's, Nov. 8, 2016, Notice of Inquiry at 11 (Feb. 21, 2017) ("Wikimedia Additional Comments"); *see also* EFF Initial Comments at 13 ("Equally problematic are 'filters' that some service providers employ to help prevent copyrighted content from being uploaded at all (and/or to monetize that content). The most well-known example of this is YouTube's Content ID system. The system has been plagued with problems from the beginning.").

Founded in 1999, Audible Magic has also created filtering technology that is licensed to social media platforms. Using Automatic Content Recognition ("ACR"), Audible Magic matches audio and video files uploaded to the platform against files registered with Audible Magic's database.[226] If there is a match, the database relays to the platform ownership information and rules specifying how the owner wants the file to be used. The service is used by SoundCloud, Facebook, Vimeo, Twitch, and Dailymotion, among others, and may lead to direct licensing agreements between copyright owners and platforms.[227] In its Study comments, Audible Magic states that both small and large scale entities can take advantage of its technological services as they "are quick, simple and inexpensive to install" and "require very little in the way of maintenance."[228] One commentator, however, notes that smaller, individual creators may not have access to or even be aware of services like Audible Magic.[229]

In 2016, Facebook developed its own tool called Rights Manager, a video-matching technology intended "to further help rights owners protect the content they own."[230] Rights Manager allows approved publishers to upload and maintain a reference library of videos; create rules about how videos are used based on, *e.g.*, how much content has been reused or how many views the video has received; identify new matches; and "whitelist" specific Facebook pages or profiles on which their videos are allowed to be used.[231] When originally launched, Rights Manager was predominantly manual: once Rights Manager located matches, the system itself could not send automated notices.[232] In October 2017, Facebook started directly integrating

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[226] *See Technology*, AUDIBLE MAGIC, https://www.audiblemagic.com/technology/.

[227] *See Solutions*, AUDIBLE MAGIC, http://www.audiblemagic.com/solutions.

[228] Audible Magic Corporation, Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015, Notice of Inquiry at 2 (Mar. 21, 2016) ("Audible Magic Initial Comments").

[229] *See* DGA Initial Comments at 8.

[230] Analisa Tamaya Keef & Lior Ben-Kereth, *Introducing Rights Manager*, FACEBOOK FOR MEDIA (Apr. 12, 2016), https://www.facebook.com/facebookmedia/blog/introducing-rights-manager; *see also* Facebook, Inc. ("Facebook"), Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015, Notice of Inquiry at 6 (Apr. 1, 2016) ("Facebook Initial Comments") ("[T]he tool flags uploaded videos that match the rights owners' content and allows those rights owners to quickly and efficiently report the videos to Facebook for removal.").

[231] *See* Analisa Tamaya Keef & Lior Ben-Kereth, *Introducing Rights Manager*, FACEBOOK FOR MEDIA (Apr. 12, 2016), https://www.facebook.com/facebookmedia/blog/introducing-rights-manager.

[232] *See, e.g.*, Sony Music Entertainment, Additional Comments Submitted in Response to U.S. Copyright Office's Nov. 8, 2016, Notice of Inquiry at 3–4 (Feb. 21, 2017) ("Sony Additional Comments") ("Facebook has implemented a content identification and management technology it calls 'Rights Manager.' However, while copyright owners can use Rights Manager to identify and track usage of their content, they cannot automatically block infringing uses. That requires a manual review and takedown process."); Todd Spangler, *Facebook Connects Video Copyright-Flagging System to Third Party Tools*, VARIETY (Oct. 3, 2017, 7:00 AM), http://variety.com/2017/digital/news/facebook-rights-manager-copyright-videos-third-party-1202578122/.

Rights Manager with services from third-party providers to allow for increased automation,[233] and in February 2018 it expanded Rights Manager to cover video content posted to Instagram.[234]

Taking a different approach with filtering technology, the cloud storage platform Dropbox uses hash-matching technology to prevent materials already subject to DMCA takedown notices from being shared on its system. Upon receiving a takedown notice and disabling access to the file, Dropbox adds the file's unique identifier, or hash, to a blacklist. If a user attempts to share a file with the same hash, it is blocked from being shared.[235] This does not remove the file from the user's account, but only prevents him from sharing it.[236] Although hash-matching stops some infringement, it can be circumvented by making a minor alteration to the file or by sharing a different file with the same material.[237]

Given the efficacy of these filtering technologies in removing at least a portion of user-posted infringing material, many copyright owners have advocated amending section 512 to make the use of such systems a condition of safe harbor eligibility. These proposals are discussed in section VI.B.3.a., below.

c) Trusted Notifier Programs

Strategic partnerships between stakeholders in different industries have provided opportunities to address large-scale copyright infringement online outside of the notice-and-takedown process. In 2016, the MPAA and the domain name registry Donuts Inc. announced a partnership culminating in the Trusted Notifier program. Under this agreement, MPAA, as a "trusted notifier," can report large-scale pirate websites registered in Donuts-operated domains, which Donuts then investigates and determines any warranted actions.[238] A subsequent partnership between the MPAA and Radix, a registry based outside the United States, has since

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[233] *See* Spangler, *Facebook Connects Video Copyright-Flagging System to Third Party Tools*, VARIETY (Oct. 3, 2017, 7:00 AM), http://variety.com/2017/digital/news/facebook-rights-manager-copyright-videos-third-party-1202578122/.

[234] *See* Fred Beteille, *Facebook's Rights Manager Now Protects Your Video on Instagram*, FACEBOOK FOR MEDIA (Feb. 8, 2018), https://www.facebook.com/facebookmedia/blog/facebooks-rights-manager-now-protects-your-video-on-instagram.

[235] *See* Greg Kumparak, *How Dropbox Knows When You're Sharing Copyrighted Stuff (Without Actually Looking at Your Stuff)*, TECHCRUNCH (Mar. 30, 2014, 4:38 PM), https://techcrunch.com/2014/03/30/how-dropbox-knows-when-youre-sharing-copyrighted-stuff-without-actually-looking-at-your-stuff/.

[236] *See* Kyle Orland, *Dropbox Clarifies Its Policy on Reviewing Shared Files for DMCA Issues*, ARS TECHNICA (Mar. 30, 2014, 6:00 PM), https://arstechnica.com/tech-policy/2014/03/dropbox-clarifies-its-policy-on-reviewing-shared-files-for-dmca-issues/.

[237] *See* Information Technology & Innovation Foundation ("ITIF"), Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015, Notice of Inquiry at 5 (Mar. 21, 2016) ("ITIF Initial Comments").

[238] Press Release, MPAA, Initial Results Demonstrate Effectiveness of Partnership with Donuts on "Trusted Notifier" Program (June 22, 2016), https://www.motionpictures.org/press/initial-results-demonstrate-effectiveness-of-partnership-with-donuts-on-trusted-notifier-program/.

been announced.[239] Similar to the trusted notifier partnership with Donuts, MPAA must follow a set of standards when it notifies Radix of a domain name engaged in large-scale piracy before Radix conducts an official investigation and takes the appropriate action.[240] While one commentator argues that these partnerships only serve as "large-scale program[s] of private-ordered online content regulation"[241] another commentator states that such a perspective is misleading as there is no evidence of broader "DNS-based enforcement."[242]

3. Government Inquiries and Reports

Several U.S. government initiatives overseen by various agencies have attempted to identify and improve the tools available to creators and users within the DMCA landscape to address allegedly infringing content available on the internet. Consultation with many stakeholders across industries has shaped the direction of these initiatives and policies.

a) Intellectual Property Enforcement Coordinator

In 2008, Congress passed the Prioritizing Resources and Organization of Intellectual Property Act of 2008 ("PRO IP Act")[243] for the "critical" purpose of "improv[ing] [IP enforcement] both domestically and internationally."[244] Among other changes, the PRO IP Act created the position of Intellectual Property Enforcement Coordinator ("IPEC") within the Executive Office of the President.[245] The IPEC is directed to coordinate enforcement efforts with an advisory committee made up of delegates from different federal agencies[246] and to act as a principal advisor to the President on IP enforcement issues.[247] Each year, IPEC issues an annual intellectual

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[239] Press Release, MPAA, MPAA/Radix Partnership Highlights Momentum behind Voluntary Initiatives (May 13, 2016), https://www.motionpictures.org/press/mpaa-radix-partnership-highlights-momentum-behind-voluntary-initiatives/.

[240] *Id*.

[241] Annemarie Bridy, *Notice and Takedown in the Domain Name System: ICANN's Ambivalent Drift into Online Content Regulation*, 74 WASH. & LEE L. REV. 1345, 1347–48 (2017).

[242] Paul Vixie, *Notice, Takedown, Borders, and Scale*, CIRCLEID, (Mar. 1, 2017) http://www.circleid.com/posts/print/20170301_notice_takedown_borders_and_scale/ (quoting Bridy, *Notice and Takedown in the Domain Name System*).

[243] Pub. L. No. 110-403, 122 Stat. 4256.

[244] H.R. REP. NO. 110-617, at 22 (2008).

[245] Prioritizing Resources and Organization for Intellectual Property Act of 2008, Pub. L. No. 110-403, § 301 *et seq.*, 122 Stat. 4256, 4264–65. In addition to establishing the Intellectual Property Enforcement Coordinator, the PRO IP Act also made several legislative changes that strengthened civil and criminal IP laws and provided more resources for IP enforcement efforts. *See* H.R. REP. NO. 110-617, at 23 (2008).

[246] The advisory committee consists of representatives from federal agencies who have a hand in intellectual property, including the Department of Justice, the United States Patent and Trademark Office, the Office of the United States Trade Representative, the Department of State, and the United States Copyright Office. *See* Pub. L. No. 110-403, § 301(b)(3)(A), 122 Stat. 4256, 4265.

[247] *See* H.R. REP. NO. 110-617, at 28 (2008). Congress identified "the lack of permanent and effective leadership in coordinating [enforcement] efforts" as "[o]ne of the most significant deficiencies" in the pre-IPEC ecosystem. *Id*. at 26.

property report to Congress detailing the activities of the advisory committee during the preceding fiscal year.[248] Its most recent annual report noted the prominent issue of online piracy, stating that "[m]any stakeholders, including online sales platforms, payment processing companies and advertising networks, have formed collaborative partnerships to address these concerns[,]" but mentioned that new issues are still arising due to "rapid advances in internet-enabled commerce" and assured that "[t]he Administration continues to seek the input of key stakeholders to help develop new partnerships and creative solutions for addressing outstanding IPR-related issues in the e-commerce and social media space, and will continue expanding its efforts in the future."[249]

In addition to submission of an annual report to Congress, the IPEC is tasked with coordinating with the advisory committee the development and implementation of a Joint Strategic Plan ("JSP") against counterfeiting and infringement.[250] Envisioned as the "framework for coordinating and assessing Federal efforts to combat piracy,"[251] the JSP is released every three years.[252] The JSP's objectives include reducing the number of infringing goods, identifying and addressing weaknesses in IP enforcement, ensuring that relevant information is shared among government agencies, disrupting and eliminating infringement networks, and protecting IP rights overseas through information sharing and enforcement coordination with other countries.[253]

Related to the JSP's objectives, the IPEC has encouraged various "cooperative efforts within the business community to reduce Internet piracy," and to "address repeated acts of infringement."[254] The IPEC's most recent JSP, *Creativity & Enterprise, Charting a Path Ahead: U.S. Joint Strategic Plan on Intellectual Property Enforcement, FY 2017-2019*, applauds the existing voluntary measures involving payment processors and advertisers, but notes that there is opportunity "for expanded collaboration between all stakeholders to augment" the initiatives and

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[248] *See* 15 U.S.C. § 8114

[249] IPEC, ANNUAL INTELLECTUAL PROPERTY REPORT TO CONGRESS 29 (2020), https://www.whitehouse.gov/wp-content/uploads/2020/04/IPEC-2019-Annual-Intellectual-Property-Report.pdf.

[250] *See* Prioritizing Resources and Organization for Intellectual Property Act of 2008, Pub. L. No. 110-403, § 301(b)(1), 122 Stat. 4256, 4265.

[251] H.R. REP. NO. 110-617, at 28 (2008).

[252] Prioritizing Resources and Organization for Intellectual Property Act of 2008, Pub. L. No. 110-403, § 303(b), 122 Stat. 4256, 4267.

[253] *Id*. at 4266–67.

[254] IPEC, 2010 JOINT STRATEGIC PLAN ON INTELLECTUAL PROPERTY ENFORCEMENT 17 (2010), https://www.whitehouse.gov/sites/whitehouse.gov/files/omb/assets/intellectualproperty/intellectualproperty_strategic_plan.pdf. *See also* IPEC, SUPPORTING INNOVATION, CREATIVITY & ENTERPRISE, CHARTING A PATH AHEAD: U.S. JOINT STRATEGIC PLAN ON INTELLECTUAL PROPERTY ENFORCEMENT, FY 2017–2019, 61–79 (2016), https://www.whitehouse.gov/sites/whitehouse.gov/files/omb/IPEC/ 2016jointstrategicplan.pdf; IPEC, 2013 JOINT STRATEGIC PLAN ON INTELLECTUAL PROPERTY ENFORCEMENT 35–37 (2013), https://www.whitehouse.gov/sites/whitehouse.gov/files/omb/IPEC/ 2013-us-ipec-joint-strategic-plan.pdf.

"stay ahead of rapidly changing tactics" of illicit operators.[255] Accordingly, the JSP directs federal agencies to conduct benchmark studies on initiatives currently in place and to consider future multistakeholder engagement.[256] The JSP also addresses measures that search engines, social media sites, and mobile applications can take, and recommends the use of multistakeholder processes to develop industry standards and best practices in each area.[257] Comments submitted in response to the development of the next JSP have addressed similar topics, including the use of technology to address online piracy[258] and the challenges faced by creators to license content to large internet platforms.[259]

b) Internet Policy Task Force

The Department of Commerce launched the Internet Policy Task Force ("IPTF") in 2010 to identify public policy and operational challenges impacting the digital economy.[260] In 2013, following a public process involving a series of stakeholder listening sessions and the receipt of written comments, the IPTF published *Copyright Policy, Creativity, and Innovation in the Digital Economy* ("Green Paper").[261] Discussing challenges with online copyright enforcement, the Green Paper concluded that some gaps and shortcomings in existing legal tools "may require legislative solutions," but that "voluntary initiatives are an important component."[262] The Green Paper identified the notice-and-takedown system as an issue that warranted further IPTF study and called for a multi-stakeholder forum to identify best practices for improving its operation.[263]

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[255] IPEC, SUPPORTING INNOVATION, CREATIVITY & ENTERPRISE at 62–64.

[256] *See id.* at 63, 65–66.

[257] *See id.* at 69–74.

[258] IFTA, Comments Submitted in Response to IPEC's Sept. 13, 2018, Notice of Inquiry at 4–6 (Nov. 13, 2018), https://www.regulations.gov/document?D=OMB-2018-0009-0016. The IPEC solicited comments for the next JSP in September 2018. As of the date of this Report, the JSP for FY 2020–2022 has not yet been released. *See* Request of the U.S. Intellectual Property Enforcement Coordinator for Public Comments: Development of the Joint Strategic Plan on Intellectual Property Enforcement, 83 Fed. Reg. 46,522 (Sept. 13, 2018).

[259] RIAA & National Music Publishers Ass'n ("NMPA"), Comments Submitted in Response to IPEC's Sept. 13, 2018, Notice of Inquiry at 4–6 (Nov. 13, 2018), https://www.regulations.gov/document?D=OMB-2018-0009-0018.

[260] The IPTF's work on copyright policy is led by the U.S. Patent and Trademark Office and the National Telecommunications and Information Administration. *See Internet Policy Task Force*, UNITED STATES PATENT & TRADEMARK OFFICE, https://www.uspto.gov/learning-and-resources/ip-policy/copyright/internet-policy-task-force.

[261] *See* IPTF, COPYRIGHT POLICY, CREATIVITY, AND INNOVATION IN THE DIGITAL ECONOMY (2013) ("Green Paper"), https://www.uspto.gov/sites/default/files/news/publications/copyrightgreenpaper.pdf.

[262] *See id.* at 61.

[263] *See id.* at 102.

The IPTF's multistakeholder forum took place in 2014 and consisted of a series of meetings throughout the country, as well as smaller working and drafting groups.[264] In April 2015, the IPTF issued a document developed by forum participants entitled *DMCA Notice-and-Takedown Processes: List of Good, Bad and Situational Practices*.[265] It provides a "set of agreed upon practices" aimed at "improv[ing] the efficiency of the handling and processing of DMCA notices by both senders and recipients."[266] These practices consist of common-sense guidelines aimed at both OSPs and rightsholders, such as OSPs making notice and counter-notice instructions easily located and understandable, and rightsholders establishing automated search parameters so that flagging non-infringing content is minimized.[267]

IV. HOW OTHER COUNTRIES HAVE TRIED TO STRIKE THE BALANCE

The inherently international nature of the internet has rendered online infringement a global issue. Each country, however, has approached this issue differently. Despite the variations among legal frameworks, the influence of the U.S. section 512 notice-and-takedown process is worldwide. As the United States was the first country to adopt safe harbors for service provider infringement liability, other countries have had the benefit of reviewing the U.S. system when seeking to adopt their own safe harbors and processes for addressing copyright infringement on the internet. Additionally, the U.S. government has negotiated the inclusion of provisions modeled on section 512 and its service provider safe harbors in the intellectual property rights chapters of many of its Free Trade Agreements ("FTAs").[268] The FTA provisions on service provider safe harbors require parties to provide legal incentives for service providers to cooperate with copyright owners to deter the unauthorized storage and transmission of copyrighted materials and to provide limitations in their law that have the effect of precluding monetary relief against service providers for copyright infringements that they do not control, initiate, or direct,

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[264] *See Multistakeholder Forum on the DMCA Notice and Takedown System*, U.S. PATENT & TRADEMARK OFFICE, https://www.uspto.gov/learning-and-resources/ip-policy/copyright/multistakeholder-forum-dmca-notice-and-takedown-system.

[265] DEP'T OF COMM. DMCA MULTISTAKEHOLDER FORUM, DMCA NOTICE-AND-TAKEDOWN PROCESSES: LIST OF GOOD, BAD, & SITUATIONAL PRACTICES (2015), https://www.uspto.gov/sites/default/files/documents/DMCA_Good_Bad_and_Situational_Practices_Document-FINAL.pdf.

[266] Press Release, U.S. Patent & Trademark Office, U.S. Commerce Department Announces Digital Millennium Copyright Act Multistakeholder Forum Results (Apr. 7, 2015), https://www.uspto.gov/about-us/news-updates/us-commerce-department-announces-digital-millennium-copyright-act.

[267] *See* DMCA MULTISTAKEHOLDER FORUM, DMCA NOTICE-AND-TAKEDOWN PROCESSES 1, 3.

[268] *But see* 166 Cong. Rec. S239–S240 (Jan. 15, 2020) (statement of Sen. Thom Tillis that future free trade agreements should reflect an updated DMCA); Letter from Congressman Jerrold Nadler, Chairman of Comm. on the Judiciary of House of Representatives and Congressman Doug Collins, Ranking Member of Comm. on the Judiciary of the House of Representatives to Hon. Robert E. Lighthizer, United States Trade Rep. (Sept. 17, 2019), https://judiciary.house.gov/sites/democrats.judiciary.house.gov/files/documents/Ambassador%20Lighthizer%20USMCA%20letter%209.17.19.pdf) (stating that "we do not believe a provision requiring parties to adopt a Section 512-style safe harbor system of the type mandated by [the United States-Mexico-Canada Agreement] should continue to be included in future trade agreements . . . while 'serious policy discussions are ongoing'").

and that take place through systems or networks controlled or operated by them or on their behalf. While varying in complexity, the FTAs include notice-and-takedown approaches similar to section 512.[269]

In an effort to evaluate the balance of interests between content owners and service providers struck by different legal systems and their implication for the internet ecosystem, the Copyright Office has reviewed a variety of different legal regimes adopted by foreign countries in response to these shared concerns. Whether the responsibility of identifying and removing unauthorized content is placed upon the rightsholder or the service provider varies among these different systems. The degree of government involvement, likewise, differs.

The analysis below does not seek to examine all of the removal frameworks for online infringing content across the globe, but to consider representative examples of different approaches. This overview will provide some context for the later discussion in this Report concerning potential recommendations for the current U.S. system.

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[269] *See* United States-Korea Free Trade Agreement, S. Kor-U.S., art. 18.10.30, June 30, 2007, 46 I.L.M. 642, https://ustr.gov/trade-agreements/free-trade-agreements/korus-fta/final-text; United States-Panama Trade Promotion Agreement, Pan.-U.S., art. 15.11.27, June 28, 2007, https://ustr.gov/trade-agreements/free-trade-agreements/panama-tpa/final-text; United States-Colombia Trade Promotion Agreement, Colom.-U.S., art. 16.11.29, Nov. 22, 2006, [https://web.archive.org/web/20190111223030/https://ustr.gov/trade-agreements/free-trade-agreements/colombia-fta/final-text]; United States-Peru Trade Promotion Agreement, Peru-U.S., art. 16.11.29, Apr. 12, 2006, https://ustr.gov/trade-agreements/free-trade-agreements/peru-tpa/final-text; United States-Oman Free Trade Agreement, Oman-U.S., art. 15.10.29, Jan. 19, 2006, http://www.ustr.gov/trade-agreements/free-trade-agreements/oman-fta/final-text; United States-Bahrain Free Trade Agreement, Bahr.-U.S., art. 14.10.29, Sept. 14, 2004, 44 I.L.M. 544, http://www.ustr.gov/trade-agreements/free-trade-agreements/bahrain-fta/final-text; Dominican Republic-Central America-United States Free Trade Agreement, Costa Rica-Dom. Rep.-El Sal.-Guat.-Hond.-Nicar.-U.S., art. 15.11.27, Aug. 5, 2004, 43 I.L.M. 514, https://ustr.gov/trade-agreements/free-trade-agreements/cafta-dr-dominican-republic-central-america-fta/final-text; United States-Morocco Free Trade Agreement, Morocco-U.S., art. 15.11.28, June 15, 2004, 44 I.L.M. 544, http://www.ustr.gov/trade-agreements/free-trade-agreements/morocco-fta/final-text; United States-Australia Free Trade Agreement, Austl.-U.S., art. 17.11.29, May 18, 2004, 43 I.L.M. 1248, http://www.ustr.gov/trade-agreements/free-trade-agreements/australian-fta/final-text; United States-Chile Free Trade Agreement, Chile-U.S., art. 17.11.23, June 6, 2003, 42 I.L.M. 1026, http://www.ustr.gov/trade-agreements/free-trade-agreements/chile-fta/final-text; United States-Singapore Free Trade Agreement, Sing.-U.S., art. 16.9.22, May 6, 2003, 42 I.L.M. 1026, https://ustr.gov/trade-agreements/free-trade-agreements/singapore-fta/final-text. The United States was also part of the Trans-Pacific Partnership ("TPP") negotiations and that intellectual property chapter contained a distinct approach to OSP liability, given the multi-party nature of those negotiations. Trans-Pacific Partnership, Feb. 4, 2016, art. 18.81-82, https://ustr.gov/sites/default/files/TPP-Final-Text-Intellectual-Property.pdf. The United States withdrew from the TPP in January 2017, and the remaining TPP members negotiated a separate agreement, the Comprehensive and Progressive Agreement for Trans-Pacific Partnership. *See* Colin Dwyer, *The TPP Is Dead. Long Live the Trans-Pacific Trade Deal*, NPR (Mar. 8, 2018, 8:01 AM), https://www.npr.org/sections/thetwo-way/2018/03/08/591549744/the-tpp-is-dead-long-live-the-trans-pacific-trade-deal. Given that Canada and Mexico were also part of the TPP negotiations, the OSP liability articles in the United States-Mexico-Canada Agreement (USMCA) chapter on intellectual property contains elements from both the TPP as well as the prior FTA approaches. *See* United States-Mexico-Canada Agreement, Can.-Mex.-U.S., art. 20.87-88, Nov. 30, 2018, https://ustr.gov/sites/default/files/files/agreements/FTA/USMCA/Text/20-Intellectual-Property-Rights.pdf.

The Office has identified several different systems that other countries have implemented to address online infringing content that broadly sort into three groups: (A) notice systems, (B) verified systems, and (C) blocking. While many of the countries discussed below may utilize a combination of two or more of the systems examined below, the particular countries discussed are considered illustrative of that particular approach. This section concludes with a discussion on the recent EU Digital Single Market Copyright Directive.

A. Notice Systems

Notice systems fundamentally involve a copyright owner notifying a service provider of unauthorized content available on its system. The subsequent actions after this initial step vary among the different notice systems. Each variation in these actions results in a different balance of interests and responsibilities between creators and service providers in responding to unauthorized online content.

1. Notice-and-Notice

With a notice-and-notice regime, the service provider forwards notices from copyright owners to users, alerting them that their accounts have been linked to alleged copyright infringement. A notice-and-notice regime generally does not impose any obligations on the user who receives the notice, nor is there any obligation on the service provider to remove the unauthorized content or to cancel the user's service.[270] Notices may contain a request for payment, in the form of a license for example, in relation to the claimed infringement.

Canada has such a notice-and-notice regime; it entered into force in January 2015.[271] Under this system, a copyright owner may send a notice of claimed infringement to a service provider.[272] When a service provider receives such a notice, the service provider shall, "as soon as feasible," forward the notice to the person to whom the specified site belongs and inform the rightsholder of its forwarding or a reason why it was impossible to do so.[273] Canada's notice-and-notice regime does not require that either the service provider or the user disable access to the content. The system operates as more of an educational system rather than a legal process, formalizing a "voluntary industry-based practice that had been in place for several years."[274] One

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[270] After this process, the copyright owner may pursue litigation, with its associated costs, to have the allegedly infringing content removed.

[271] Copyright Act, R.S.C. 1985, c. C-42, s 41.25 *et seq.* (Can.).

[272] *Id*. s 41.25(1). Under this provision, a service provider is defined as a conduit, information location tool, or the provider of "the digital memory that is used for the electronic location to which the claim of infringement relates." *Id*.

[273] *Id*. s 41.26(1).

[274] *Notice and Notice Regime*, GOV'T OF CAN. OFFICE OF CONSUMER AFFAIRS, https://www.ic.gc.ca/eic/site/oca-bc.nsf/eng/ca02920.html (last updated Apr. 1, 2019). *See also* Tr. at 358:17–22 (Apr. 8, 2019) (Matthew Schruers, CCIA) ("[F]or a long time before the Canadian system was implemented some years ago, there was an informal inter-industry agreement that enabled notice forwarding primarily, which is what rightsholders in that marketplace wanted.").

stakeholder during the Washington, D.C. roundtable questioned the efficacy of the notice-and-notice process in addressing infringing content online, comparing them unfavorably to some private agreements.[275]

2. Graduated Response

Graduated response systems generally involve a service provider undertaking an escalating series of actions after an initial warning to a user regarding alleged infringing activities. The number of warnings issued by the service provider varies across different graduated response systems. After the user has received a warning, subsequent actions by the service provider may include suspension and termination of the user's service. The graduated response system rests on two different principles: that service providers have an obligation to participate in the scheme because they otherwise would receive an unfair benefit from infringement connected to their service, and that the system provides an allegedly cheaper enforcement mechanism than seeking enforcement against individual users.[276]

In 2009, France established the High Authority for the Diffusion of Works and the Protection of Rights on the Internet ("Hadopi"), an administrative agency to oversee its graduated response system.[277] Under this graduated response framework, a rightsholder may inform Hadopi of unauthorized downloads on or via certain websites. The Commission for Protection of Rights, a unit of Hadopi, reviews any evidence of infringement and then sends a warning to the user informing them of the following: any facts alleged against them, the user's obligation to monitor access to the internet using their service,[278] the existence of security measures, and the legal remedies available to the copyright owner.[279] If the user is found to have continued

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[275] Tr. at 362:17–22 (Lui Simpson, AAP) ("In the past, there were some . . . private cooperation agreements that were favorable to rightsholders in the sense that something was being done. But on the notion that notice and notice alone will accomplish anything, I think we've seen frankly that it doesn't."). The notice-and-notice system isn't the only measure Canada has to address online infringement: the Federal Court of Canada issued its first site blocking order in November 2019, against pirate subscription streaming sites. *See Bell Media Inc. et al. v. GOLDTV.BIZ*, 2019 FC 1432 (Can.) (stopping the infringement of the plaintiffs'/rightsholders' works on particular streaming sites); *see also* Barry Sookman, *Site Blocking Orders come to Canada: GoldTV.biz* (Nov. 18, 2019), http://www.barrysookman.com/2019/11/18/site-blocking-orders-come-to-canada-bell-media-v-goldtv-biz/.

[276] *See* Nicholars Suzor & Brian Fitzgerald, *The Legitimacy of Graduated Response Schemes in Copyright Law*, 34 UNSW L.J. 1, 3–4 (2011).

[277] Code de la Properiété Intellectuelle [CPI] [Intellectual Property Code], art. L. 331-12–45 (Fr.). The French Constitutional Council struck down the first iteration of Hadopi as an unconstitutional grant of authority to a non-judicial body. Specifically, the court found that the authority to terminate an individual's access to the internet should be made by a court after a careful balancing of interests and not by an agency, as internet access affects an individual's right to free expression. *See* Conseil Constitutionnel [CC] [Constitutional Court] decision No. 2009-580, June 10, 2009, J.O. 9675 (Fr.), https://www.conseil-constitutionnel.fr/sites/default/files/2018-10/2009_580dc.pdf.

[278] Under French Law, a person with access to internet services has an obligation to ensure that his connection is not used for infringing reproductions or communications to the public. Code de la Properiété Intellectuelle [CPI] [Intellectual Property Code], art. L. 336-3 (Fr.).

[279] *Id*. art. L. 331-25.

engaging in unlawful activities after six months, the Commission for Protection of Rights may initiate the second stage of the graduated response system by sending another warning by email and registered letter. If infringement is still occurring after one year from the second warning, the Commission for the Protection of Rights will inform the copyright owner that prosecution is likely and subsequently may send the file to the public prosecutor's office.[280] As of the date of this Report, Hadopi still operates as France's "anti-piracy agency" but not necessarily with the same authority as originally enacted. However, its structure and position with the French government are likely to change with a potential merger among different agencies.[281]

3. Notice-and-Staydown

A notice-and-staydown system essentially collapses the steps discussed above under the other notice systems into a single responsibility of the service provider to prevent the reappearance of the same or similar[282] infringing content. Under a notice-and-staydown framework, a takedown notice from a rightsholder generally triggers a duty for the service provider to proactively identify and remove all instances of the infringing content and prevent future uploads. Service providers have depended on technology, such as various filtering systems, in order to meet the obligations under this duty.[283]

Germany's notice-and-staydown framework, for example, is predicated on the secondary liability theory of *Störerhaftung*, under which an intermediary who knowingly and causally facilitates a third party's conduct that directly infringes copyright may incur liability, but only for

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[280] *Response Graduee* [*Graduated Response*], HADOPI [http://web.archive.org/web/20170702013530/https://www.hadopi.fr/usages-responsables/nouvelles-libertes-nouvelles-responsabilites/reponse-graduee]; *see also* Nathan Lovejoy, Note, *Procedural Concerns with the HADOPI Graduated Response Model*, HARV. J.L. & TECH. DIG. (Jan. 13, 2011), https://jolt.law.harvard.edu/digest/procedural-concerns-with-the-hadopi-graduated-response-model.

[281] Project de Loi 2488 du 5 décembre 2019 Relatif à la Communication Audiovisuelle et à la Souveraineté Culturelle à l'ère Numérique [Bill no. 2488 of December 5, 2019, on the Audiovisual Communication and Cultural Sovereignty in the Digital Age] (Fr.), http://www.assemblee-nationale.fr/dyn/15/textes/l15b2488_projet-loi. As of the time of this Report, the bill was still pending. Hadopi released a report in December 2019, finding that legal consumption is increasing and illicit consumption of digital material is decreasing. HADOPI, BAROMÈTRE DE LA CONSOMMATION DE BIENS CULTURELS DÉMATÉRIALISÉS 2019: UNE CONSOMMATION LÉGALE PAYANTE EN HAUSSE ET DES PRATIQUES ILLICITES EN RECUL [BAROMETER OF THE CONSUMPTION OF DEMATERIALIZED CULTURAL GOODS 2019: PAYING LEGAL CONSUMPTION IS INCREASING AND ILLICIT PRACTICES ARE DECREASING] (Dec. 5, 2019) (Fr.), https://www.hadopi.fr/actualites/barometre-de-la-consommation-de-biens-culturels-dematerialises-2019-une-consommation.

[282] Some frameworks only provide a duty to prevent the re-upload of the identical infringement of the identical work while other systems provide for duties to prevent upload of similar infringements of the identical work, as long as the infringement is as obvious as the first infringement.

[283] Content recognition technology relies on algorithms that can filter and categorize various types of content, reducing the use and dependence on human reviewers. For example, German company ivitec has developed market-ready video fingerprinting and automatic content recognition software solutions. *About Us*, IVITEC, https://ivitec.com/about.html.

injunctive relief.[284] The intermediary is liable only to the extent that it violates certain standards of conduct relating to the duty of care, including the duty to investigate infringing content.[285] When notified of a single instance of clearly infringing content, a service provider under the German notice-and-staydown framework, therefore, must take some type of action, such as using filtering technology, to ensure (1) takedown and staydown of the infringing material and (2) prevention of similar infringements of the same kind.[286] German service providers have employed various different approaches in filtering content in order to meet the duty of care. Hash value filters help identify identical files to ensure that the files named in a notice are removed or blocked.[287] Keyword filters and other text-based measures vary in efficiency depending on the context; while keyword filters do not capture file names that do not use the title of the work, these types of filters are efficient in the user-generated content sites and search engines in which search terms must refer to the title of the work in order to be found by users.[288]

B. Verified Systems

Due to a large volume of notices sent to service providers, some countries have designated a third-party organization or a governmental agency to review and verify the validity of each notice of alleged copyright infringement before further action is taken. This process initially shifts the responsibility to review every notice to another entity other than the service provider.

1. Third-Party

With a third-party verified system, a third-party organization, generally a stakeholder organization that is familiar with copyright and rightsholders, reviews notices to verify the identity of the sender and the copyright owner as well as the claim of infringement. The third-

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[284] *See* Michael Gruenberger & Adolf Dietz, *Germany, in*, INTERNATIONAL COPYRIGHT LAW & PRACTICE GER-170, § 8[1][c][i] (Lionel Bently ed., 2019).

[285] The scope of the duty to investigate depends on whether the party can reasonably carry out an investigation. *See id*.

[286] The German Federal Court of Justice held in *Atari Europe v. Rapidshare* that the service provider, after being notified that a user shared an unauthorized version of a video game using its services, should have checked whether unauthorized copies of a video game were stored on its servers by other users. *See Bundesgerichtshof [Federal Court of Justice of Germany], Atari Europe v. Rapidshare, I ZR 18/11*, WORLD INTERMEDIARY LIABILITY MAP: COURT DECISION: GERMANY (July 12, 2012) (summarizing the case in English), https://wilmap.law.stanford.edu/entries/bundesgerichtshof-federal-court-justice-germany-atari-europe-v-rapidshare-i-zr-1811; *see also* AAP Initial Comments at 26 n.67 ("This 'proportionality test' under Germany law requires that the ISP take measures that are proportionate to the likelihood of infringement by or through the ISP, taking into consideration the cost and effectiveness of the measures."); JAN BERND NORDEMANN, LIABILITY OF ONLINE SERVICE PROVIDERS FOR COPYRIGHTED CONTENT—REGULATORY ACTION NEEDED? IN-DEPTH ANALYSIS FOR THE IMCO COMMITTEE OF THE EUROPEAN PARLIAMENT, at 20 (2018) IP/A/IMCO/2017-08-PE 614.207, https://www.europarl.europa.eu/RegData/etudes/IDAN/2017/614207/IPOL_IDA(2017)614207_EN.pdf.

[287] *See* Jan Bernd Nordemann, *Liability for Copyright Infringements on the Internet; Host Providers (Content Providers)—The German Approach*, 2 J. INTELL. PROP., TECH. & ELEC. COMM. L. 37, 44 (2001).

[288] *See id*. at 45.

party organization then forwards the notice to the relevant service provider, who must then remove the content. This type of system facilitates cooperation between rightsholders and service providers by placing the majority of the burden to review and process notices on a third party.

Part of Japan's approach to liability in the online environment includes a component that allows for third-party verification of notices. Japan's Provider Liability Limitation Act[289] provides for a takedown process that relies on third-party organizations, generally referred to as a "Reliability Verification Organization" ("RVO").[290] The RVO, which must have expert knowledge in copyright, verifies the identity of the person who has sent the takedown notice, that the sender is the copyright owner, and that the content infringes a copyright.[291] Upon verification, the service provider must remove the allegedly infringing content, otherwise the service provider may be liable for the alleged infringement.[292]

2. Government Agency

Under other verified systems, a government agency may play a role in reviewing the copyright owner's notification of infringement and taking the appropriate subsequent action. The specific purview and the scope of the reviewing agency's authority depend on the particular country's legal framework. Similarly, the involvement of the government agency in pursuing other enforcement responsibilities varies among countries as well.

The Italian independent regulatory authority, Autorità per la Garanzie nelle Comunicazioni ("AGCOM"), oversees various aspects of communications in the country and has

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[289] Kono tokutei denki tsūshin ekimu teikyō-sha no songai baishō sekinin no seigen oyobi hasshinsha jōhō no kaiji ni kan [Act on the Limitation of Liability for Damages of Specified Telecommunications Service Providers and the Right to Demand Disclosure of Identification Information of the Senders], Act No. 137 of 2001 (Japan), *translated in* UNESCO, WORLD ANTIPIRACY OBSERVATORY 4 (2009), http://www.unesco.org/culture/pdf/antipiracy/Japan/Jp_%20LimitLiability_Telecom_en.

[290] Purobaida sekinin seigen-hō gaidorain-tō kentō kyōgi-kai [Provider Liability Limitation Act Guidelines Review Council], Purobaida sekinin seigen-hō chosakken kankei gaidorain [Provider Liability Limitation Act Guidelines Relating to Copyright] V.1. (Nov. 2003) (Japan), *translated in* TELESA, PROVIDER LIABILITY LIMITATION ACT GUIDELINES RELATING TO COPYRIGHT 14 (2002) https://www.telesa.or.jp/wpcontent/uploads/consortium/provider/pdf/guidelines_copyright.pdf.

[291] Kono tokutei denki tsūshin ekimu teikyō-sha no songai baishō sekinin no seigen oyobi hasshinsha jōhō no kaiji ni kan [Law Concerning the Limits of Liability for Damages of Specified Telecommunications Service Providers and the Right to Request Disclosure of Identification Information of the Senders], Law No. 137 of 2001, art 4, art. 5 guidelines (Japan), *translated in* UNESCO, WORLD ANTIPIRACY OBSERVATORY 4 (2009), http://www.unesco.org/culture/pdf/anti-piracy/Japan/Jp_%20LimitLiability_Telecom_en; *see also* Purobaida sekinin seigen-hō gaidorain-tō kentō kyōgi-kai [Provider Liability Limitation Act Guidelines Review Council], Purobaida sekinin seigen-hō chosakken kankei gaidorain [Provider Liability Limitation Act Guidelines Relating to Copyright] Nov. 2003 (Japan), *translated in* TELESA, PROVIDER LIABILITY LIMITATION ACT GUIDELINES RELATING TO COPYRIGHT 14 (2002) https://www.telesa.or.jp/wp-content/uploads/consortium/provider/pdf/guidelines_copyright.pdf.

[292] *See* Tatsuhiro Ueno & Teruo Doi, *Japan, in,* INTERNATIONAL COPYRIGHT LAW AND PRACTICE JAP-93, § 8[4][c][ii] (Lionel Bently ed., 2019).

administrative copyright enforcement authority, including the removal of unauthorized content.[293] Under the Italian framework, the rightsholder, upon finding infringing content, initiates the proceedings by filing a complaint with AGCOM via a form available on the agency's website.[294] Upon review of the formal and substantive requirements for a complaint, AGCOM will decide whether to dismiss or continue the enforcement process. If the rightsholder's complaint meets the requirements, AGCOM will then send a communication to the service provider and user, detailing the works involved and AGCOM's preliminary findings.[295] Service providers and users can either file a counter-claim or voluntarily remove the content and communicate this removal to AGCOM.[296] If the server on which the infringing works are found is in Italy, then AGCOM can order the hosting service provider to remove the works or disable access to them.[297] If the server is located abroad, AGCOM may order ISPs to disable access to the infringing website for users located in Italy.[298] Expedited proceedings are available to respond to a massive violation or a serious economic exploitation of the work.[299]

3. Inter-Governmental Commission

In some countries, many different government agencies participate in the review and investigation of claims of online infringement by copyright owners. This framework generally involves the collaboration of an administrative entity that reviews evidence of online infringement, with a judicial body enforcing an order to remove that infringing content.

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[293] *See* Regolamento In Materia di Tutela del Diritto d'Autore Sulle Reti di Comunicazione Elettronica E Procedure Attuative ai Sensi del Decreto Legislativo 9 Aprile 2003, N. 70 [Regulation on the Protection of Copyright on Electronic Communication Networks and Implementation Procedures in Accordance with Legislative Decree 9 April 2003, No. 70], arts. 2, 8 (It.), https://www.agcom.it/documents/10179/0/Documento/b0410f3a-0586-449a-aa99-09ac8824c945; *see also* Gianluca Campus, *Italian Public Enforcement of Online Copyright Infringement: New Powers and Procedures for AGCOM*, KLUWER COPYRIGHT BLOG (Dec. 14, 2018), http://copyrightblog.kluweriplaw.com/2018/12/14/italian-public-enforcement-of-online-copyright-infringement-new-powers-and-procedures-for-agcom/.

[294] *See* Regolamento In Materia di Tutela del Diritto d'Autore Sulle Reti di Comunicazione Elettronica E Procedure Attuative ai Sensi del Decreto Legislativo 9 Aprile 2003, N. 70 [Regulation on the Protection of Copyright on Electronic Communication Networks and Implementation Procedures in Accordance with Legislative Decree 9 April 2003, No. 70], art. 6 (It.).

[295] *Id*. art. 7.

[296] *Id*. art. 7.

[297] *Id*. art. 8.

[298] *Id*. art. 8. AGCOM has ordered the blocking of several torrent sites that were popular in Italy. *See* Andy, *Italy Orders Blockade of Three More Torrent Sites*, TORRENTFREAK (June 12, 2014), https://torrentfreak.com/italy-orders-blockade-of-three-more-torrent-sites-140612/.

[299] Regolamento In Materia di Tutela del Diritto d'Autore Sulle Reti di Comunicazione Elettronica E Procedure Attuative ai Sensi del Decreto Legislativo 9 Aprile 2003, N. 70 [Regulation on the Protection of Copyright on Electronic Communication Networks and Implementation Procedures in Accordance with Legislative Decree 9 April 2003, No. 70], art. 9 (It.).

Spain's Second Section for the Commission for Intellectual Property,[300] for example, reviews notices of allegedly unauthorized content and then may work with the courts to seek judicial action to remove the unauthorized works. A rightsholder may apply to the Second Section to take action against a service provider for hosting allegedly infringing content.[301] The application must identify the relevant content and provide evidence of infringement of that content and of a previous, unsuccessful takedown request, such as an email request sent to the service provider.[302] After receiving the application, the Second Section requires the service provider to remove the infringing content within 48 hours or explain its reason for not doing so.[303] If the service provider does not adequately respond, then the Second Section may take appropriate measures to interrupt the infringing service by passing the case to the court to rule on whether the site should be shut down.[304]

C. Blocking

A number of countries rely on website blocking as an enforcement method that can target specific digital piracy sites.[305] Europe in particular has a long history with website blocking: the European Union first adopted a provision requiring member states to provide for website blocking in 2001,[306] and some of the earliest DNS blocking injunctions were issued in Denmark beginning in 2006.[307] Recent studies have shown that website blocking has operated as an effective tool in addressing digital piracy, despite the familiar misperceptions about its efficacy and alleged potential for abuse.[308] Currently, more than 40 countries have either enacted or are

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[300] Part of the Ministry of Education, Culture and Sport. Intellectual Property Law art. 158(2)(b) (R.D.L. 1996, 1, amended 2014) (Spain).

[301] Intellectual Property Law art. 158*ter*(3).

[302] *Id*.

[303] *Id*.

[304] *Id*.

[305] *See* Tr. at 302:1–6 (Apr. 8, 2019) (Lui Simpson, AAP) ("AAP encourages the U.S. Copyright Office to take account of the disruptive effect website blocking has on blatantly pirate sites. There are now some 40 countries with a website blocking statute or are considering its adoption.").

[306] Directive 2001/29 of the European Parliament and of the Council of 22 May 2001 on the Harmonisation of Certain Aspects of Copyright and Related Rights in the Information Society, art. 8(3), 2001 O.J. (L 167) (EC) ("InfoSoc Directive").

[307] Ellen Marja Wesselingh, *Website Blocking: Evolution or Revolution? 10 Years of Copyright Enforcement by Private Third Parties*, REVISTA D'INTERNET, DRET I POLÍTICA 38–39 (Oct. 2014), https://idp.uoc.edu/articles/10.7238/idp.v0i19.2422/galley/2482/download/. The first website blocking order in the United Kingdom was issued in 2011. Twentieth Century Fox Film Corp & Ors v British Telecomms. Plc [2011] EWHC 1981 (Ch) 2714 (Eng.).

[308] *See* Brett Danaher et al., *Website Blocking Revisited: The Effect of the UK November 2014 Blocks on Consumer Behavior* at 17 (Apr. 18, 2016) (unpublished article), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2766795; *see also* RETTIGHEDSALLIANCEN, ANNUAL REPORT 2017, 5 (Mar. 2018), https://rettighedsalliancen.dk/wpcontent/uploads/2018/08/ENGB_RettighedsAlliancen2018.pdf (noting average 75% decrease in Danish IP traffic to piracy sites in the wake of DNS blocking orders).

under an obligation to enact some form of no-fault injunctive relief to block access to piracy sites.[309] According to an Information Technology and Innovation Foundation ("ITIF") 2016 study, at least twenty-five countries have used website blocking as a policy and legal measure against copyright infringing content.[310] The application of website blocking and its relationship to other measures varies across among different countries, with some using the judicial system,[311] regulatory structure, [312] or voluntary agreements between service providers and rightsholders[313] to block websites.

1. Examples of Blocking Actions

While many countries have utilized website blocking to address digital piracy, the legal basis for these actions, the jurisdictional scope, and the requirements and knowledge standards applicable to the service provider all vary across the different regimes. For example, some blocking orders apply only to the particular piracy site and any mirror sites, while more flexible dynamic blocking orders reflect the practices of certain piracy websites to quickly shift domain names or even infringing content from one website to another.[314]

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[309] This includes the countries of the European Union as well as Argentina, Australia, Iceland, India, Israel, Indonesia, Malaysia, Mexico, Norway, Russia, Singapore, South Korea, and Thailand. *See In the Matter of an Application Pursuant to Sections 24, 24.1, 36, and 701(a) of the* Telecommunications Act*, 1993 to Disable On-line Access to Piracy Sites*, Application Before the Canadian Radio-television and Telecommunications Commission 4–6 (Mar. 29, 2018) (written intervention of the Motion Picture Association–Can.), *reposted at* TORRENTFREAK, https://torrentfreak.com/images/mpa-can.pdf. In January 2018, the FairPlay Coalition submitted an application to the Canadian Radio-television and Telecommunications Commission, requesting that the Commission create a regime to identify and require ISPs to block "websites and online services that are blatantly, overwhelmingly, or structurally engaged in copyright piracy"; the Commission denied the application in October 2018 on the grounds that it lacked jurisdiction under the Telecommunications Act to implement such a regime. *See* Canadian Radio-television and Telecommunications Commission, Telecom Decision CRTC 2018-384 (Oct. 2, 2018), https://crtc.gc.ca/eng/archive/2018/2018-384.htm.

[310] NIGEL CORY, ITIF, HOW WEBSITE BLOCKING IS CURBING DIGITAL PIRACY WITHOUT "BREAKING THE INTERNET" 12–13 (2016), http://www2.itif.org/2016-website-blocking.pdf. These countries include Argentina, Australia, Austria, Belgium, Chile, Denmark, Finland, France, Germany, Greece, Iceland, India, Indonesia, Ireland, Italy, Malaysia, Norway, Portugal, Russia, Saudi Arabia, Singapore, South Korea, Spain, Turkey, and the United Kingdom. *See also* Nigel Cory, *The Normalization of Website Blocking Around the World in the Fight Against Piracy Online*, ITIF (June 12, 2018), https://itif.org/publications/2018/06/12/normalization-website-blocking-around-world-fight-against-piracy-online; Barry Sookman, *Site Blocking Orders Come to Canada: GoldTV.biz* (Nov. 18, 2019), http://www.barrysookman.com/2019/11/18/site-blocking-orders-come-to-canada-bell-media-v-goldtv-biz/.

[311] *See infra* discussions of United Kingdom, Australia, and India regimes.

[312] In 2017, the Russian telecoms regulator ordered local service providers to block 8,000 pirate websites. *See* Cory, *The Normalization of Website Blocking Around the Worl*.

[313] *See* Bill Toulas, *Portugal is Extending Their Voluntary Piracy Blocking to Live Sports Streams*, TECHNADU (Jan. 21, 2019), https://www.technadu.com/portugal-extending-piracy-blocking-to-live-sports/55280/.

[314] *See* Cory, *The Normalization of Website Blocking*.

a) UK's 97A Actions

The United Kingdom has relied upon the civil enforcement mechanisms available under section 97A of the Copyright, Designs and Patents Act of 1988 to prevent consumers from accessing infringing content on websites. Under this provision, the High Court has the power to grant an injunction against a service provider when the service provider has actual knowledge of another person using their service to infringe copyright.[315] When determining whether a service provider has actual knowledge, the statute states that the court shall consider whether the service provider has received notice of the infringement in question.[316] *Twentieth Century Fox v. BT* was the first case in which the High Court issued an injunction resulting in blocking UK internet users' access to the infringing website, setting legal precedent for rightsholders in the UK to force service providers to block websites that facilitate copyright infringement.[317] Similar blocking injunctions were issued in subsequent cases, clarifying the steps required to block websites in this context.[318] Both the courts and stakeholders have acknowledged that the process is expensive[319] and of limited application outside the UK.[320] The UK case law has also specifically addressed the practical issues of blocking illegal like streams by IP blocks, referred to as "super injunctions."[321]

b) Australia's Court-Ordered Blocking

Under Australia's copyright law, a copyright owner may apply to the Federal Court of Australia to grant an injunction that requires a carriage ISP to take such steps as the Court considers "reasonable" to disable access to a foreign online location whose primary purpose or

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[315] Copyright, Designs and Patents Act 1988, c. 48, § 97A(1) (Eng.).

[316] *Id*.

[317] Twentieth Century Fox et al. v. British Telecoms. Plc [2011] EWHC 1981 (Ch) (Eng.).

[318] *See, e.g.*, Dramatico Entertainment Ltd v. British Sky Broadcasting Ltd [2012] EWHC (Ch) 268 (Eng.); EMI Records Ltd v. British Sky Broadcasting Ltd [2013] EWHC (Ch) 379 (Eng.); Football Association Premier League Ltd v. British Sky Broadcasting Ltd [2013] EWHC (Ch) 2058 (Eng.). These cases discussed issues relevant in the process of issuing a court-ordered injunction including what is satisfactory evidence and who should be party to the action as the procedure in making an application for a blocking injunction is not clear in the law. *See* Althaf Marsoof, *The Blocking Injunction—A Critical Review of its Implementation in the United Kingdom Within the Legal Framework of the European Union*, 46 INT'L REV. INTELL. PROP. & COMPETITION L. 632, 647–648 (Sept. 1, 2015).

[319] *See* Twentieth Century Fox et al. v. British Telecoms. Plc [2011] EWHC 1981 (Ch), [189] (Eng.).

[320] The website in Twentieth Century Fox case was moved to an offshore location outside the EU; the blocking order blocked only UK internet user access, mitigating the impact of copyright infringement within the UK only. *See* Twentieth Century Fox et al. v. British Telecoms. Plc [2011] EWHC 1981(Ch), [2] (Eng.).

[321] *See* The Football Association Premier League Ltd v. British Telecommunications PLC et al. [2017] EWHC 480 (Ch); *see also* Gianluca Campus, *"Super Injunctions" and "Fast Injunctions": Enforcement Against the Illicit Distribution of Sport Events*, KLUWER COPYRIGHT BLOG (Dec. 30, 2019), http://copyrightblog.kluweriplaw.com/2019/12/30/super-injunctions-and-fast-injunctions-enforcement-against-the-illicit-distribution-of-sport-events/; Theo Savvides & Sean Ibbetson, *The UK's First "Live" Blocking Order Prevents Users Accessing Premier League Football Streams*, KLUWER COPYRIGHT BLOG (Apr. 18, 2017), http://copyrightblog.kluweriplaw.com/2017/04/18/the-uks-first-live-blocking-order-prevents-users-accessing-premier-league-football-streams/.

primary effect is the infringing or facilitation of infringement of copyright and is infringing or facilitating infringement of copyright.[322] "Reasonable steps" may include the carriage ISP blocking domain names, URLs, and IP addresses that provide access to the online location specified in the injunction.[323] The recent amendment to Australia's copyright law, which added "primary effect" of infringing or facilitating the infringement of copyright to the injunction standard, means that it is no longer necessary to establish the intent of the site operator when seeking an injunction; the Federal Court merely has to look at the evidence of the effect of the site.[324] Rightsholders have used this framework successfully to block piracy-linked online services. In *Roadshow Films Pty Limited v Telstra Corporation Limited*, the Federal Court of Australia issued an order to block access to several overseas file-sharing sites including The Pirate Bay and Torrentz.[325]

c) India's Site Blocking

India has recently applied blocking orders seeking to address infringement beyond a single site. The Delhi High Court, in the 2019 case *UTV v. 1337x.to*, recently established a judicially-based process for rightsholders to seek approval for "dynamic injunctions" directed against mirror/redirect piracy websites, avoiding the efforts of getting judicial orders for each mirror site.[326] This remedy attempts to address the "whack-a-mole" effect of mirror websites by permitting a plaintiff to implead additional mirror websites (including URL, domain name, and IP address changes) to the same injunction order, as long as they all provide access to the same main website. India's Civil Procedure Code permits the Delhi High Court to issue dynamic injunctions as "necessary for the ends of justice," per its own discretion.[327]

D. European Union Digital Single Market Copyright Directive

In 2019, the European Union addressed the balance between content holders and service providers in the context of digital piracy with the Digital Single Market Copyright Directive ("DSM Copyright Directive").[328] Article 17 of the DSM Copyright Directive addresses the "value

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[322] Copyright Act 1968, s 115A(1) (Austl.) (amended by Copyright Amendment (Online Infringement) Bill 2018).

[323] *Id*. s 115A(2B).

[324] *Id*. s 115A(1)(b).

[325] Roadshow Films Pty Ltd. v. Telstra Corp. Ltd. [2016] FCA 1503 (15 Dec. 2016) (Austl.).

[326] *UTV Software Comms. Ltd. & Ors. v. 1337x.to & Ors.* [2019] CS(COMM) 724/2017 (Del. 10 Apr. 2019)) (India); *see also* Nigel Cory, *India and Website Blocking: Courts Allow Dynamic Injunctions to Fight Digital Piracy*, ITIF: INNOVATION FILES (May 29, 2019), https://itif.org/publications/2019/05/29/india-and-website-blocking-courts-allow-dynamic-injunctions-fight-digital.

[327] CODE CIV. PROC. 1908, § 151 (India).

[328] 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 Council Directives 96/9/EC and 2001/29/EC, 2019 O.J. (L. 130) ("DSM Copyright Directive"). The DSM Copyright Directive was adopted by the EU Parliament on March 26, 2019, approved by the Council on April 15, 2019, and published in the Official Journal of the European Union on May 17, 2019. *See The*

gap" concept that online content sharing platforms obtain unreasonable value from enabling their users to make available copyrighted content, without guaranteeing that rightsholders receive their share of the value or remuneration from such exploitation of their works. In order to "bridge the gap," the DSM Copyright Directive seeks to ensure that rightsholders receive appropriate remuneration for the use of their works online by promoting a "licensing market between rightsholders and online content-sharing service providers" which preserves a "reasonable balance between both parties."[329] These provisions, however, do not affect the contractual freedom of rightsholders who are not obliged to give an authorization or to enter into licensing agreements.[330]

The DSM Copyright Directive targets "online content sharing service providers"[331] whose main purpose is to store and enable users to upload and share a large amount of content.[332] A provider will only qualify as an "online content sharing service provider" if it organizes the content and promotes it for profit-making purposes.[333] According to the DSM Copyright Directive, providing public access to copyright-protected works uploaded by its users qualifies as an act of communication to the public or an act of making available to the public and therefore the online content-sharing service provider must obtain authorization, including via a licensing agreement, from the rightsholder.[334] If no authorization is granted, the content sharing service provider is thus liable for unauthorized acts of communication to the public unless it can demonstrate that it has made best efforts to obtain authorization; made best efforts to ensure the

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EU Copyright Directive Passes—But Member States Remain Split on Upload Filters, LEXOLOGY (May 13, 2019), https://www.lexology.com/library/detail.aspx?g=ca0b067c-5061-4cf7-9a15-ed7f38aef601. Member States have two years to amend, if necessary, their respective domestic laws to reflect the DSM Copyright Directive's provisions. *See* DSM Copyright Directive, art. 29(1). Following its exit from the EU, the United Kingdom will not implement the DSM Copyright Directive. *See Article 13: UK Will not Implement EU Copyright Law,* BBC NEWS (Jan. 4, 2020), https://www.bbc.com/news/technology-51240785.

[329] DSM Copyright Directive, recital 61. *See also* Tr. at 286:2–7 (Apr. 8, 2019) (Eric Cady, IFTA) ("In terms of developments, we are encouraged by the European Parliament's recent approval of the Copyright Directive, to the extent that it recognizes the serious need to rebalance the notice and takedown framework with respect to online content sharing service providers.").

[330] DSM Copyright Directive, recital 61.

[331] *See* DSM Copyright Directive, recital 66.

[332] EU law generally applies a different liability doctrine to active hosting service providers as opposed to passive or "neutral" service providers. *See generally*, JAN BERND NORDEMANN, LIABILITY OF ONLINE SERVICE PROVIDERS FOR COPYRIGHTED CONTENT—REGULATORY ACTION NEEDED? IN-DEPTH ANALYSIS FOR THE IMCO COMMITTEE OF THE EUROPEAN PARLIAMENT, at 20 (2018) IP/A/IMCO/2017-08-PE 614.207, https://www.europarl.europa.eu/RegData/etudes/IDAN/2017/614207/IPOL_IDA(2017)614207_EN.pdf.

[333] DSM Copyright Directive, art. 2(6), recital 62. These particular service providers do not include providers of services such as not-for-profit online encyclopedias, not-for-profit educational and scientific repositories, open source software developing and sharing platforms, providers of electronic communications services as defined in Directive EU 2018/1972, online marketplaces, business-to-business cloud services and cloud services that allow users to upload content for their own use. *Id*.

[334] DSM Copyright Directive, art. 17(1).

unavailability of specific works in accordance with high industry standards; and has acted expeditiously, upon receiving a sufficiently substantiated notice from the rightsholder, to disable access to or to remove from its website the notified works, and made best efforts to prevent future uploads of these works.[335] The DSM Copyright Directive explains that these obligations "should not lead to Member States imposing a general monitoring obligation."[336]

Several provisions of the DSM Copyright Directive, particularly Article 17, have generated significant controversy. Platforms such as Wikimedia and Reddit have claimed that the new requirements will make "all platforms hosting user-generated content . . . legally responsible for users uploading copyrighted content . . . leading to the creation of filters that will likely be error-prone and abused by copyright trolls."[337] Supporters of Article 17, such as the Independent Music Companies Association, PRS for Music, and other rightsholder groups, have stated that the provision will rebalance the online creative platforms and create a "fair and functioning market for creative works of all kinds on the Internet."[338] Additionally, reports indicate that challenges with the national transposition of the Directive, including potential errors in certain translations, have appeared.[339] The European Commission has organized a stakeholder dialogue to discuss best practices to ensure the cooperation between content-sharing service provider s and rightsholders for Article 17, and to identify the necessary actions that content-sharing service providers need to take in implementing the provision.[340] Implementation of the Directive continues at the national level.

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[335] DSM Copyright Directive, art. 17(4).

[336] DSM Copyright Directive, recital 66, art. 17(8).

[337] James Vincent, *European Wikipedias have been Turned Off for the Day to Protest Dangerous Copyright Laws*, THE VERGE (Mar. 21, 2019, 6:30 AM), https://www.theverge.com/2019/3/21/18275462/eu-copyright-directive-protest-wikipedia-twitch-pornhub-final-vote. *See also* Tr. at 301:16–18 (Apr. 8, 2019) (Matthew Schruers, CCIA) ("This is a source of business investment deterrents and potential risk to free speech and consumer expression interests."); Tr. at 311:11–13 (Apr. 8, 2019) (Abby Volmer, GitHub) ("[W]hether or not the . . . Directive actually says the word 'filtering,' the reality is the requirements are going to incentivize a lot of platforms to filter.").

[338] Daniel Sanchez, *Critics Decry "A Dark Day for Internet Freedom" as European Parliament Approves the Copyright Directive*, DIGITAL MUSIC NEWS (Mar. 26, 2019), https://www.digitalmusicnews.com/2019/03/26/copyright-directive-approved/ (quoting Robert Ashcroft, Chief Executive of PRS for Music, "This is about creating a fair and functioning market for creative works of all kinds on the Internet."); *see also Copyright: Say No to Scaremongering and Yes to Creators Getting Paid*, INDEP. MUSIC COS. ASS'N (June 28, 2018), https://impalamusic.org/content/copyright-say-no-scaremongering-and-yes-creators-getting-paid.

[339] *See* Eleonora Rosati, *DSM Directive Series #5: Does the DSM Directive Mean the Same Thing in all Language Versions? The Case of "Best Efforts" in Article 17(4)(a)*, THE IPKAT (May 22, 2019), http://ipkitten.blogspot.com/2019/05/dsm-directive-series-5-does-dsm.html; *see also* Paul Keller, *A Better Way to Implement Article 17? New German Proposal to Avoid Overblocking*, COMMUNIA (Apr. 15, 2020), https://www.communia-association.org/2020/04/15/better-way-implement-article-17-new-german-proposal-avoid-overblocking/.

[340] *Stakeholder Dialogue on the Application of Article 17 of Directive on Copyright in the Digital Single Market*, EUR. COMM. (Feb. 10, 2020), https://ec.europa.eu/digital-single-market/en/stakeholder-dialogue-application-article-17-directive-copyright-digital-single-market.

V. HIGH-LEVEL FINDINGS AND GUIDING PRINCIPLES

A. Guiding Principles for the Study

Perhaps more so than any recent study it has undertaken, the Copyright Office's Section 512 Study has benefited from an extensive public record: the Office held five days of public roundtables in three cities, featuring over 150 participants; over 92,000 comments were received across three separate rounds of public comments; and literal volumes have been written by academics, think tanks, interest groups, and others on the topics under consideration. The proper balance of intermediary safe harbors and liability online is a topic on which few stakeholders have no opinion, and passions (as well as rhetoric) run high on all sides.

One thing that has become abundantly clear is that no potential solution(s) will please everybody. Despite this fact, the Copyright Office has taken seriously Congress' request to evaluate the present-day effectiveness of section 512 in a fair, neutral manner and provide a set of recommendations for ways to improve the system while continuing to secure the benefits of these powerful technologies for creators, OSPs, and users. In weighing the implications of the contrasting world-views displayed by participants on various sides of the issue, it became necessary for the Office to outline a set of guideposts to follow in conducting its review and making its recommendations.

1. Copyright Protection Online Must be Meaningful and Effective

The framers of the Constitution recognized the importance of providing limited protections for writings and discoveries to "promote the Progress of Science and useful Arts,"[341] and Congress has repeatedly reaffirmed this importance by adopting various iterations of the copyright laws over the years.[342] The resulting U.S. copyright framework provides "a balanced set of protections and exceptions to facilitate the country's economic and cultural growth."[343] This balance underpins the development not only of an extremely rich and diverse cultural heritage, but also the economic viability of the creative and technology sectors.

For the law's protections to be meaningful, however, copyright owners must have a mechanism for vindication of their rights when their works are infringed. In passing section 512 and the broader DMCA, Congress recognized that the internet posed a unique challenge to copyright owners' ability to protect their rights and sought to build a mechanism for the efficient

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[341] U.S. CONST., art. 1, § 8, cl. 8.

[342] Copyright Act of 1976, Pub. L. No. 94-553, 90 Stat. 2541 (1976); Copyright Act of 1909, Pub. L. No. 60-349, 35 Stat. 1075 (1909); Copyright Act of 1831, 4 Stat. 436 (1831); Copyright Act of 1790, 1 Stat. 124 (1790).

[343] *Legislative Branch Appropriations for 2020 (Part 2): Hearing Before the Subcomm. on Legislative Branch of the H. Comm. on Appropriations*, 116th Cong. 262 (2019) (written statement of Karyn Temple, Acting Register of Copyrights) *reproduced at* Statement of Karyn Temple, Acting Register of Copyrights, Before the Subcomm. on the Legislative Branch of the Comm. on the Appropriations at 1 (Feb. 13, 2019), https://www.copyright.gov/about/budget/2020/house-budget-testimony-fy20.pdf.

and effective removal of infringing content online.[344] As Congress acknowledged, such a mechanism would have the dual benefit of not only ensuring the continued economic health of the cultural industries, but also the growth and development of the then new intermediary sector, enabling legitimate services to profit from developing new ways to meet customers' demands for access to legitimate content.[345]

A system that fails to provide adequate protection of creators' rights in the online ecosystem thus not only fails in upholding the congressional intent behind section 512, but also undermines the animating purpose behind the copyright laws. For this reason, the entirety of the answer to the problem of piracy on the internet cannot be, as some have implied, simply developing more legitimate services to distribute content.[346] While an increase in legitimate services and distribution channels does have an important role to play, such distribution channels will not long be able to operate in an environment where easy, widespread access to "free" infringing content is the norm.[347]

2. OSPs Operating in Good Faith Must be Afforded Legal Certainty and Leeway to Innovate

In order to fully respect the original congressional intent behind section 512, we cannot simply stop at ensuring effective copyright protections in the online environment. The other half of the bargain that Congress struck in 1998 was the creation of legal certainty and leeway to innovate for emerging OSPs in order to "foster the continued development of electronic commerce and the growth of the Internet."[348] A vibrant and innovative technology sector offers benefits for many parts of society: for the technology companies and their shareholders, who

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[344] H.R. REP. NO. 105-551, pt. 2, at 25 (1998) ("[T]he Committee also recognizes that the digital environment poses a unique threat to the rights of copyright owners, and as such, necessitates protection against devices that undermine copyright interests. In contrast to the analog experience, digital technology enables pirates to reproduce and distribute perfect copies of works—at virtually no cost at all to pirate. As technology advances, so must our laws.").

[345] H.R. REP. NO. 105-551, pt. 2, at 23 (1998) ("The debate on this legislation highlighted two important priorities: promoting the continued growth and development of electronic commerce; and protecting intellectual property rights. These goals are mutually supportive. A thriving electronic marketplace provides new and powerful ways for the creators of intellectual property to make their works available to legitimate consumers in the digital environment. And a plentiful supply of intellectual property—whether in the form of software, music, movies, literature, or other works—drives the demand for a more flexible and efficient electronic marketplace.").

[346] *See, e.g.*, Tr. at 49:15–18 (May 12, 2016) (Corynne McSherry, EFF); Tr. at 98:9–14 (May 3, 2016) (Michael Petricone, CTA).

[347] The Office is aware that a debate exists within the literature as to whether the availability of legitimate content services is the chicken or the egg with respect to declining piracy rates. *Compare* Brett Danaher et al., *The Effect of Piracy Website Blocking on Consumer Behavior* at 5 (Aug. 13, 2019) (unpublished article), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2612063 (positing that website blocking enforcement activities drove an increased usage of legal subscription sites) *with* João Pedro Quintais & Joost Poort, *The Decline of Online Piracy: How Markets—Not Enforcement—Drive Down Copyright Infringement*, 34 AM. U. INT'L L. REV. 807, 811 (2019) (positing that the increasing availability of legitimate distribution services is the primary driver of a decrease in piracy).

[348] H.R. REP. NO. 105-551, pt. 2, at 21 (1998).

receive the economic benefit of their investment in innovation; for the general public, which now has, in the words of one comic panel, access to the "entire contents of Library of Congress on your cell phone";[349] and for the creative industry and authors, who now have additional outlets to provide access to, and earn money from, their creative works.[350]

3. Congress Intended to Incentivize Cooperation Between OSPs and Rightsholders, but Cooperation Cannot be the Only Answer

One of the key features of the notice-and-takedown system devised by Congress was an attempt to provide "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."[351] Congress envisioned a system where content owners and ISPs would continue to work together to develop new technologies and best practices for addressing infringement on the internet, rather than creating a static system that locked in place the anti-piracy toolkit of the 1990s.[352] As a number of Study participants note, the ideal approach to addressing the limitations of the current notice-and-takedown system would be the development of new approaches pursuant to this same type of broad-based, multi-stakeholder consensus.[353]

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[349] Dan Piraro, BIZARRO (Aug. 9, 2006).

[350] Tr. at 152:12–15 (May 2, 2016) (Rebecca Prince, Becky Boop) ("Now, I create video content on YouTube, which is one of the few platforms where you get AdSense revenue specifically for your content and mostly within the first few days of publishing your content."); Tr. at 290:17–21 (May 12, 2016) (Cathy Gellis, Digital Age Defense) ("We're not in 1998 anymore. We are now deep into the 21st century where the internet and various platforms on the internet are major venues where information and knowledge is exchanged and how people interrelate with each other."). In fact, 2019 revenues from streaming music accounted for nearly eighty percent of the total U.S. music industry revenues, which saw double-digit growth overall for the fourth straight year. *See* RIAA, YEAR-END 2019 RIAA MUSIC REVENUES REPORT at 1 (Feb. 2020), https://www.riaa.com/wp-content/uploads/2020/02/RIAA-2019-Year-End-Music-Industry-Revenue-Report.pdf.

[351] H.R. REP. NO. 105-796, at 72 (1998) (Conf. Rep.).

[352] *See, e.g.*, 17 U.S.C. § 512(i)(2). Of course, as multiple study participants point out, Congress' vision of broad, open, cross-industry standards-setting for the creation of standard technical measures has not come to pass. *See e.g.*, Authors Guild Initial Comments at 27 ("[T]he statute foresaw an environment of cooperation and collaboration between copyright holders and service providers [with the development of standard technical measures]. But, as we have seen in many areas of section 512, its implementation has not played out as intended."); c3 Initial Comments at 36 ("The fact that hosting platforms are reaping huge profits from the sale of ads placed on infringing works while insulated from liability for such activities by safe harbor protections has provided a strong financial disincentive for these service providers to participate in the 'open, fair, voluntary, multi-industry standards process' called for in section DMCA 512(i)(2)(A)."); Tr. at 12:7–11 (April 8, 2019) (Ken Hatfield, American Federation of Musicians Local 802) ("Over 20 years after President Clinton . . . signed the DMCA, neither the active cooperation between the platforms and the creators nor the standard technical measures envisioned by Congress have materialized."); Tr. at 68:18–23 (May 3, 2016) (Lisa Willmer, Getty Images) ("[A]s much as we've heard about the value of Content ID, there is not Content ID for images, and that's not because the technology doesn't exist; because Google has chosen not to implement it. So it's clear that leaving it to voluntary action is not enough.").

[353] *See* Tr. at 226:19–227:5 (May 13, 2016) (Joseph Gratz, Durie Tangri LLP) ("And I think one of the things that may need to happen is the first set of voluntary agreements may need to be about how you study the question . . . and what the measure, how to measure it and how to interpret those results. I think those are things on which reasonable people can

As with copyright policymaking in general, internet policy created without the input and buy-in of important stakeholders is unlikely to be successful and is more likely to suffer from unforeseen and unintended consequences. Particularly in an area with so many different stakeholders with widely divergent social, economic, and technological interests at stake, any changes imposed without sufficient consultation risk upending markets that represent significant portions of the U.S. economy. While difficult, such consensus-building is most likely to result in sensible, workable public policy.

While consensus-based fixes would be the ideal approach to improving the U.S. notice-and-takedown system, it has become clear that this is one instance where the perfect should not become the enemy of the good. Throughout the Study, the Office heard from participants that Congress' intent to have multi-stakeholder consensus drive improvements to the system has not been borne out in practice.[354] By way of example, more than twenty years after passage of the DMCA, although some individual OSPs have deployed DMCA+ systems that are primarily open to larger content owners, not a single technology has been designated a "standard technical measure" under section 512(i).[355] While numerous potential reasons were cited for this failure—from a lack of incentives for ISPs to participate in standards setting[356] to the inappropriateness of one-size-fits-all technologies[357]—the end result is that few widely-available tools have been created and consistently implemented across the internet ecosystem. Similarly, while various

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differ. But I think they are things on which reasonable people are likely ultimately to reach consensus or at least to reach multiple consensuses that can all be reported out."); Tr. at 134:20–135:1 (May 13, 2016) (Fred von Lohmann, Google) ("And so, we were able to make a lot of progress by working together on the ad network side on figuring out what was working, what challenges we face and what was working."). *See also infra* section VI.B.2.

[354] *See* Tr. at 127:14–128:1 (May 3, 2016) (Kerry Sheehan, PK) ("I think historically, we haven't seen significant public interest participation in these agreements . . . . But I think it's pretty clear on the language that Congress included in the statute that the standard technical measures need to be developed pursuant to a broad consensus in an open, fair, voluntary and multi-industry standards process."); Tr. at 87:11–15 (May 3, 2016) (Victoria Sheckler, RIAA) ("The DMCA standard technical measures doesn't say it's one-size-fits-all. It doesn't say that there can't be flexibility. It does say people need to come together in a multi-stakeholder process to come up with those. And they're not coming to the table.").

[355] DMCA+ systems allow rightsholders to identify and potentially remove infringing content without going through the notice-and-takedown process. Examples include YouTube's Content ID and Facebook's Rights Manager, both of which are monetization systems.

[356] *See* Tr. at 126:2–12 (May 3, 2016) (Thomas Kennedy, American Society of Media Photographers ("ASMP") ("My concern is basically that there are organizations that absolutely need to be talking with individual creator groups in order to facilitate solutions and yet those conversations are not happening, primarily, because I don't think . . . there are either sufficient incentives or a willingness to really engage in the conversations. And until and unless that's acknowledged and addressed, I'm not sure that voluntary measures can really totally satisfy the needs of the different creator communities."); Tr. at 20:9–11 (May 13, 2016) (Keith Kupferschmid, Copyright Alliance) ("I think there's no incentive for the OSP community to sort of come to the table under that specific provision."); Tr. at 116:6–8 (May 3, 2016) (Victoria Sheckler, RIAA) (describing what accounts for successful voluntary initiatives as "building trust[,] having skin in the game, having a regular line of communication are the main points").

[357] *See* Tr. at 34:24–35:2 (May 3, 2016) (Michael Petricone, CTA) ("[I]t is not a one size fits all solution. It costs YouTube tens of millions of dollars and takes hundred [sic] of lawyers, which is obviously out of reach for a small start-up.").

voluntary initiatives have been undertaken by different market participants to address the volume of true piracy within the system, these initiatives, although initially promising, likewise have suffered from various shortcomings, from limited participation to ultimate ineffectiveness.[358]

Thus, while the Office continues to encourage stakeholders to work together and come up with solutions and voluntary initiatives to address current and future limitations of the notice-and-takedown system, in this Report the Office has not limited itself to recommendations that are the subject of existing industry consensus. It is clear that any changes to the system are likely to encounter opposition from one or several groups of stakeholders. The Office has, however, endeavored to limit any such recommendations to those we have concluded would have the greatest impact on restoring the balance Congress sought to achieve with passage of section 512.

Importantly, it is worth noting that the Office has limited itself to consideration of improvements of the existing notice-and-takedown system. Without clear political guidance from Congress to the contrary, the Office does not view its role as reconfiguring the entire copyright liability regime relating to infringing material online, but instead to make recommendations on how to best improve the existing system put in place by Congress. The choice to redefine the existing balance or establish a new balance lies within the purview of Congress.[359]

4. To the Extent Possible, Government Decision-Making Should be Based on Evidence

Internet policy tends to spark heated rhetoric.[360] While this is unsurprising for a topic that touches so many and has such far-reaching economic implications, there is relatively little available evidence upon which to craft governance decisions. For this reason, the Copyright Office has, throughout the Study, sought to separate the qualitative and quantitative evidence from the rhetoric on all sides of the issue. The Office recognizes that any changes to (or even a decision not to make any changes to) the current section 512 system will have far-reaching

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[358] *See infra* section VI.B.2.

[359] The Office is mindful that questions of the proper scope of intermediary liability online, and the broader role of the larger platforms in society, are the subject of ongoing debate in Congress and elsewhere. *Compare* Press Release, Sen. Ted Cruz, Sen. Cruz Calls on USTR to Eliminate Inclusion of Special Protections for Big Tech in U.S. Trade Deals (Nov. 1, 2019), https://www.cruz.senate.gov/?p=press_release&id=4743, *with* Emily Stewart, *Ron Wyden Wrote the Law that Built the Internet. He Still Stands By it—and Everything It's Brought With It*, VOX: RECODE (May 16, 2019), https://www.vox.com/recode/2019/5/16/18626779/ron-wyden-section-230-facebook-regulations-neutrality.

[360] For every assertion that the internet will be killed by net neutrality, one can find an assertion that the internet is destroying the music industry, or journalism, or even democracy itself. *See, e.g.*, JAMIE BARTLETT, THE PEOPLE VS. TECH: HOW THE INTERNET IS KILLING DEMOCRACY (AND HOW WE SAVE IT) (2018); Gray Reed & McGraw, P.C., *Will Net Neutrality Kill the Internet 3.0?*, J.D. SUPRA (Feb. 26, 2015), https://www.jdsupra.com/legalnews/will-net-neutrality-kill-the-internet-3-55812/; Ian Morris, *Technology is Destroying the Music Industry, Which is Great for the Next Taylor Swift*, FORBES (Nov. 17, 2014), https://www.forbes.com/sites/ianmorris/2014/11/17/technology-is-destroying-the-music-industry-which-is-great-for-the-next-taylor-swift/; J.M. Porup, *The Printing Press Created Journalism. The Internet Will Destroy It*, MEDIUM (Mar. 28, 2014), https://medium.com/@toholdaquill/the-printing-press-created-journalism-the-internet-will-destroy-it-9cafc89b40e3.

implications, and there are serious policy and economic concerns underlying the positions of all parties.[361]

The facts—of how the internet has evolved, of how participants in the notice-and-takedown system experience section 512 today, and of how courts have interpreted it—are what the Office looked to gather in the Study in order to inform our recommendations. Towards this end, the Office sought, as part of its Second Notice, "empirical research on any of the topics discussed in this Notice, or other topics that are likely to provide useful data to assess and/or improve the operation of section 512."[362] In response, the Office received nine empirical studies. Responses received by the Office covered:

- an updated report on the "Notice and Takedown in Everyday Practice" study;[363]
- an analysis of Automattic Inc.'s transparency reports from 2015–2016 documenting notices of claimed infringement that it receives;[364]
- a report that examines the functionality and limitations of filtering technologies;[365]
- a notice-and-takedown evaluation survey conducted by the National Music Publishers' Association that consisted of 64 member music publisher participants;[366]

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[361] *See* Adam Holland & Christopher T. Bavitz, Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015, Notice of Inquiry at 3 (Apr. 1, 2016) ("Berkman Cyberlaw Clinic Initial Comments") ("As Internet scholars John Palfrey and Jonathan Zittrain noted in an article in *Science* magazine, decisions regarding Internet regulation have particularly far-reaching implications given such decisions' 'profound societal impact' and connections to 'economics, free expression and privacy.'") (quoting John Palfrey & Jonathan Zittrain, *Better Data for a Better Internet*, SCIENCE, Dec. 2, 2011, at 1210–11, http://science.sciencemag.org/content/334/6060/1210.full).

[362] Section 512 Study: Request for Additional Comments, 81 Fed. Reg. 78,636, 78,642 (Nov. 8, 2016).

[363] Jennifer Urban et al., "Notice and Takedown in Everyday Practice, Updated March, 2017," Empirical Study Submitted in Response to U.S. Copyright Office's Nov. 8, 2016, Notice of Inquiry (Mar. 22, 2017) ("Urban et al. Empirical Study").

[364] Automattic Inc., "Comments of Automattic Inc.," Empirical Study Submitted in Response to U.S. Copyright Office's Nov. 8, 2016, Notice of Inquiry (Mar. 22, 2017).

[365] Evan Engstrom & Nick Feamster, "The Limits of Filtering: A Look at the Functionality & Shortcomings of Content Detection Tools," Empirical Study Submitted in Response to U.S. Copyright Office's Nov. 8, 2016, Notice of Inquiry (Mar. 22, 2017).

[366] NMPA, "Empirical Research Submission of The National Music Publishers' Association," Empirical Study Submitted in Response to U.S. Copyright Office's Nov. 8, 2016, Notice of Inquiry (Mar. 22, 2017).

- a notice-and-takedown survey focused on unlicensed uses of copyrighted sound recordings conducted by American Association of Independent Music and Future of Music Coalition that consisted of 73 independent record label participants;[367]
- a notice-and-takedown survey conducted by the Copyright Alliance that consisted of 1,362 small creator participants;[368]
- a notice-and-takedown survey conducted by the Digital Media Licensing Association with over 1,200 creator responses;[369]
- a study examining the chilling effect of DMCA notices that request takedown of legal material conducted by Jon Penney and that consisted of 1,212 internet user participants;[370] and
- a critique of the "Notice and Takedown in Everyday Practice" study.[371]

While each of these responses provided some useful context for the Study, taken as a whole and looked at in conjunction with other publicly available reports,[372] they illustrate a key obstacle facing policy makers looking to create evidence-based policy with respect to the notice-and-takedown regime. Namely, one of the key features of the system—the privatized, extra-judicial nature of takedown notices and counter-notices under section 512—has resulted in much of the information about how the system is being utilized in practice being inaccessible to researchers and policy makers alike. Although some individual participants in the system have sought to provide greater transparency by making certain datasets—such as the Lumen database—publicly available, any insights that emerge from a review of such datasets are by

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[367] A2IM & FMC, "Joint Supplemental Comments of the American Association of Independent Music and Future of Music Coalition in Response to Request for Empirical Research," Empirical Study Submitted in Response to U.S. Copyright Office's Nov. 8, 2016, Notice of Inquiry (Mar. 22, 2017).

[368] Copyright Alliance, "512 Study—Empirical Research," Empirical Study Submitted in Response to U.S. Copyright Office's Nov. 8, 2016, Notice of Inquiry (Mar. 22, 2017).

[369] Digital Media Licensing Association ("DMLA"), "DMLA Empirical Research Study for Section 512 Study," Empirical Study Submitted in Response to U.S. Copyright Office's Nov. 8, 2016, Notice of Inquiry (Mar. 21, 2017) ("DMLA Empirical Study").

[370] Jon Penney, "Comments of Jon Penney," Empirical Study Submitted in Response to U.S. Copyright Office's Nov. 8, 2016, Notice of Inquiry (Mar. 22, 2017).

[371] George S. Ford, "Notice and Takedown in Everyday Practice: A Review," Empirical Study Submitted in Response to U.S. Copyright Office's Nov. 8, 2016, Notice of Inquiry (Mar. 22, 2017).

[372] *See* Michael Masnick & Leigh Beadon, THE SKY IS RISING, 2019 EDITION: A DETAILED LOOK AT THE STATE OF THE ENTERTAINMENT INDUSTRY (2019), https://skyisrising.com/TheSkyIsRising2019.pdf (finding that the internet has not decreased content creation or the size of any aspect of the creative industry); ORG. FOR ECON. CO-OPERATION & DEV., *Chapter 5: Copyright in the Digital Era: Country Studies*, *in* ENQUIRIES INTO INTELLECTUAL PROPERTY'S ECONOMIC IMPACT 209 (2015), https://www.oecd.org/sti/ieconomy/KBC2-IP.Final.pdf.

definition representative of only a subset of the transactions involving some of the larger OSPs in the ecosystem.[373]

For this reason, it has been difficult to quantify the extent to which many of the concerns expressed about the current U.S. notice-and-takedown system by various participants in the Study represent significant limitations in need of remedy. While increased transparency by all participants in the notice-and-takedown system could thus hold the promise of improving internet policymaking, in the absence of readily verifiable evidence on how the system is currently working, the Office's recommendations are based upon the limited publicly-available information it has been able to gather as part of the Study process. Where possible, we note those conclusions (or lack of conclusions) that could benefit from further study and fact-gathering.

5. Internet Policy in the 21st Century Cannot be One-Size-Fits-All

While participants in the Study disagree about many topics related to the notice-and-takedown system, one point of agreement has become apparent: to be effective, any changes to the current system must take into account differences within and among stakeholder classes.[374] An expectation that all OSPs develop and deploy expensive, Content ID-like systems would simply be overkill for what the Urban study terms "DMCA Classic" OSPs that receive a small volume of takedown notices, while making it economically difficult for any new players to enter the market.[375] Likewise, an approach to online infringement that requires all content owners to have enforcement teams on retainer is guaranteed to leave many small, individual creators

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[373] For example, while Google sends copies of many of the DMCA notices it receives to the Lumen database, actions taken by content owners against infringing content on YouTube utilizing the Content ID system do not appear to be included in these reports. *See* Urban et al. Empirical Study at 49.

[374] Tr. at 141:20–142:2 (April 8, 2019) (Caleb Donaldson, Google) ("Even putting aside [section] 512(a) providers, the number of different kinds of [section] 512(c) platforms and the different resources available to them dictates that repeat infringer policies will be, will have some variation."); Tr. at 147:18–21 (April 8, 2019) (Keith Kupferschmid, Copyright Alliance) ("One size fits all for the DMCA doesn't work for the notice system either, for the little guy, the small businesses, the individual creators. It just—it just doesn't work."); Tr. at 371:15–19 (April 8, 2019) (Lui Simpson, AAP); Tr. at 156:4–6 (May 13, 2016) (Dave Green, Microsoft) ("So not only does one size not fit all for ISPs, one size does not fit all for the various rightsholder constituencies."); Tr. at 147:8–13 (May 13, 2016) (Dean Marks, MPAA).

[375] *See* Tr. at 74:9–13 (May 12, 2016) (Alex Feerst, Medium) (discussing "DMCA Classic" OSPs); Tr. at 107:9–18 (May 2, 2016) (Brianna Schofield, University of California-Berkeley School of Law). The Office recognizes that the availability of third-party services like Audible Magic, which offer digital fingerprinting solutions as a service for OSPs, could help obviate the need for new entrants to develop their own in-house equivalent of Content ID. The Office notes, however, that digital fingerprinting technology is not equally advanced across all media types, and further would question the economic advisability of requiring even the smallest OSP to engage such services. *See* Kernochan Center for Law, Media and the Arts Columbia Law School, Additional Comments Submitted in Response to U.S. Copyright Office's Nov. 8, 2016, Notice of Inquiry at 8 (Feb. 21, 2017) ("Kernochan Additional Comments") (discussing the prospect of "automated fair use"); Tr. at 35:17–37:4 (May 3, 2016) (Eugene Mopsik, American Photographic Artists ("APA")) (discussing machine recognition of licensed images).

without an effective mechanism for vindicating their rights.[376] Similarly, any system premised on the assumption of good faith cooperation cannot fully address bad faith actors like true pirate sites or sites designed to perpetuate the whack-a-mole problem through the use of Pez linking.[377] Such activities need to be recognized—by parties and the courts—as simply outside the purview of the notice-and-takedown system, necessitating different enforcement mechanisms.

B. The Notice-and-Takedown System as Experienced by Parties Today is Unbalanced

With the enactment of the DMCA, Congress sought to "balance[] the interests of content owners, on-line and other service providers, and information users in a way that [would] foster the continued development of electronic commerce and the growth of the Internet."[378] To achieve that balance, Congress believed it was essential to afford OSPs "greater certainty . . . concerning their legal exposure"[379] and to provide copyright owners with "reasonable assurance that they [would] be protected against massive piracy" online.[380] Section 512 was designed to advance both of those goals by providing "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."[381]

The structure of the notice-and-takedown system reflects this desire for cooperation. Section 512 encourages copyright owners to notify OSPs of allegedly infringing material as described in section 512(c)(3). By doing so, copyright owners can obtain the benefit of having the material removed expeditiously without the time or cost of resorting to litigation.[382] As the legislative history explains, "copyright owners are not obligated to give notification of claimed infringement in order to enforce their rights," but they have incentive to do so because "neither actual knowledge nor awareness of a red flag may be imputed to a service provider based on information from a copyright owner or its agent that does not comply with the notification provisions of subsection [512](c)(3)."[383] Similarly, OSPs have the incentive to act expeditiously to remove or disable access to the material upon receiving a notice from the copyright owner in

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[376] *See, e.g.*, Tr. at 55:13–56:17 (May 12, 2016) (Brian McNelis, Lakeshore Records); Tr. at 26:22–27: 11 (May 2, 2016) (Alisa Coleman, ABKCO Music & Records); Tr. at 128:2–5 (May 2, 2016) (Damon DiMarco, author).

[377] *See Capitol Records, LLC v. Escape Media Grp., Inc.*, No. 12-CV-6646, 2015 WL 1402049, at *8 (S.D.N.Y. Mar. 25, 2015) ("*Escape Media Grp.*") ("[T]he system acts as a technological Pez dispenser: Each time a Primary File for a song is removed due to a DMCA takedown notice, a Non-Primary File is slotted in to take its place, with the process continuing until there are no remaining Non-Primary Files for that particular song, and there is nothing to keep the Non–Primary Files from replenishing."); *see also* A2IM Music Community Initial Comments at 10–11.

[378] H.R. REP. NO. 105-551, pt. 2, at 21 (1998).

[379] H.R. REP. NO. 105-551, pt. 2, at 49–50 (1998).

[380] S. REP. NO. 105-190, at 8 (1998).

[381] H.R. REP. NO. 105-551, pt. 2, at 49 (1998).

[382] *See supra* section II.C.4.

[383] S. REP. NO. 105-190, at 45 (1998).

order to qualify for section 512's limitation on liability.[384] While an OSP "is free to refuse to 'take down' the material or site, even after receiving a notification of claimed infringement from the copyright owner," it would then forfeit the benefit of the safe harbor if found liable for infringement.[385] Thus, Congress envisioned the notice-and-takedown system as "a formalization and refinement of a cooperative process that ha[d] been employed to deal efficiently with network-based copyright infringement."[386]

Despite Congress' intentions, the record in the Study reveals a stark division of opinion between rightsholders and OSPs over how effectively section 512 balances their respective interests in practice. Representatives of these groups reported strikingly different experiences with the notice-and-takedown process and offered widely divergent perspectives on its benefits and burdens.

1. Many OSPs Report that Section 512 is a Success Story

OSPs and other stakeholders in the technology industries generally express the view that section 512 has succeeded in achieving Congress' goals as described above. They argue that the cooperation and balance of interests fostered by the statute have facilitated the development of an innovative, diverse technological sector and the widespread dissemination of creative works through legitimate channels witnessed over the past two decades.[387] Several commenters highlight the rapid advancement of online services and digital products that have transformed the economy and the technological landscape[388]—developments that they attribute in large part to

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[384] *See supra* section II.C.4.

[385] S. REP. NO. 105-190, at 45 (1998).

[386] S. REP. NO. 105-190, at 45 (1998); *see also Veoh IV*, 718 F.3d at 1021 (stating that "Congress enacted [the DMCA] to foster cooperation among copyright holders and service providers in dealing with infringement on the Internet"); *UMG Recordings, Inc. v. Veoh Networks, Inc.*, 620 F. Supp. 2d 1081, 1089 (C.D. Cal. 2008) ("*Veoh I*") ("Section 512(c) codifies the 'notice and takedown' procedure Congress instituted so that the service providers and copyright holders could cooperate to protect copyrights."). *Cf. Capitol Records, Inc. v. MP3tunes, LLC*, 821 F. Supp. 2d 627, 636 (S.D.N.Y. 2011) ("The DMCA seeks to balance the interests of copyright owners and online service providers by promoting cooperation, minimizing copyright infringement, and providing a higher degree of certainty to service providers on the question of copyright infringement.").

[387] *See* Amazon Initial Comments at 3 (Apr. 1, 2016) ("This careful balancing among stakeholders' interests has proven to be a durable, and workable framework that has facilitated the unprecedented dissemination and availability of creative works, increased innovation and content creation, and dramatic economic growth."); Re:Create, Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015, Notice of Inquiry at 2 (Apr. 1, 2016) ("Re:Create Initial Comments") ("Section 512 of the DMCA has provided the foundation for the success of the Internet and is a cornerstone of the overall U.S. economy. Today the Internet enables over $8 trillion in e-commerce each year and in 2014, was responsible for 6% of real GDP in the US . . . . Its growth has benefited both creators and consumers, who have made it their preferred platform for the distribution and consumption of media . . . . More people are creating more things on more mediums than ever before.").

[388] *See, e.g.*, Copia Institute Initial Comments at 3–4 ("In these nearly twenty years we have seen countless businesses and jobs be added to the economy, innumerable examples of pioneering technology be innovated, myriad new markets previously unimaginable be created (including many for those in the arts and sciences to economically exploit), and enormous value returned to the economy."); CTIA Initial Comments at 5 ("While the growth of internet generally has

the ability of companies to build internet-based businesses without facing uncertain exposure to secondary liability.[389] In the words of one advocacy organization, "[o]nline platforms ranging from YouTube, to Facebook, to Tumblr, to Twitter, to Wikipedia, to innumerable subject matter specific discussion forums, have arisen thanks to the legal certainties provided by Section 512."[390] These stakeholders emphasize that this type of innovation is exactly what Congress sought to achieve in adopting the safe harbor framework.[391]

Many of these commenters further argue that the growth of the technological sector supported by section 512 has benefited both consumers and creators. They observe that consumers can now choose among numerous authorized platforms to stream music and video,

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been staggering, the explosion of *wireless* internet services, such as those provided by CTIA's members, has been particularly noteworthy. Growing from the initial digital networks deployed in the early 1990s (with 500,000 digital subscribers in 1995), the U.S. wireless industry now serves more than 355 million active digital devices."); IFTA Initial Comments at 3 ("Technology and Internet bandwidth have increased exponentially since [1998] with the rise of decentralized file sharing systems becoming a common online activity, along with the ability for Internet users to immediately stream programming.").

[389] *See* Application Developers Alliance, Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015, Notice of Inquiry at 4 (Mar. 30, 2016) ("Application Developers Alliance Initial Comments") ("The creative and Internet industries are thriving, notwithstanding extraordinary challenges and fears associated with piracy risk, content filtering and policing, and building administrative, legal, and technological infrastructure to manage notice-and-takedown processes. Netflix, Pandora, Etsy, and Amazon are only a few examples of creative and technology visionaries collaborating to create new business models, new opportunity, and new revenue that supports more creativity, more creators, and more consumers."); CTA, Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015, Notice of Inquiry at 2 (Apr. 1, 2016) ("CTA Initial Comments") ("In evaluating the impact of Section 512, it should be remembered that Section 512 has sheltered the birth or remaking of now-mainstream businesses such as Amazon, eBay, Kodak, and YouTube."); Facebook Initial Comments at 3 ("While many factors surely have played a part in Facebook's growth over the years, the predictability afforded by section 512's limitations on liability have provided important assurance that Facebook could expand its business around user-generated content so long as it complied with section 512. The same appears to have held true for the many other U.S. online service providers that have thrived since the enactment of section 512."); Verizon Communications, Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015, Notice of Inquiry at 6 (Apr. 1, 2016) ("Verizon Initial Comments") ("The overwhelming success of the DMCA and its safe harbor provisions in promoting the growth of the Internet cannot be seriously disputed . . . . Now, the Internet is widespread, by any conceivable measure. This is due in large part to a virtuous cycle of investment—as more American individuals and businesses became connected to and reliant upon the Internet, companies like Verizon invest in larger, faster, and more capable Internet infrastructure and services, both wired and wireless.").

[390] PK Initial Comments at 2.

[391] *See* Amazon Initial Comments at 3 ("In 1998, Congress understood that the Copyright Act needed to be updated to apply that balanced framework to online activity, without impairing the extraordinary innovation and economic development of commercial Internet services. This resulted in the adoption of the Digital Millennium Copyright Act."); Application Developers Alliance Initial Comments at 1–2 ("The entire app industry benefits greatly by today's interconnected and interdependent [section] 512 system because the shared burdens of the [section] 512 system manifest a nearly perfect balance between content-owner protection, technological innovation, and business model transformation that Congress envisioned when it created the system nearly 20 years ago."); CTIA Initial Comments at 1 ("The section 512 safe harbors have been successful in achieving the purpose that Congress intended of ensuring that copyright claims did not stifle the growth of the internet and innovative technology.").

facilitating access to a vast number of legitimate content offerings.[392] They note that these platforms have allowed creators to distribute their works to new audiences and markets around the world more easily, offering additional revenue streams to copyright owners.[393] Moreover, these commenters argue, such benefits are not limited to large content producers: platforms such as YouTube, Flickr, Instagram, and SoundCloud have allowed creators of all sizes and means to interact with consumers directly and build a following that can enable them to make a living from their creative endeavors.[394] As the Internet Association observes, "[t]he Internet offers lower barriers to entry for smaller and independent artists to access larger, more diverse sets of consumers. This in turn has fueled a virtuous cycle of expressive and creative works, and it has democratized access and reach at scale."[395] Other stakeholders argue that, in addition to facilitating lawful dissemination, the technological innovation spurred by section 512 has aided the creation of works by providing authors with a variety of new tools to produce creative content.[396]

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[392] *See* Digital Media Association ("DiMA"), Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015, Notice of Inquiry at 3 (Apr. 1, 2016) ("DiMA Initial Comments") ("[C]onsumers now have the ability to purchase music from their favorite online music store, tune in to Internet radio or subscribe to an on-demand music streaming service to satisfy their individual listening habits."); United States Telecom Association ("USTelecom"), Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015, Notice of Inquiry at 3 (Apr. 1, 2016) ("USTelecom Initial Comments") ("Consumers today have an increasing number of options from which they can legally access the audio and video content of their choosing.").

[393] *See* CCIA Initial Comments at 5–6 (Mar. 31, 2016) ("Section 512 has dramatically increased the ease by which content creators can reach new audiences and markets. The economy-transforming platforms made possible by Section 512 have created extensive new markets for creators that would not have existed otherwise. From software app stores to short- and long-form video platforms, to self-publishing ebook marketplaces, numerous platforms utilizing Section 512 have disintermediated gatekeepers and dramatically lowered barriers to entry in the content creation sector.").

[394] *See* EFF Initial Comments at 4 ("Thanks to the safe harbors, new services and businesses have emerged, from YouTube to eBay, Etsy and so on, which in turn have become platforms for individuals and small businesses to reach customers. Artists—from musicians to filmmakers to comedians—can reach fans directly, and many have become wealthy in the process."); Pinterest Initial Comments at 1 ("The DMCA safe harbor has played a vital role in enabling Pinterest to grow from a nascent technology into a platform that over 100 million people use to discover new ideas and inspiration. Pinterest also creates value for businesses and publishers, connecting them with a set of engaged and passionate users looking to make their ideas a reality, which in turn leads to more traffic to their websites, distribution of their content, ad revenue, and retail sales. Without Section 512, this ecosystem might never have existed.").

[395] Internet Association Initial Comments at 10. *See also* Mozilla, Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015, Notice of Inquiry at 2–3 (Apr. 1, 2016) ("Mozilla Initial Comments") ("Section 512's liability limitations . . . . have permitted the growth of online services which, in turn, have become conduits for the marketing and licensing of copyrighted works to far more people than might have had access to them if such services had not existed. They have brought into existence a market for smaller and amateur content creators who are able to easily generate revenue from their content for the first time.").

[396] *See* Amazon Initial Comments at 4–5 ("The U.S. copyright regime has in large part enabled the innovative development of distribution models beyond distributing fixed format media . . . . Digitization has also promoted growth in content creation . . . . A significant part of this growth was driven by the proliferation of lawful online services."); Internet Association Initial Comments at 10 ("Section 512 benefits creators and right holders by . . . providing unprecedented ways for content creation and consumption, which is particularly beneficial for small and independent creators.").

With respect to the system's allocation of burdens, OSPs generally describe the balance as equitable, though several do discuss the costs they face in responding to large volumes of takedown notices submitted by rightsholders.[397] Other stakeholders point to the problem of abusive or otherwise invalid notices targeting non-infringing content.[398] One commenter states that abusive takedown notices generate "real cost[s] [for the OSP] . . . and divert[] resources from more productive uses."[399] These concerns will be discussed in detail in later sections of this Report.

Overall, however, this group of stakeholders characterize the current framework as providing the "optimal balancing of responsibilities for addressing online infringement."[400] Amazon argues that "[b]y establishing a system of shared responsibility for preventing or addressing infringing activity, [section 512] strikes the right balance for rightsholders and service providers alike."[401] Similarly, Microsoft remarks that "[w]hile the online ecosystem has undergone significant changes since enactment of the DMCA, Section 512 has demonstrated its flexibility and capability at addressing the scale of these concerns" by balancing "the roles, responsibilities, liabilities and immunities of all impacted stakeholders."[402]

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[397] *See* BSA Initial Comments at 2 ("BSA members invest significant resources into developing state of the art systems for processing high volumes of takedown notices.").

[398] *See* Re:Create Initial Comments at 3 ("Unfortunately, there is growing abuse and mistakes by copyright holders, who are sending notices of infringement in many cases where the use is not a copyright infringement or is a clear fair use. In many cases, the notices are being sent for reasons other than copyright infringement. This includes anti-competitive purposes, to harass a platform or consumer, or to try and chill speech that the rightsholder does not like."); USTelecom Initial Comments at 4 ("[T]he sending of millions of invalid notices, purportedly under Section 512(c) but relating to ISPs provision of conduit services under [section] 512(a), is disruptive to the proper functioning of the Internet ecosphere."); Tr. at 158:12–19 (May 12, 2016) (Joseph Gratz, Durie Tangri LLP) (noting that "about 10 percent of the valid takedown notices" sent to Automattic are directed at "clear fair uses, clearly uncopyrightable content or containing clear material misreprsentations"); Tr. at 65:17–21 (May 2, 2016) (Patrick Flaherty, Verizon) ("Our biggest concern relates to just the over-volume of conduit invalid notices that we receive related to peer-to-peer file sharing and the many millions and millions and millions we receive from companies like Rights[c]orp.").

[399] Automattic Inc., Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015, Notice of Inquiry at 2 (Mar. 31, 2016) ("Automattic Initial Comments") ("For example, we spend significant effort reviewing and trying to weed out overbroad and abusive DMCA takedown notices, so that our users' speech isn't needlessly censored. This is a real cost to us, and diverts resources from more productive uses, like improving the products and services we offer our customers.").

[400] Facebook Initial Comments at 12.

[401] Amazon Initial Comments at 4.

[402] Microsoft Initial Comments at 12–13.

2. Creators and Rightsowners Report that Section 512 Currently Fails to Protect them from Online Infringement

While OSPs generally declare section 512 a success story, rightsholders report that it has largely failed to protect them from online infringement as promised by Congress.[403] In their view, when Congress created the safe harbor framework, it "did not anticipate certain aspects of the current Internet ecosystem that have evolved to facilitate the proliferation of large-scale infringement."[404] They note that, while technological advancements have created easier, faster, and more diverse ways to share authorized content, the same technologies have enabled piracy to grow to a level far beyond what could have been contemplated in 1998.[405]

Copyright owners from a range of creative industry sectors offer evidence indicating that online piracy remains pervasive despite section 512. The MPAA cites a 2013 study that found that "432 million unique users worldwide explicitly sought infringing content during one month alone."[406] MPAA also cites 2015 data showing that cyberlockers and websites, well known to be sources of infringing content, receive millions of unique visitors per month.[407] In the publishing

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[403] *See, e.g.*, Copyright Alliance Initial Comments at 2 ("Eighteen years have now passed since the DMCA was enacted, and the interconnectivity provided by the Internet has fundamentally changed commerce, communication, and the way the public experiences copyrighted works. Consumers can access and enjoy all sorts of copyrighted works where and when they want, and creators benefit from new platforms that reach new audiences. But at the same time, online infringement is now rampant, causing widespread harm to the economic and creative vibrancy of the copyright community."); Council of Music Creators, Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015, Notice of Inquiry at 1 ("Council of Music Creators Initial Comments") ([T]he intent of Congress in enacting the DMCA was to strike a balance between protecting composers, songwriters, producers, and performers on the one hand, and shielding business interests from unreasonable liability for copyright infringement on the other. Unfortunately, that is not how it has worked out in practice.").

[404] AAP Initial Comments at 26; Songwriters of North America ("SONA"), Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015, Notice of Inquiry at 2 (Apr. 1, 2016) ("SONA Initial Comments") ("The Safe Harbor Provisions were enacted because Congress was concerned about the liability imposed on ISPs from the infringing activities of third parties on their services. Congress never anticipated the creation of online services which were created solely or primarily for the distribution of infringing content.").

[405] S*ee* c3 Initial Comments at 7–8 ("These circumstances led Congress to underestimate how rapidly the internet would spread; how dramatically access speeds would increase and the costs of electronic storage would decrease; how difficult it would be for copyright owners to monitor for infringement; how easy it would become to earn revenue from advertising (which is often served to websites by third-party providers), as opposed to subscription or use-based fees; how often technologies would be designed to exploit legal loopholes; and how much money could be earned from inducing or turning a blind eye to infringement."); DGA Initial Comments at 5 ("The authors of the DMCA could not have foreseen the magnitude of today's search engines and the sophisticated means that copyright infringers have at their disposal to distribute and profit from copyrighted materials.").

[406] MPAA Initial Comments at 11 (citing DAVID PRICE, NETNAMES, SIZING THE PIRACY UNIVERSE 3 (2013), *reposted at* ILLUSION OF MORE, https://illusionofmore.com/wp-content/uploads/2013/09/NetNames-Sizing_Piracy_Universe-Report-2.5.pdf); *see also* IFTA Initial Comments at 3 (reporting that in 2009 there were 5.4 billion instances of pirated content online with that number increasing to more than 14 billion in 2010).

[407] MPAA Initial Comments at 11 (citing MPAA, Comments to USTR in Response to Request for Public Comment on the 2015 Special 301 Out of Cycle Review of Notorious Markets, Docket No. USTR-2015-0016 (Oct. 5, 2015),

context, the Authors Guild reports that "[f]rom 2009 to 2013, the number of Internet piracy alerts we received increased over 300%. In the next year alone, from 2013 to 2014, that number doubled."[408] Similarly, a group of twenty organizations representing rightsholder interests in the music industry state that "since 2012, RIAA alone has noticed over 175 million infringements of music."[409]

Other copyright owners point to the substantial numbers of takedown requests received by Google as evidence that section 512 has done little to stem the volume of online infringement. For example, at least two commenters cite data from Google's Transparency Report[410] indicating that the company received more than 80 million notices in February 2016 alone.[411] Rightsholders state that the exponential growth in the volume of notifications is not "an indication that the system is working as intended"; rather, "if infringing content continues to be rampant despite the volume of notifications being sent, this can only indicate that the system is not working."[412] The Association of American Publishers ("AAP") maintains that "an increase in the volume does not speak to the *effectiveness* of the notice-and-takedown process," given evidence that "the very same infringing content is easily and quickly re-uploaded to the same site after removals pursuant to previous notifications."[413]

Rightsholders report that this rise in piracy has led to significant declines in revenue.[414] Several note that they must devote extensive financial resources to combatting online

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https://www.regulations.gov/contentStreamer?documentId=USTR-2015-0016-0007&attachmentNumber=1&contentType=pdf).

[408] Authors Guild Initial Comments at 2.

[409] A2IM Music Community Initial Comments at 14.

[410] *Content Delistings Due to Copyright*, GOOGLE: TRANSPARENCY REPORT, http://www.google.com/transparencyreport/removals/copyright/.

[411] *See* FMC Initial Comments at 3; Getty Initial Comments at 3; *see also* DotMusic, Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015, Notice of Inquiry at 2 (Apr. 1, 2016) ("DotMusic Initial Comments") ("During the week of February 29, 2016 there were 21,064,571 URL takedown requests for copyright infringement removal (i.e. 125,384 takedowns per hour).").

[412] AAP Initial Comments at 6.

[413] AAP Initial Comments at 6–7; *see also* FarePlay, Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015, Notice of Inquiry at 1 (Apr. 1, 2016) ("FarePlay Initial Comments") ("One need look no further than the hundreds of millions of legitimate takedown notifications filed each year that are rendered useless by a loophole in Section 512, that allows offenders to simply repost the same work, indefinitely.").

[414] *See* c3 Initial Comments at 16 ("Despite music being more popular than ever today, music industry revenues have been nearly flat since 2010, and are less than half what they were in 2000 (adjusted for inflation)."); MPAA Initial Comments at 12 ("The widespread availability of infringing content online for free undercuts the distribution of such content through legitimate channels, making it difficult for content owners to recover the substantial cost of creating creative content or generating money to invest in the creation of new content or content delivery systems."); Music Managers, Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015, Notice of Inquiry at 2 (Apr. 1, 2016) ("Music Managers Initial Comments") ("Already, thousands of artists, songwriters, musicians, and others in the music industry are no longer able to make an adequate living while remaining fully committed to their creative work.

infringement.[415] For example, Universal Music Group ("UMG") states that it has had to "shift significant resources that could otherwise be used to invest in the creation of new content (including the discovery and development of artists) toward the protection of existing content."[416] Commenters argue that these losses tend to fall most heavily on producers of smaller-budget works. One independent filmmaker at the roundtable expressed frustration in seeing her film uploaded on torrent sites before it was even released.[417] And, according to the Copyright Alliance, this same filmmaker "made only about $100 off of her latest feature film, because free illegal copies of the work are so widely available on the Internet."[418] Other commenters note additional economic consequences of piracy, including job losses, diminished investment in legitimate distribution models, and higher prices for consumers.[419]

Most copyright owners contend that section 512 does not provide an effective means of stemming this infringing activity, citing several reasons. First, commenters note the substantial burdens and inefficiencies resulting from the need to generate and send massive numbers of takedown notices to OSPs. MPAA, for example, notes that "[i]n calendar year 2015, [its] members sent notices with respect to more than 104.2 million infringing URLs."[420] The Copyright Alliance describes the number of takedown notices as "staggering, and . . . steadily increasing," as stakeholders are "grappling with tens of millions of notices a year."[421] Sony Music reports that its

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Many have quit making music altogether."); Recording Artists & Songwriters, Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015 Notice of Inquiry at 2 (Apr. 1, 2016) ("Recording Artists & Songwriters Initial Comments") ("Music consumption has skyrocketed, but the monies generated by individual writers and artists for that consumption has plummeted.").

[415] *See* Authors Guild Initial Comments at 6 ("Piracy makes authors spend more time policing, and thus less time writing or exploiting their works. And the prevalence of free and low-cost online books forecloses authors from legitimate licensing markets."); MPAA Initial Comments at 2 ("Copyright owners spend millions of dollars annually combatting online piracy. This siphons resources away from investments in new content and new forms of distribution and delivery."); Tr. at 15:7–10 (May 2, 2016) (Lisa Hammer, independent film director).

[416] UMG Initial Comments at 13.

[417] Tr. at 15:14–16:16 (May 2, 2016) (Lisa Hammer, independent film director).

[418] Copyright Alliance Initial Comments at 2.

[419] *See* DGA Initial Comments at 4 ("Given this importance of downstream revenue to financial success, if there is a decrease in this revenue (a decrease significantly spurred on by online theft), financiers will be more reluctant to invest in new work, and the result will be less work and fewer jobs. This is not a prediction for the future; this is the reality of today."); ITIF Initial Comments at 3 ("Widespread piracy has a negative economic impact, seriously harming the artists who create content and the technicians who produce it. Piracy limits the ability of content producers to create legitimate business models for selling digital content. It hurts U.S. competitiveness as the U.S. economy has a competitive advantage in content industries. And it hurts law-abiding consumers who must pay higher prices for content (or have access to less content or lower-quality content in the marketplace) to compensate for the costs of piracy.").

[420] MPAA Initial Comments at 2; *see also* Tr. at 39:12 (May 2, 2016) (David Kaplan, Warner Brothers Entertainment Inc.) ("Last year, we sent about 25 million [notices].").

[421] Copyright Alliance Initial Comments at 4, 6.

recordings were the subject of over 5.7 million takedown notices in 2015.[422] Similarly, the Songwriters of North America ("SONA") cites a 2013 report indicating that copyright holders were sending takedown notices every month "for over 6.5 million infringing files, which were available on more than 30,000 websites."[423]

These stakeholders note that sending such a large number of notices imposes significant time and financial costs on the authors and artists, which smaller entities often cannot afford.[424] Even Warner Music Group ("WMG"), a large entity, estimates that "it would take at least 20-30 people, at a fully-loaded cost in excess of $2 million per year, and probably the use of an outside content monitoring contractor at additional expense, to meaningfully affect (but not entirely block) just WMG's top 25 album releases on YouTube."[425] With the significant volume of notices,[426] many content owners note the need to rely on automation of the notice-and-takedown process to accommodate this volume.[427] However, one commenter points out that this approach is not appropriate or available for every rightsholder.[428]

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[422] Sony Initial Comments at 1–2 (noting that the notices were sent "pursuant to 17 U.S.C. § 512 . . . or pursuant to substantially similar instructions required by various digital services").

[423] SONA Initial Comments at 3.

[424] *See, e.g.*, Artists Rights Society ("ARS"), Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015, Notice of Inquiry at 3 (Mar. 31, 2016) ("ARS Initial Comments") (pointing out that notices are "time-consuming and costly hurdles," and stating that "ARS . . . has spent time resubmitting notices and explaining to websites why they are obliged to take down the infringing uses at issues to qualify for a safe harbor"); AAP Initial Comments at 7 ("The notification process requires significant investments by the rights holder. For large publishing houses, an online monitoring service is usually employed to carry out the function of scouring the Internet for materials that infringe its copyrights. Unfortunately, most publishers in the U.S. are small businesses or non-profits for whom the costs of such programs are beyond their financial reach."); c3 Initial Comments at 4; FMC Initial Comments at 3 ("[S]maller rightsholders . . . lack the financial and human resources to respond to infringement at this scale and volume."); Tr. at 17:10–22 (May 2, 2016) (Natalie Madaj, NMPA).

[425] WMG Initial Comments at 8.

[426] It is unclear whether the counter-notification process and put-back procedures add to the volume, time, or effort exercised by stakeholders to address online infringement. *Compare* MPAA Initial Comments at 29 ("The number of counter-notifications sent is extremely small in absolute terms and particularly when compared with the number of takedown notices sent."), *with* Sony Additional Comments at 22 ("Given service providers' poor and unbalanced messaging about counter-notices, and an abundance of online resources to help users get their infringing uploads reinstated, [Sony's] investigators see a very large number of improper put-backs."), *and* WMG Initial Comments at 5 ("First WMG's efforts [to remove all WMG recordings from YouTube] were thwarted by user requests to put back blocked videos.").

[427] *See* Getty Initial Comments at 4–5; MPAA Initial Comments at 16–17. But many stakeholders claim a significant error rate in the automated notices. *See* Library Copyright Alliance ("LCA"), Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015 Notice of Inquiry at 9 (Apr. 1, 2016) ("LCA Initial Comments"); Jonathan Bailey, Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015 Notice of Inquiry at 2 (Feb. 16, 2016).

[428] *See* AAP Initial Comments at 7 ("[T]he average smaller publishing house [with limited resources] . . . [is] without the automation afforded through online monitoring services" and thus "infringing activity often goes unaddressed.").

These inefficiencies are compounded, rightsholders argue, by what is often referred to as the "whack-a-mole" problem. As discussed herein, courts have interpreted section 512 to require specific and individualized information from notice senders.[429] Recent court decisions, moreover, have interpreted the OSP's lack of duty to monitor under section 512(m) in a manner that effectively limits the usefulness or applicability of the representative list provision.[430] As a result, the copyright holder may succeed in having the infringing content removed from a website, only to have it reposted almost immediately on the same site by a different or even the same user, requiring the rightsholder to start the process over again.[431] Commenters argue that this scenario eviscerates the notice-and-takedown process's effectiveness,[432] contending that the millions of takedown notices sent by copyright owners have seemingly "had little impact toward reducing the volume of infringing material available."[433]

Second, copyright owners argue that section 512 incentivizes the growth of business models that profit from the dissemination of infringing content. Specifically, they contend that section 512 facilitates piracy sites hosting unauthorized user-uploaded content, as the safe harbor means that the OSPs have little incentive to negotiate licenses with rightsholders.[434] AAP argues that the business models of certain sites, developed in response to section 512, "invite users to continually upload infringing works that attract traffic to the site and provide opportunities for

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[429] *See, e.g.*, *Perfect 10, Inc. v. Giganews, Inc.*, 993 F. Supp. 2d 1192, 1198–1202 (C.D. Cal. 2014), *aff'd*, 847 F.3d 657 (9th Cir. 2017); *Capitol Records, Inc. v. MP3tunes, LLC*, 821 F. Supp. 2d 627, 643 (S.D.N.Y. 2011), *rev'd in part on other grounds Capitol Records, Inc. v. MP3tunes, LLC*, No. 07 Civ. 9931, 2013 WL 1987225, at *10 (S.D.N.Y. May 14, 2013); *Arista Records LLC v. Myxer Inc.*, No. CV 08-03935, 2011 WL 11660773, at *23 (C.D. Cal. Apr. 1, 2011) ("Nonetheless, the burden is born by the copyright owner, and that burden requires the owner to provide sufficiently detailed information to the service provider to identify the infringed work.").

[430] *See infra* section VI.A.2.b.

[431] *House Section 512 Hearing*, 113th Cong. 3 (statement of Rep. Jerrold Nadler, Ranking Member).

[432] *See* A2IM Music Community Initial Comments at 4–5 ("[T]he DMCA makes it my responsibility to police the entire Internet on a daily basis. As fast as I take my music down, it reappears again on the same site—an endless whack-a-mole game.") (quoting Maria Schneider); Authors Guild Initial Comments at 2 ("Unless an author's pirated book is published by one of the few publishers that have the means to actively address piracy, the only recourse an author has is to send fruitless DMCA notices in a never-ending game of Whac-a-Mole. This is hardly a good use of an author's or anyone's resources.").

[433] AAP Initial Comments at 6; Tr. at 54:11–15 (May 2, 2016) (Victoria Sheckler, RIAA) ("We have sent over 175 million notices in the past three years to a variety of entities that claim DMCA status, or DMCA safe harbor status. And yet, we continue to see our members' works show up again and again and again on these sites.").

[434] *See* Authors Guild Initial Comments at 2 ("Not only have the section 512 safe harbors been ineffective at curtailing Internet piracy; they have also incentivized the growth of numerous businesses designed to distribute a continuous flow of infringing books, music, and films. The safe harbors are allowing service providers who traffic in pirated content to evade financial liability while simultaneously profiting from widespread copyright infringement of creative works of authorship."); c3 Initial Comments at 11 ("In the transformed Internet environment of today, as online speeds have dramatically increased while the cost of storage space has dramatically decreased, the DMCA's failure to scale has rendered it increasingly obsolete and futile from an enforcement standpoint. Large, sophisticated entertainment-oriented websites have developed, and they premise their business models on being shielded from responsibility by the safe harbors.").

the operators to earn revenue through the sale of advertising or subscriptions relating to the presence of such content."[435] Sony Music Entertainment argues that "Section 512 effectively grants . . . a constructive royalty-free license, under which companies can confidently profit from the massive copyright infringement occurring on their platforms without any fear of liability. The process of relying on users to acquire popular copyrighted content without authorization is so reliable that seeking a license from Sony for the exploitation of Sony Recordings is unnecessary."[436]

Third, rightsholders contend that hosting services utilizing *licensed* content also derive an unfair competitive advantage from section 512, fostering a "value gap" where online content sharing platforms obtain value from enabling their users to share copyright content, without guaranteeing that the rightsholders receive their share of the value from their content. They argue that such services have undue bargaining power in negotiating licensing fees with copyright owners because the copyrighted material will be uploaded by users regardless of whether the rightsholders agree to license it. As WMG explained:

> Section 512 has an economic dampening effect on many (if not all) of WMG's digital license negotiations. In some cases, that is because WMG's counterparties that do not rely on Section 512 are constrained in the price they can pay because of the need to compete with services that rely on Section 512 . . . . In other cases, WMG finds itself in an unfair negotiating situation, because services that rely on Section 512 clearly expect that royalty rates must be discounted because of the possibility of that service's relying on Section 512 for its content acquisition as an alternative to a license. In both of these ways, Section 512 distorts the marketplace for digital music streaming services, and creates a "value gap" between the income generated by the services from the use of music and the revenues that are being returned to record companies, music publishers, recording artists and songwriters.[437]

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[435] AAP Initial Comments at 3; *see also* ARS Initial Comments at 2 ("Regretfully, ARS' ability to protect both the exclusive rights of its members and to provide users with the assurance that their uses of works will be lawful has been severely challenged by the immunity provisions of section 512 which allow willful copyright infringers to exploit works of art repeatedly, for commercial purposes, while hiding behind internet service providers."); T Bone Burnett et al., Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015, Notice of Inquiry at 2 (Apr. 1, 2016) ("T Bone Burnett Initial Comments") ("The DMCA leaves creators at the mercy of rogue websites that operate at the farthest reaches of US law—and beyond—and offers no meaningful way to hold repeat offenders to account. And forces us to stand by helpless as billions of dollars in advertising is sold around illegal copies of our work."); Getty Initial Comments at 2 ("There is no incentive for cooperation. The safe harbors are instead used by service providers as a shield and an excuse for doing nothing to detect or prevent copyright infringement.").

[436] Sony Initial Comments at 4.

[437] WMG Initial Comments at 9–10; *see also* A2IM Music Community Initial Comments at 9 ("Here, unfair competition comes in two forms: completely unlicensed services; and services that negotiate 'in the shadow of the law' to obtain below market rates."); FMC Initial Comments at 13 ("[T]o the extent that safe harbors currently result in the widespread availability of unlicensed copies of creative works, this dynamic can create new imperatives to license entire catalogs under one-size-fits-all terms."); Schneider Initial Comments at 2 ("[C]ompanies like YouTube have taken

3. This Disconnect is Evidence that the Current System is not Working Consistently for all Stakeholders

The sharp divergence in the assessments of section 512 by OSPs and copyright owners indicates that the statute in practice is not achieving the balance Congress originally intended. While this divided opinion by itself is not conclusive, the fact that one of the two principal groups whose interests Congress sought to balance is virtually uniform in its dissatisfaction with the current system suggests that at least some of the statute's objectives are not being met. More acutely, smaller creators and OSPs have voiced in Study comments and roundtable participation increasing frustration not only with the notice-and-takedown framework not meeting their needs to protect their works or to serve their customers but also the absence of any satisfactory opportunities to shape policies and practices that fuel the process. This evidence seems especially relevant given that the notice-and-takedown system was premised on the idea that copyright owners and OSPs would find cooperation mutually beneficial.

As stated in the previous section, a system that fails to provide adequate protection of creators' rights of all sizes ultimately fails to carry out congressional intent regarding section 512 as well as the overall purpose of copyright law. Any recalibration of this balance, however, should acknowledge the continuing need for cooperation and compromise among the various stakeholders. No system, however devised, will be able to prevent false positives or completely end digital piracy. While consensus-based fixes may be the ideal but not the most realistic approach to address this balance, cooperation and compromise among all stakeholders, large and small creators, OSPs, and users, would ensure that everyone has a role and responsibility in addressing online infringement in a manner suitable to their objectives and resources. This cooperation should occur at all steps of the notice-and-takedown process. Furthermore, due to the evolving challenges related to online infringement, any method going forward to effectively address this issue depends upon accurate and precise data shared through these cooperative channels.[438]

VI. SPECIFIC FINDINGS AND RECOMMENDATIONS

A. Evaluation of the Existing Section 512 Statutory Scheme

More than twenty years have passed since Congress enacted section 512, and, as the chairman of the Senate Judiciary Committee's Intellectual Property Subcommittee recently noted,

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advantage of the provisions of section 512 to generate billions of dollars of revenue, directly on the backs of copyright owners."); UMG Initial Comments at 12 ("In negotiations with copyright owners, YouTube (like other online music services) is able to point to the vast quantity of unlicensed music that remains available for free online—and which copyright owners have been powerless to stop given the application of the DMCA—as justification for ever-lower compensation rates to copyright owners.").

[438] *See* section V.A.4. (discussion on the need for better facts on which to frame internet policy).

"the wear and tear is showing."[439] Indeed, the effect of societal and technological change on section 512 has long been evident. With the Study's guiding principles in mind, the Office has formulated several recommendations for legislative action, with some offering greater potential improvements for the functioning of the section 512 system than others. In crafting these recommendations, the Office hewed closely to Congress' stated intentions in drafting section 512. Hence, these recommendations are based on the Office's evaluation of how well the balance that Congress sought to strike with section 512 has been maintained in practice, as shown through an evaluation of how each building block of the existing section 512 statutory scheme is currently functioning. This included looking at developments related to how OSPs qualify for the section 512 safe harbors, various aspects of the notice-and-takedown process itself, and related provisions of section 512.

Over the decades, the shift in the balance of the benefits and obligations for copyright owners and OSPs under section 512 has resulted in an increasing burden on rightsholders to adequately monitor and enforce their rights online, while providing enhanced protections for OSPs in circumstances beyond those originally anticipated by Congress. The shift can be explained by the confluence of different factors. As discussed above, there have been significant changes to the technical landscape since the DMCA passed that have increased the potential economic impact of online infringements. These changes have been compounded by developments with respect to judicial interpretations of existing provisions. Much of the story of how section 512 works today is a story of how relatively broad provisions have been interpreted and applied in a manner that broadens the protections for some stakeholders, while narrowing the benefits of the system for others.

As discussed further below, the scope and coverage of the safe harbors have expanded in a way that may not be in accordance with congressional intent, while the provisions intended to relieve some of the administrative burden of the notice-and-takedown process on copyright owners have been interpreted narrowly. In this section, we look at the existing provisions of section 512 and how they have been interpreted by the courts, in order to determine how well they are (or are not) working. Later sections will look at approaches to the problem of online copyright infringement that go beyond legislative changes to section 512.

1. Qualification for the Section 512 Safe Harbors

In crafting section 512, Congress enumerated four broadly-worded safe harbors tied to specific types of online activities, in order to enable the system to adapt to future technological developments. It is undisputed, however, that by electing to enumerate certain activities that benefit from the safe harbors, Congress determined that not all online activities were intended to

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[439] Sen. Thom Tillis, *Getting Back to Basics on the Digital Millennium Copyright Act*, THE HILL (Dec. 17, 2019, 2:30 PM), https://thehill.com/blogs/congress-blog/technology/474918-getting-back-to-basics-on-the-digital-millennium-copyright-act.

fall within the purview of section 512.[440] Instead, as drafted, section 512 creates safe harbors for four different types of online activities, and imposes conditions and obligations that OSPs must meet in order to invoke the protections of these safe harbors. There are two obligations that all OSPs must meet to be eligible for safe harbor protections;[441] the remaining limitations and obligations depend upon the type of online activity in which the OSP is engaged.[442]

Thus, to determine that an OSP is entitled to the benefit of a section 512 safe harbor, a court must conclude that: (1) the OSP meets the definition of "service provider" set forth in section 512(k) and the potentially-infringing activity falls within one of the four enumerated safe harbors in sections 512(a)–(d); (2) the OSP complies with all applicable obligations, such as the adoption and reasonable implementation of a repeat infringer policy and the accommodation of standard technical measures; and (3) with respect to OSPs engaged in hosting and providing online information location tools, the knowledge and financial benefit limitations set forth in sections 512(c)(1) and (d)(1) do not apply.[443] As discussed further in this section, while courts have expansively read the enumerated safe harbors, they have interpreted the obligations and

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[440] *Compare* S. REP. NO. 105-190, at 19 (1998) ("[T]he Committee decided . . . to create a series of 'safe harbors' for *certain* common activities of service providers.") (emphasis added), *with* 47 U.S.C. § 230 (providing a broader definition of "interactive computer service," combined with a complete shield against liability except for certain types of claims).

[441] These two obligations are: (i) they must adopt, reasonably implement, and inform subscribers and account holders of a repeat infringer policy and (ii) they must accommodate and not interfere with standard technical measures. *See* 17 U.S.C. § 512(i)(1).

[442] OSPs engaged in system caching activities must: (i) register a DMCA agent with the U.S. Copyright Office and (ii) follow the limited notice-and-takedown process set forth in section 512(b)(2)(E). *See* 17 U.S.C. § 512(b). OSPs engaged in either hosting activities or providing online information location tools must also register a DMCA agent with the U.S. Copyright Office and follow the notice-and-takedown process set forth in in section 512(c)(3). *See* 17 U.S.C. §§ 512(c), (d). However, there is an additional limitation on application of the section 512(c) and (d) safe harbors—the OSP must not: (i) have actual knowledge of the infringement (the "actual knowledge" standard), (ii) be aware of facts or circumstances from which infringing activity is apparent (the "red flag knowledge" standard), or (iii) receive a financial benefit directly attributable to the infringing activity while also having the right and ability to control the infringing activity (the "financial benefit/right and ability to control" standard). *See* 17 U.S.C. §§ 512(c)(1), (d)(1).

[443] Very few courts actually address which party has the burden of proof with respect to the safe harbors, often requiring rightsholders to "prove" whether an OSP qualifies for the safe harbor. The safe harbors are affirmative defenses, for which the initial burden of proof would typically fall on OSPs. *See Fung*, 710 F.3d at 1039; *ALS Scan, Inc. v. RemarQ Cmtys., Inc.*, 239 F.3d 619, 625 (4th Cir. 2001); *cf. Disney Enters., Inc. v. Hotfile Corp.*, No. 11-20427-CIV, 2013 WL 6336286, at *19 (S.D. Fla. Sept. 20, 2013) (noting that "[a]lthough an affirmative defense, the DMCA has often been construed in favor of service providers, requiring relatively little effort by their operations to maintain immunity"). Some courts have found the burden of proof to be split between the OSP and rightsholder, requiring the OSP to prove that it (1) meets the definition of "service provider" in section 512(k) and the potentially-infringing activity falls within one of the four enumerated safe harbors in sections 512(a)–(d), and (2) complies with all applicable obligations, while rightsholders bear the burden of proof with respect to (3) whether the limitations set forth in sections 512(c)(1) and (d)(1) apply. *See, e.g.*, *Perfect 10, Inc. v. CCBill LLC*, 488 F.3d 1102, 1114 (9th Cir. 2007), *cert. denied*, 552 U.S. 1062 (2007) (citing *Napster*, 239 F.3d at 1013 n.2); *Capitol Records, LLC v. Vimeo, LLC*, 826 F.3d 78, 94–95 (2d Cir. 2016). Notably, the Ninth Circuit in *CCBill* cites a passage from *Napster* (discussing the burden of proof for proving direct infringement) for the proposition that plaintiffs have the burden of proof with respect to section 512's knowledge requirements. Some courts likewise appear to require plaintiffs to bear the burden of proof with certain eligibility exclusions like section 512(i). *See infra* n.568.

limitations in (2) and (3) quite narrowly, resulting in broader application of the safe harbors than Congress likely anticipated.

a) Eligible Categories of OSPs

Over the past twenty years, the courts have broadly applied the four categories of safe harbors under section 512,[444] covering OSPs engaged in a wide range of activities, such as providing a marketplace for the sale of hard goods, modification by the OSP of user-uploaded content, and financial services offered by payment processers.[445] Today, section 512 is regularly interpreted by the courts to cover many technologies that Congress could not have envisioned when it enacted the DMCA. In part, this has been due to the substantial evolution of digital technology since 1998. As new online services and technologies have developed, courts have been asked to determine whether such new services and technologies meet the threshold requirements for section 512's safe harbors. At times, activities that lie outside the four corners of the text have been found to be sufficiently "related" or ancillary to one or more of the core section 512 activities to enjoy the protections of the safe harbors.[446]

During the public roundtables and in public comments submitted for the Study, stakeholders did not fundamentally disagree with the proposition that courts have interpreted the four safe harbor categories broadly—they disagree instead over whether courts should have. Rightsholders generally express concern that the safe harbors have been construed beyond congressional intent.[447] With respect to application of the section 512(a) safe harbor, some rightsholders' comments reflect a feeling that courts have interpreted it over broadly,[448] though others assert that the statutory definition was too broad in the first place.[449] On section 512(b),

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[444] As discussed below, while courts have found as an initial matter that one or more of the four safe harbors applies to a particular type of conduct, courts have sometimes relied on other provisions of section 512 to exclude a particular OSP from the protections of the safe harbors.

[445] *See Viacom Int'l, Inc. v. YouTube, Inc.*, 676 F.3d 19, 38–39 (2d Cir. 2012) (finding that video hosting site that reproduced, transcoded, played back, and displayed content related to user-uploaded material met the qualifications for the section 512(c) safe harbor); *CCBill*, 488 F.3d at 1116 (remanding to the district court the question of whether a payment processor qualified for the section 512(a) safe harbor); *Corbis Corp. v. Amazon.com, Inc.*, 351 F. Supp. 2d 1090, 1110 (W.D. Wash. 2004) (finding that Amazon's zShops third party vendor platform and associated payment processing activities met all of the requirements of the section 512(c) safe harbor). *Cf. In re Aimster Copyright Litig.*, 334 F.3d 643, 655 (7th Cir. 2003) (finding that a P2P file-sharing service qualifies as a "service provider" under section 512(k), though it does not qualify for protection under any of the safe harbors).

[446] *See Viacom*, 676 F.3d at 39–40.

[447] *See* Tr. at 347:13–22 (May 12, 2016) (Elizabeth Valentina, Fox Entertainment Group); *see also* UMG Initial Comments at 9–10 ("The courts have also construed the activities covered by the Section 512 safe harbors beyond what is appropriate.").

[448] *See* MPAA Initial Comments at 7 (stating that "courts have erroneously expanded the scope of what constitutes 'intermediate and transient storage' for purposes of section 512(a)").

[449] *See* AAP Initial Comments at 2–3 (stating that the section 512 safe harbors are overbroad because the section 512(k)(1)(B) definition is overbroad).

only a few rightsholders offer input on how courts have defined the system caching safe harbor, though the MPAA claimes that one court "ignored . . . critical limitations" in the statute by holding that "intermediate" or "temporary" can be 20 days.[450] Rightsholders are more universally critical of the section 512(c) safe harbor for storage and hosting services, saying that courts have stretched it far beyond the storage function of such services to "all the functions that they provide,"[451] including streaming and downloading, and that courts have incorrectly deemed eligible storage services that modify user content or use algorithms to recommend content to other users.[452] Rightsholders, as well as OSPs and users, generally have little to say about how courts have construed the entities covered by section 512(d).[453]

OSPs, on the other hand, say that courts have been correct to broadly interpret eligibility for the safe harbors. Moreover, many technology companies credited this broad application of the safe harbors with nurturing the amazing growth of the internet and undergirding the United States' position as the global leader in the internet's continued development.[454] Their comments were less focused on the individual safe harbors and more generally praising of how the overall system of safe harbors has worked. The one safe harbor that many OSPs do, in fact, focus on is the safe harbor for hosting and storage. OSPs argue that courts have correctly interpreted the scope of section 512(c) to include related activities, such as "photo and video hosting, image search, real estate listings, and virtual marketplaces."[455] Moreover, they state that such interpretations reflect section 512's adaptability to new technologies, which "has also fostered the development of many of today's most successful cutting-edge online services, including social networking, instant messaging, and live video streaming."[456]

i. Section 512(c) Safe Harbor

The biggest source of conflict between stakeholders on the scope of the safe harbors is whether courts' application of the section 512(c) safe harbor for "storage at the direction of a user of material that resides on a system or network controlled or operated by or for the service provider"[457] has swept in services that go beyond serving up content "at the direction of a user."

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[450] MPAA Initial Comments at 7–8. *See also* A2IM Music Community Initial Comments at 7 n.23 (claiming that the court in *Field v. Google* "expand[ed] the safe harbor[] beyond the four corners of the statute").

[451] Tr. at 347:13–22 (May 12, 2016) (Elizabeth Valentina, Fox Entertainment Group). *See also* UMG Initial Comments at 9–10.

[452] *See, e.g.*, c3 Initial Comments at 12–14; MPAA Initial Comments at 6–7.

[453] *But see* Google Initial Comments at 5 (specifically mentioning search engines in stating that courts have gotten the categories correct).

[454] *See* USTelecom Initial Comments at 4 ("The safe harbor provisions contained in the DMCA have clearly played an important role in helping to create a legal environment through which the Internet's growth has flourished.").

[455] CCIA Initial Comments at 4.

[456] Google Initial Comments at 5.

[457] 17 U.S.C. § 512(c)(1).

Courts have held that section 512(c) includes video-hosting sites that make copies of videos in different encoding schemes (transcoding), deliver videos to a user's browser cache at the user's request (playback), use algorithms to identify and display related videos, and syndicate content to a third party;[458] online storage lockers that are used to display or disseminate copyright-protected content;[459] and e-commerce sites that provide a platform for users to market and sell their products.[460]

Courts have reasoned that these services qualify for the section 512(c) safe harbor because their activities are "related" to the activity of storing user-uploaded content. For example, in *Viacom International, Inc. v. YouTube, Inc.*, owners of copyrighted videos sued YouTube for operating a website that allowed users to upload videos, alleging direct and secondary copyright infringements.[461] YouTube sought protection under section 512(c), claiming that three challenged software functions—transcoding, playback, and related videos—were offered "by reason of the storage" and thus were entitled to the safe harbor.[462] The Second Circuit agreed.[463] The Second Circuit reasoned that transcoding and playback were automated functions, and that "to exclude these automated functions from the safe harbor would eviscerate the protection afforded to service providers by § 512(c)."[464] For the related videos feature, "by which a YouTube computer algorithm identifies and displays 'thumbnails' of clips that are 'related' to the video selected by the user," the court said a similar analysis applied.[465] In short, the Second Circuit held that the related videos feature falls under the section 512(c) safe harbor because it is automated, responsive to user inputs, and helps users locate and access user-stored videos; thus, it "'is closely related to, and follows from, the storage itself,' and is 'narrowly directed toward providing access to material stored at the direction of users.'"[466] On remand for further fact-finding, the district court also held that a fourth software function—syndicating videos to a third party—"make[s]

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[458] *See Viacom*, 676 F.3d at 39–40. *See also Veoh IV*, 718 F.3d at 1015–16 (holding that section 512(c) is not limited to services that merely host user-generated content and that it also covers the access-facilitating processes that automatically occur when a user uploads a video to a host site).

[459] *Hotfile*, 2013 WL 6336286, at *19 ("The term 'storage' has also been broadly interpreted to include displaying or disseminating content that is uploaded to the system's servers at the direction of users, which covers Hotfile's operations."). However, Hotfile lost the protection of the section 512(c) safe harbor because (i) it did not reasonably implement a repeat infringer policy and (ii) it did not substantially comply with section 512(c)(2) since it delayed registering a DMCA agent with the Copyright Office. *See id.* at *20–*26.

[460] *See, e.g.*, *Corbis Corp.*, 351 F. Supp. 2d at 1110.

[461] *Viacom*, 676 F.3d at 25–26.

[462] *Viacom Int'l, Inc. v. YouTube, Inc.*, 718 F. Supp. 2d 514 (S.D.N.Y. 2010), *aff'd in part, rev'd in part, and vacated*, *Viacom Int'l, Inc. v. YouTube, Inc.*, 676 F.3d 19 (2d Cir 2012).

[463] *Viacom*, 676 F.3d at 39–40.

[464] *Id*. at 39.

[465] *Id*.

[466] *Id*. at 40 (quotation marks omitted) (quoting *Veoh I*, 620 F. Supp. 2d at 1092).

user-stored videos more readily accessible (without manual intervention)" and thus is also done "by reason of the storage" and qualifies for the safe harbor.[467]

The *Viacom* district court and Second Circuit thus relied heavily on the "automated" nature of YouTube's processes in determining whether to apply the safe harbors, rather than focusing on whether the particular processes themselves fell within one of the enumerated safe harbors. *Viacom* built on a related-services doctrine developed by a district court in *UMG Recordings, Inc. v. Veoh Networks, Inc*. ("*Veoh I*").[468] The *Veoh I* district court said the plaintiff was wrong to assume "that section 512(c) requires . . . that the infringing conduct *be* storage" and that instead "the statute extends to functions other than mere storage; it applies to 'infringement of copyright *by reason of* the storage at the direction of a user.'"[469] Subsequently, the Ninth Circuit built on this and said that section 512(c) puts "no limitation on the service provider's ability to modify user-submitted material to facilitate storage and access."[470] The Ninth Circuit expressly stated that Congress created the hosting safe harbor to cover activities beyond mere hosting: "the language of the statute recognizes that one is unlikely to infringe a copyright by merely storing material that no one could access, and so includes activities that go beyond storage."[471]

The Second and Ninth Circuits, along with their lower courts, have thus broadened the protections of the safe harbors to include services being done "by reason of" storage of the copyrighted material at the direction of a user. Such a broad interpretation of the activities covered by the section 512(c) safe harbors may result in protecting activities beyond what Congress initially anticipated, and perhaps beyond what Congress intends to protect. For example, the algorithm used by YouTube to identify "related" clips has the ultimate effect of *promoting* specific content to a given user. By mechanizing a function that in the early days of the internet would have been done by the OSP's employees (much as early search engines were created by hand, rather than the use of web crawlers), YouTube's software—and similar content-curating and promoting software on other platforms—may go beyond what Congress intended when it sought to protect an OSP from liability for "storage at the direction of a user of [potentially infringing] material."[472]

The Office is unconvinced that Congress, in 1998, intended to protect any additional services *related* to the storage of content, beyond the act of storage or providing access to the content. For the section 512(c) safe harbor, Congress excluded material that an OSP stores on its network through its own actions and not at the direction of a user, and the example Congress

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[467] *Viacom Int'l, Inc. v. YouTube, Inc.*, 940 F. Supp. 2d 110, 123 (S.D.N.Y. 2013).

[468] *Veoh I*, 620 F. Supp. 2d 1081.

[469] *Id*. at 1088–89 (quoting 17 U.S.C. § 512(c)).

[470] *Veoh IV*, 718 F.3d at 1019.

[471] *Id*.

[472] 17 U.S.C. § 512(c)(1).

gave of a section 512(c)-eligible OSP was one providing server space for a website, chatroom, or other forum for user posts.[473] The statute makes no mention of related services or of user experience. It expressly states that an OSP that meets other requirements will not be liable for monetary relief "for infringement of copyright by reason of the storage at the direction of a user of material that resides on a system or network."[474] The legislative history—which gave as examples of services covered by section 512(c) those "providing server space for a user's web site"[475]—is no more useful for OSPs claiming that services that modify content they host fit within the bounds of section 512(c).

It is not clear that "by reason of the storage" means "services related to the storage"—rather, Congress may have intended "by reason of" to refer to the various exclusive rights that can be infringed through the act of content hosting and providing access thereto (e.g., reproduction with a server copy and public performance or display when a third party accesses the user-uploaded content). If Congress in fact intended section 512(c) to cover *some* related services, additional clarity to assist courts with the determination of where to draw such a line may be advisable. For example, if section 512(c) can reasonably be interpreted as providing a safe harbor for services and activities related to providing access to content (such as automatically optimizing playback definition depending on the bandwidth available through the user's internet service), it does not necessarily follow that services that *promote consumption of* specific user-uploaded content are likewise insulated from liability. It is not clear what limiting factors from the statute a court could rely upon to reasonably draw the line on such services—is it only permissible to serve up content automatically when an algorithm determines that it is related to content in which the user had previously indicated an interest, or could the selection be made for economic or other reasons?

ii. Section 512(a) Safe Harbor

The section 512(a) safe harbor protects OSPs from liability for copyright infringement that occurs "by reason of the provider's transmitting, routing, or providing connections for, material through a system or network *controlled or operated by* or for the service provider, or by reason of the intermediate and transient storage of that material in the course of such transmitting, routing, or providing connections."[476] The prototypical example of a conduit service provider, as detailed in the legislative history, is an ISP that literally provides a user with an internet connection.[477]

Nonetheless, courts have on occasion applied the section 512(a) safe harbor in an expansive manner, at times in ways likely not within the scope of what Congress intended. For

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[473] H.R. REP. NO. 105-551, pt. 2, at 53 (1998).

[474] 17 U.S.C. § 512(c)(1).

[475] H.R. REP. NO. 105-551, pt. 2, at 53 (1998).

[476] 17 U.S.C. § 512(a) (emphasis added).

[477] *See* H.R. REP. NO. 105-551, pt. 2, at 50-51 (1998).

example, in *In re Aimster Copyright Litigation*, the Seventh Circuit addressed whether the P2P developer Aimster, whose software lived on top of instant-messaging services like AOL's AIM messenger, should be held liable "for copyright infringement as a result of file swapping among their subscribers."[478] The court concluded that "[a]lthough the Act was not passed with [P2P] services in mind, the definition of Internet service provider is broad,"[479] and, as the district court judge had ruled, "Aimster fits it."[480] In another case, the Ninth Circuit reasoned that section 512(a) does not require that the service provider "itself transmit the infringing material" and, thus, a qualifying service provider can be one that provides services to OSPs—even if the services are being provided to an OSP that itself would not qualify for a safe harbor—such as an online payment processor for websites that carry infringing material.[481]

As discussed above, for the definition of conduits eligible for the section 512(a) safe harbor, Congress started with telecommunications law and adapted it "to make it appropriate for the Internet and online media."[482] Congress envisioned the mere conduit safe harbor to protect backend, internet infrastructure services like "providing connectivity for a world wide web site."[483] Its stated intent was to limit liability for those providing pipes and facilities and hardware that infringing material may incidentally travel across or utilize as it goes from user to user. It is understandable how the *Aimster* court looked at the definition of "service provider" in section 512(k) and concluded that P2P file-sharing networks fit, though it raises a question about whether it is a good policy outcome to have liability or safe harbor protections for a file-sharing service turn on whether users pull from a central server managed by the service provider or, as in *Aimster*, pull directly from other users with the service provider just providing the connections. Of course, as discussed below, other provisions in section 512 may (and have) nonetheless prevented P2P services from benefitting from the section 512 safe harbors, and as a result the broad interpretation of section 512(a) may have little real-world impact. Any re-evaluation of the contours of covered section 512(a) activity, though, will need to be kept somewhat broad so as to future-proof the statute for tomorrow's new technologies.

Similarly, the Office questions whether a third party that does not directly transmit or store user traffic or content, like payment processors, should be considered conduits entitled to protection under section 512(a). While there has been no final ruling on this issue, the Ninth

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[478] *In re Aimster*, 334 F.3d at 655. Though the court held that a service like Aimster *could* qualify for a section 512 safe harbor, Aimster, in fact, lost the safe harbor because it had no repeat infringer policy. *See id*. at 655.

[479] *Id*. at 655 (quotation marks omitted) (quoting 17 U.S.C. § 512(k)(1)(B)).

[480] *Id*. at 655. *See also In re Aimster Copyright Litig.*, 252 F. Supp. 2d 634, 658 (N.D. Ill. 2002) ("A plain reading of both definitions [in section 512(k)] reveals that 'service provider' is defined so broadly that we have trouble imagining the existence of an online service that *would not* fall under the definitions, particularly the second. In any event, Aimster certainly qualifies under the first version (and, by extension, the second).").

[481] *CCBill*, 488 F.3d at 1116.

[482] S. REP. NO. 105-190, at 54 (1998). *See also* H.R. REP. NO. 105-551, pt. 2, at 63 (1998).

[483] S. REP. NO. 105-190, at 54 (1998).

Circuit in *Perfect 10, Inc. v. CCBill LLC* appeared to be open to the argument that a payment processor could qualify under section 512(a).[484] Specifically, the Circuit Court stated that, on the facts before it, "[i]t is unclear whether such payment is a digital communication, transmitted without modification to the content of the material, or transmitted often enough that CCBill is only a transient holder."[485] This evaluation is in some tension with the wording of section 512(a), which states that an OSP that meets the conditions of the section 512(a) safe harbor shall not be liable for monetary damages "*by reason of* the provider's transmitting, routing, or providing connections for, *material* through a system or network controlled or operated by or for the service provider, or by reason of the intermediate and transient storage of that *material* in the course of such transmitting, routing, or providing connections."[486] This language would seem to imply that, in order to qualify under section 512(a), the OSP's liability should arise as a result of *the original user's material itself* being infringing, rather than as a result of an act of exchanging payment in return for a (different) user to obtain the infringing material. The case settled before any final determination was made, and no cases since have helped articulate whether third parties like payment processors should qualify for section 512(a). The answer has significant economic consequences, because payment processors are essential for infringers to be able to profit from their activities.[487]

iii. Section 512(b) and (d) Safe Harbors

The section 512(b) and (d) safe harbors for system caching and linking, respectively, do not appear to raise the same issues as the other two safe harbors. The system caching safe harbor has not received much judicial attention, but in *Field v. Google, Inc.*, the court deemed storage of 14 to 20 days as "temporary," and thus covered by section 512(b).[488] The court also ruled that a copyright owner directed their content to another person (the search engine) when the copyright owner posted content online without using the robots.txt script, which tells search engines not to crawl the content.[489] In other words, the court said that unless a copyright owner took an action

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[484] *See CCBill*, 488 F.3d at 1116 (finding that a payment processor for online services fit within the section 512(k)(1)(A) definition for "service provider," rejecting the plaintiff's argument that the payment processor "is not eligible for immunity under § 512(a) because it does not itself transmit the infringing material," but remanding to the district court to determine whether the payment processor met the eligibility requirements of section 512(a)).

[485] *CCBill*, 488 F.3d at 1116.

[486] 17 U.S.C. § 512(a) (emphasis added).

[487] *See* MPAA Initial Comments at 26–27 (describing the role payment processors can play in both enabling and preventing infringers from profiting). Payment processors have been involved in some section 512-related voluntary initiatives, such as "follow the money" and other best practices. *See* IPEC, SUPPORTING INNOVATION, CREATIVITY & ENTERPRISE, CHARTING A PATH AHEAD: U.S. JOINT STRATEGIC PLAN ON INTELLECTUAL PROPERTY ENFORCEMENT, FY 2017–2019, 61–63 (2016), https://www.whitehouse.gov/sites/whitehouse.gov/files/omb/IPEC/ 2016jointstrategicplan.pdf.

[488] 412 F. Supp. 2d 1106, 1124 (D. Nev. 2006).

[489] *Id*. at 1113–16. The court treated this as the author "transmit[ing] the material in question, the pages of his Web site, to Google's Googlebot at Google's request," which satisfies the section 512(b)(1)(B) requirement that "the material is transmitted from [Person 1] through the system or network to [Person 2] at the direction of [Person 2]." *Id.* at 1124.

to prevent a search engine from crawling, the copyright owner had consented to caching activities.

Section 512(d), for its part, has been interpreted to include traditional web services such as search and linking,[490] as well as a social bookmarking service that "enable[d] individuals who have similar tastes to point one another (and actually provide one another access) to online materials that cater to those tastes, by bookmarking materials on the social-bookmarking service's website."[491] Websites that traffic in providing connections to copyright-protected content, such as torrent websites, also have been found to fit within the threshold requirement for information location tools, but some such OSPs have lost the section 512(d) safe harbor because they violated other criteria, particularly red flag knowledge of infringing activities.[492]

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While Congress surely intended for the section 512 safe harbors to be interpreted broadly, they are not (and should not be) limitless.[493] Though the definitions of "service provider" in

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[490] *See, e.g.*, *Perfect 10, Inc. v. Google, Inc.*, No. CV 04–9484, 2010 WL 9479059 (C.D. Cal. July 26, 2010) (finding that Google was entitled to the section 512(d) safe harbor for its web and image search tools).

[491] *Flava Works, Inc. v. Gunter*, 689 F.3d 754, 756 (7th Cir. 2012).

[492] *See, e.g.*, *Fung*, 710 F.3d at 1046–47. A related issue is the so-called "server test," which says that if the owner of a computer does not store and serve content to a user, it "is not displaying that information, even if such owner in-line links to or frames the electronic information." *Perfect 10, Inc. v. Amazon.com, Inc.*, 508 F.3d 1146, 1159 (9th Cir. 2007). Applying the server test, courts have said that OSPs are not liable for direct infringement of the Copyright Act's exclusive right of display, so long as the content they are providing to users without a license does not reside on the OSP's server. *See, e.g.*, *Leveyfilm, Inc. v. Fox Sports Interactive Media, LLC*, No. 13 C 4664, 2014 WL 3368893, at *5 (N.D. Ill. July 8, 2014) ("Furthermore, Leveyfilm has not submitted any evidence that Wysocki's article or the DVD cover photo were ever saved on Yardbarker's servers. Without such evidence, Leveyfilm cannot show that there is a genuine question of fact regarding whether Yardbarker—and by extension, Fox—copied or displayed the photo."). The viability of the server test was recently called into question by the Southern District of New York, which found in 2018 that a news website that displayed an "embedded" photo that resided on another server was still liable for copyright infringement. *Goldman v. Breitbart News Network, LLC*, 302 F. Supp. 3d 585, 593 (S.D.N.Y. 2018) ("The plain language of the Copyright Act, the legislative history undergirding its enactment, and subsequent Supreme Court jurisprudence provide no basis for a rule that allows the physical location or possession of an image to determine who may or may not have 'displayed' a work within the meaning of the Copyright Act."). The defendant submitted an interlocutory appeal to the Second Circuit on this issue, which was denied. *See* Adam R. Bialek, *SCOTUS Showdown Will Have to Wait as Second Circuit Denies Petition to Review SDNY Rejection of Server Test for Copyright Infringement*, NAT'L L. REV. (Jul. 19, 2018), https://www.natlawreview.com/article/scotus-showdown-will-have-to-wait-second-circuit-denies-petition-to-review-sdny. The remaining defendants in the case were voluntarily dismissed over the course of the next 16 months, and the case was terminated on May 28, 2019, without further rulings regarding defendants' liability. *See* Docket Report, No. 1:17-cv-03144 (S.D.N.Y. May 28, 2019).

[493] Some courts have recognized these limits when considering issues such as whether and when users act as agents of the OSP, or whether creating and selling physical products at the direction of users was the type of online service Congress sought to protect from liability. *See, e.g.*, *Mavrix Photographs, LLC v. LiveJournal, Inc.*, 873 F.3d 1045, 1054 (9th Cir. 2017) (holding "that common law agency principles apply to the analysis of whether a service provider . . . is liable for the acts of the . . . moderators"); *Greg Young Publ'g, Inc. v. Zazzle, Inc.*, No. 2:16–CV–04587, 2017 WL 2729584, at *6–*8 (C.D. Cal. May 1, 2017) (holding that an e-commerce site was entitled to the section 512(c) safe harbor for hosting the images that users uploaded, but that creating and selling physical products, even though at the direction

subsection (k) are exceptionally broad—so much so that one district court said "that we have trouble imagining the existence of an online service that would not fall under the definitions"[494]—these definitions mark only the initial threshold to determining whether a service provider qualifies for one of the safe harbors. The next question is whether a service provider, as defined by subsection (k), fits into one of the four safe harbor categories, each with their own limiting language that, though broad, is narrower than the definitions in section 512(k).

Congress' intent that some activities be excluded from these safe harbors is clear from the language of the statute as well as from explicit references in the legislative history.[495] Though Congress intended for flexible application that would enable the safe harbors to cover yet-unknown technologies and types of online services,[496] the legislative history reflects a scope that, though flexible and forward-looking, may have been intended to be more narrowly crafted than courts have recognized.[497] Based on the Office's review of the case law related to the eligibility requirements for the section 512(a), (b), (c), and (d) safe harbors, there is a risk that they, as currently interpreted, may encompass activities and service providers that Congress did not intend to protect under the safe harbors.

Notably, stretching section 512(c) to cover any activities remotely related to "storage" of the content, no matter how attenuated, has affected the balance of section 512 against copyright owners in a way that it does not appear Congress intended. The Office believes that even if section 512(c) was meant to include some "related services," Congress did not intend to include related services that modify the content or that promote consumption of specific content, rather than just increasing access to the content. If Congress determines that this change to the original balance of section 512 is, as a policy matter, undesirable, then Congress may wish to step in with clear statutory language.

Another area that may benefit from additional clarity is the phenomenon of legal and judicial resources being called upon to interpret vague statutory language, especially in cases where technological changes have arguably overtaken the original meaning. In particular,

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of users, was not entitled to the hosting safe harbor); *accord Gardner v. CafePress Inc.*, No. 3:13–cv–1108, 2014 WL 794216, at *5 (S.D. Cal. Feb. 26, 2014) ("[A]n online service that directly sells, rather than facilitates the sale of, products likely falls outside the definition of a 'service provider.'").

[494] *In re Aimster Copyright Litig.*, 252 F. Supp. 2d 634, 658 (N.D. Ill. 2002).

[495] For example, as noted above, Congress excluded from the mere conduit safe harbor those services that exercise editorial discretion in determining what material to put online.

[496] *See* CCIA Initial Comments at 3 (stating that Congress "inten[ded] that Section 512 be a forward-looking statute, so as to encourage investment in innovative services that did not yet exist in 1998").

[497] Courts have construed the safe harbors broadly, and in doing so have extended protection to some services that Congress may not have intended to include in section 512's limitation on liability. This alone would likely not result in a significant shift in the balance Congress originally intended. Current interpretations of other provisions in section 512 intended to limit the availability of the safe harbors, however, have resulted in parties placing unanticipated pressure on the categorical thresholds for the safe harbors, which is a task they were not designed for.

questions like the amount of time that qualifies as "temporary" for the section 512(b) safe harbor may benefit from regular review and updating. One court said that 14 to 20 days qualified as temporary for caching,[498] but "temporary" has a technological component—and what may have been temporary per the technological capabilities and needs of 1998 may no longer be temporary. Similarly, temporary for an online service run by a part-time hobbyist may not be temporary for an online service run by a large, billion-dollar company. It seems that this provision is likely to be explicitly context dependent, but may benefit from an articulation of the factors to be considered, including factors related to the type of content at issue (such as pre-release leaks) or the nature of the service.

Congress also may want to address some of the questions that have not yet been resolved by the courts, including rearticulating the proper breadth of the section 512(a) safe harbor and offering more contemporary examples of the types of services that should qualify as conduits. In particular, does Congress intend for the section 512(a) safe harbor to be available to a broad array of technology services beyond internet infrastructure—including software that connects users over P2P networks and services such as payment processors that provide support for conduits?

A final question for Congress to consider is the continued reliance on section 512's four function-based safe harbors, especially now that many OSPs offer numerous services and thereby may fall under multiple safe harbors.[499] Retaining the current structure would continue to defer to courts the ability to expand (or narrow) the scope of section 512's safe harbors; the current system also can force rightsholders and OSPs to invest significant time and money in litigation for uses that may not be clearly covered by one of the section 512 safe harbor categories, and it can result in inconsistencies across different courts.[500]

b) OSP Obligations: Repeat Infringer Policies[501]

A threshold requirement for safe harbor eligibility is section 512(i), which states that any OSP seeking the benefit of one of the section 512 safe harbors must have "adopted and reasonably

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[498] *Field v. Google, Inc.*, 412 F. Supp. 2d 1106, 1124 (D. Nev. 2006).

[499] For example, should social bookmarking sites that reproduce an image or snippet of text from the bookmarked site be considered an information location tool under section 512(d), or a content host under section 512(c)? Does it matter whether the service automatically selects the image or snippet, or if it is designated by the user? Similarly, should content delivery networks be treated as caching services under section 512(b), or as something more akin to conduits under section 512(a)? Does it matter to the answer who the customer for these services is—the content owner /distributer themselves or a third party OSP?

[500] One could imaging different systems of safe harbors, such as tying the safe harbors to the type of content being shared or the commercial/noncommercial nature of the OSP's activities.

[501] Although section 512(i) premises eligibility for the safe harbors on two different OSP obligations—the obligation to adopt and implement a repeat infringer policy, and the obligation to allow and not interfere with standard technical measures—the second of these two has had little real-world impact on the availability of the section 512 safe harbors. This is because, as a number of stakeholders note, to date no technologies have been designated as standard technical measures. *See infra* section VI.B.3.

implemented . . . a policy that provides for the termination in appropriate circumstances of subscribers and account holders of the service provider's system or network who are repeat infringers."[502] Congress included this provision to aid copyright owners in addressing individuals engaged in ongoing online infringement.[503] While Congress, in order to protect users' privacy interests, explicitly did not condition the safe harbors on "a service provider monitoring its service or affirmatively seeking facts indicating infringing activity,"[504] Congress nonetheless obligated OSPs to implement policies so that "those who repeatedly or flagrantly abuse their access to the Internet through disrespect for the intellectual property rights of others should know that there is a realistic threat of losing that access."[505]

Section 512's repeat infringer provision is one area where the Copyright Office saw some shift in stakeholder views across the span of the Study, resulting from court decisions handed down between the initial roundtables and the final roundtable. Early in the Study, rightsholders criticized the courts' approach as holding OSPs to a lax standard. Specifically, rightsholders said that courts had shifted the burden to the rightsholder to establish that an OSP had failed to comply with the requirements of section 512(i)(1)(A) in adopting or reasonably implementing a repeat infringer policy, and adopting too lenient of a standard for what qualifies under this section.[506] The most pressing issue, according to rightsholders, was that courts had left too much discretion to OSPs in determining who is a repeat infringer.[507] Rightsholders were concerned

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[502] 17 U.S.C. § 512(i)(1)(A).

[503] *See* S. REP. NO. 105-190, at 52 (1998) ("First, the service provider is expected to adopt and reasonably implement a policy for the termination . . . of the accounts of subscribers . . . who are repeat infringers of copyright . . . . [T]hose who repeatedly or flagrantly abuse their access to the Internet through disrespect for the intellectual property rights of others should know that there is a realistic threat of losing that access.").

[504] 17 U.S.C. § 512(m)(1). *See also* S. REP. NO. 105-190, at 52 (1998) (stating that in following its own repeat infringer policy, an OSP is not required to "investigate possible infringements, monitor its service, or make difficult judgments as to whether conduct is or is not infringing").

[505] S. REP. NO. 105-190, at 52 (1998).

[506] *See, e.g.*, A2IM Music Community Initial Comments at 3 (stating that courts' interpretations of section 512(i)(1)(A) have enabled OSPs "to stick their heads in the sand rather than do their fair share"); Authors Guild Initial Comments at 2 (stating that courts have placed minimal requirements upon OSPs and that under current law even a "bare-bones repeat infringer policy" likely protects an OSP from liability "even if it is profiting from the piracy and does absolutely nothing to discourage it"). The Authors Guild observed that "there are no set rules on the number of notifications that need be sent before terminating a user engaging in infringing activity." Authors Guild Initial Comments at 26 (citing *Capitol Records, LLC v. Vimeo, LLC*, 972 F. Supp. 2d 500, 511–17 (S.D.N.Y. 2013) (approving a policy that based termination on receipt of three notifications)); *UMG Recordings, Inc. v. Veoh Networks Inc.*, 665 F. Supp. 2d 1099, 1118 (C.D. Cal. 2009) ("*Veoh II*"), *aff'd sub nom.*, *UMG Recordings, Inc. v. Shelter Capital Partners LLC*, 667 F.3d 1022 (9th Cir. 2011) ("*Veoh III*"), *opinion withdrawn and superseded on reh'g*, 718 F.3d 1006 (9th Cir. 2013) ("*Veoh IV*") (two notifications); *Io Grp., Inc. v. Veoh Networks, Inc.*, 586 F. Supp. 2d 1132 (N.D. Cal. 2008) (two notifications)).

[507] *See* AAP Initial Comments at 23–24 (calling for more effective systems for identifying suspected persons and connecting their activity to infringement notifications); Authors Guild Initial Comments at 26 ("Courts have also struggled with when and how an OSP should determine who the repeat infringers are in order to terminate them."); Copyright Alliance Initial Comments at 25 ("The problem is not in the legal framework drafted by Congress, but instead in how OSPs choose to implement policies.").

particularly with users "creating a new account under a new name and thus escaping the repercussions of whatever the policy would be."[508] And despite recent court decisions more favorable to copyright owners,[509] rightsholders still ask for legislation or regulations that better define terms in section 512(i) and put clearer obligations on OSPs.[510] Rightsholders also urge greater transparency from OSPs with respect to repeat infringer policies and procedures.[511]

OSPs generally agree with rightsholders that the requirements imposed by section 512(i)(1)(A) are not explicit and in some cases are undefined,[512] but some OSPs state that case law has provided sufficient guidance;[513] moreover OSPs say that the flexibility allowed by case law

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[508] Getty Initial Comments at 7. Courts typically have not required OSPs to affirmatively police users or to "track users in a particular way." *Io Grp.*, 586 F. Supp. 2d at 1145.

[509] *See, e.g.*, *BMG Rights Mgmt. (US) LLC v. Cox Commc'ns, Inc.*, 881 F.3d 293 (4th Cir. 2018); *UMG Recordings, Inc. v. Grande Commc'ns Networks, Inc.*, 384 F. Supp. 3d 743 (W.D. Tex. 2019).

[510] *See, e.g.*, Tr. at 9:6–15 (Apr. 8, 2019) (Erich Carey, NMPA) ("[T]he *BMG v. Cox* case highlights an important development from our perspective, namely the opportunity for the successful enforcement of the plain language of the DMCA, where a service has enabled repeat infringers in massive scale on its own network. But for present purposes, this has not changed the music community's perspective on the DMCA. Enforcement in the BMG litigation involved the most extreme of circumstances."). For examples of requests that pre-dated the recent case law developments, *see, e.g.*, AAP Initial Comments at 22–24; c3 Initial Comments at 35; Digimarc Initial Comments at 8 (urging that Congress amend the statute to eliminate "appropriate circumstances" and define termination more seriously); Getty Initial Comments at 8 (urging that a third strike of infringement qualify as "appropriate circumstances"); IPO Initial Comments at 6 (seeking "[g]reater clarity . . . concerning the contours and requirements for the repeat infringer policies"); Ringtone Intellectual Property Group ("RIPG"), Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015, Notice of Inquiry at 5 (Apr. 1, 2016) ("RIPG Initial Comments").

[511] *See, e.g.*, Carlisle Initial Comments at 9 (proposing a requirement that companies publish transparency reports of repeat offenders as well as how the policy was applied to them); Dina LaPolt, Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015, Notice of Inquiry at 9–10 (Apr. 1, 2016) ("LaPolt Initial Comments"). Most rightsholders argue that even where repeat infringer policies do exist, their construction and implementation are opaque and transparency can be obtained "only through burdensome litigation." A2IM Music Community Initial Comments at 40; *see also* AAP Initial Comments at 23; c3 Initial Comments at 34; Digimarc Initial Comments at 8.

[512] *See* ACA Initial Comments at 4 ("[T]he language of Section 512(i) itself is inherently ambiguous. For example, nothing in the provision's statutory language nor its legislative history offer any clarifying guidance with regard to the elements of the repeat infringer termination condition."); Engine et al. Initial Comments at 14–16; *see also* Annemarie Bridy & Daphne Keller, Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015, Notice of Inquiry at 41 (Mar. 30, 2016) ("Bridy & Keller Initial Comments") ("[T]he statute provides no definition of 'repeat infringer' and is silent as to what 'appropriate circumstances' for termination of access might be."); Matthew Neco, Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015, Notice of Inquiry at 9–10 (Apr. 1, 2016) ("Neco Initial Comments").

[513] *See, e.g.*, DiMA Initial Comments at 8 (stating that "courts have provided considerable insight into the specific contours of the law's requirements"); Google Initial Comments at 15–16; *see also* Bridy & Keller Initial Comments at 41–42 (arguing that court decisions "set reasonably clear parameters for OSPs to follow as they exercise the discretion Congress gave them to define and implement compliant repeat infringer policies"). *But see* ACA Initial Comments at 5 ("Relying on litigation to provide the necessary clarification is inefficient, has resulted in decisions that offer conflicting guidance, and leaves online service providers . . . exposed to the risk of crushing liability."); Engine et al. Initial Comments at 15; OTW Initial Comments at 20 (stating that though "[t]he law on this issue isn't particularly well-developed[,] . . . [a]ny legislative attempt to define a repeat infringer policy would be unlikely to give clarity").

has been essential to effective implementation of a repeat infringer policy.[514] While some OSPs and user advocacy groups request clarification of what constitutes "repeat" infringement, as well as circumstances requiring termination,[515] most argue that courts' interpretations have been sufficient so far, and further clarification would unduly restrict the flexibility that OSPs require.[516]

That said, OSPs are critical of two recent decisions applying section 512(i). In particular, they argue that the courts in those cases—*BMG Rights Management (US) LLC v. Cox Communications, Inc.*[517] and *UMG Recordings, Inc. v. Grande Communications Networks, Inc.*[518]—misconstrued the definition of "repeat infringer" to include *alleged* infringements, which OSPs say burdens them in a way Congress did not intend.[519] OSPs and user advocacy groups continue to argue that only an infringer who had repeatedly been adjudged as an infringer—likely by a court—could meet the statutory standard for "repeat infringer."[520] OSPs also say that, given the role that internet access plays in modern life, terminating account access to conduit ISPs (if not, perhaps, to OSPs like Facebook and Google) is excessively punitive, to a degree not anticipated in 1998.[521]

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[514] *See* Facebook Initial Comments at 10; Google Initial Comments at 15.

[515] *See* ACA Initial Comments Initial Comments at 11; Engine et al. Initial Comments at 15–16.

[516] *See* DiMA Initial Comments at 8; Google Initial Comments at 15–16; Internet Association Initial Comments at 20 (arguing that "a statutory scheme mandating more specific, inflexible action" would simply lead to litigation, rather than allowing for the development of "more effective technology and systems of combating repeat infringers"); *see also* Bridy & Keller Initial Comments at 43 (stating that the body of case law "is now sufficiently large and sufficiently consistent that there is no need for Congress to add specificity to the current language"); CCIA Initial Comments at 23–24 (observing that the flexibility in section 512(i) is necessary to account for the variety of services addressed by 512(a)–(d), from comment sections through to essential email systems and self-employment platforms).

[517] *BMG Rights Mgmt. (US) LLC v. Cox Commc'ns, Inc.*, 881 F.3d 293 (4th Cir. 2018) ("*Cox*").

[518] *UMG Recordings Inc. v. Grande Commc'ns Networks, Inc.*, 384 F. Supp. 3d 743 (W.D. Tex. 2019) ("*Grande Commc'ns*").

[519] *See, e.g.*, CCIA Initial Comments at 23 ("Indeed, many service providers and a handful of courts that have considered this question have construed § 512 to refer to repeat *alleged* infringers, instead of repeat infringers, the plain language of § 512(i) notwithstanding."); Engine et al. Initial Comments at 15.

[520] *See, e.g.*, Tr. at 132:10–13 (Apr. 8, 2019) (Jonathan Band, LCA); Tr. at 266:10–15 (Apr. 8, 2019) (Catherine Gellis, The Copia Institute); Tr. at 375:12–16 (Apr. 8, 2019) (Matthew Schruers, CCIA) ("[T]he statute says, repeat infringer. It doesn't say repeat alleged infringer. I'm aware that some courts have interpreted that differently. But the language of the section is the language of the section."). *But see* Tr. at 302:8–20 (May 12, 2016) (George Borkowski, RIAA) ("And if you wait for an adjudicated infringer, you would read this part of the statute out of the statute because it takes years to have an actual adjudication."); Tr. at 282:11–16 (May 12, 2016) (Ben Sheffner, MPAA) (noting that "courts have appropriately said" adjudication of infringement is not the standard for section 512(i)); Tr. at 373:15–374:12 (Apr. 8, 2019) (Lui Simpson, AAP) (noting that a requirement to have repeat infringers adjudicated as such would result in the material being available for longer periods of time, and that such a rule "will strip out, frankly, what even makes a notice-and-takedown system workable").

[521] *See, e.g.*, ACA Initial Comments at 10; CTIA Initial Comments at 12 ("[T]ermination of access is no longer a reasonable requirement for a service provider relying on the liability limitations of section [512]. *If* the repeat infringer policy is to remain in the statute, the law should not allow mere allegations of copyright infringement by interested

The Copyright Office recognizes that the statute is not explicit about all aspects of a reasonably implemented repeat infringer policy and leaves significant discretion to OSPs. The full text of section 512(i)'s repeat infringer provision states that a section 512 safe harbor will be available to an eligible OSP only if it "has adopted and reasonably implemented, and informs subscribers and account holders of the service provider's system or network of, a policy that provides for the termination in appropriate circumstances of subscribers and account holders of the service provider's system or network who are repeat infringers."[522] The statute does not define "adopted" or "reasonably implemented," nor does it give examples of circumstances that would warrant terminating an account. The statute also does not quantify "repeat"—two or twenty or somewhere in between?—or specify whether an "infringer" is only someone whom a court has adjudged as such.[523] Similarly, the legislative history does not define these aspects of the repeat infringer provision and, rather, introduces more ambiguity by noting "that there are different degrees of online copyright infringement, from the inadvertent to the noncommercial, to the willful and commercial."[524]

Courts have not provided clarity on these issues, articulating different tests to identify what is required to comply with section 512(i)(1)(A). One test, as articulated by the Ninth Circuit in *CCBill*, holds that "a service provider 'implements' a policy if it has [1] a working notification system, [2] a procedure for dealing with DMCA-compliant notifications, and [3] if it does not actively prevent copyright owners from collecting information needed to issue such notifications."[525] A second formulation, also out of the Ninth Circuit, asks whether the OSP "(1) adopt[ed] a policy that provides for the termination of service access for repeat copyright

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parties to trigger such termination."); *see also* Copia Institute Initial Comments at 13; EFF Initial Comments at 17; ICC Initial Comments at 6.

[522] 17 U.S.C. § 512(i)(1)(A).

[523] For a discussion of the difficulty in determining the precise meaning of "infringer," see generally 4 NIMMER ON COPYRIGHT § 12B.10 (2019). While Prof. Nimmer ultimately concludes that the term "repeat infringer" means only an adjudicated infringer or a user for whom the service provider has actual knowledge of infringement, the Office does not reach the same conclusion. Adding the adjective "repeat" to infringer implies that, under Prof. Nimmer's theory, a rightsholder must go to court multiple times and obtain multiple judgments of infringement against a particular user before they could be considered a repeat infringer whose account should be terminated, absent actual knowledge by the OSP (in which case, failure to act would displace them from the safe harbor regardless of the details of their repeat infringer policy). Such a requirement seems wholly out of step with a system explicitly premised on a non-judicial resolution of infringement claims. And, as the Fourth Circuit noted in *Cox*, nowhere else in the Copyright Act is "infringer" used to refer only to adjudicated infringers. *Cox*, 881 F.3d at 301. For example, section 411 states that a copyright owner may "institute an action for infringement under section 501" if the copyright owner *first* "serves notice upon the infringer." 17 U.S.C. § 411(c). *Cf.* 4 NIMMER ON COPYRIGHT § 12B.09[A][1] (2019) (discussing section 512(h), stating that "[t]o facilitate the search for the *infringer*, Section 512 empowers copyright owners" to request their identity) (emphasis added); 3 NIMMER ON COPYRIGHT § 12.04[A][3][a] (2019) (discussing third party liability for actions that "aid the primary *infringer*," and noting that courts allow liability in such cases because of "the difficulty then faced . . . in bringing to account fly-by-night record pirates" and the desire to hold liable those "persons upon whom service might be obtained and judgments collected.") (emphasis added).

[524] S. REP. NO. 105-190, at 52 (1998).

[525] *CCBill*, 488 F.3d at 1109.

infringers in appropriate circumstances; (2) implement[ed] that policy in a reasonable manner; and (3) inform[ed] its subscribers of the policy."[526] It is rare for a court to separately address what constitutes "reasonable circumstances" for termination of a user's account, instead tending to collapse its analysis of this element with either the "adopted a policy" requirement or the "reasonably implemented" requirement.

While there is much confusion surrounding the requirements under section 512(i)(1)(A), the statute and legislative history are far from silent and may provide some guidelines for interpretation. The statute sets out some clear high-level criteria, and the legislative history provides important context that helps interpret the repeat infringer provision. In this section, we address the three most contentious aspects of the provision: (1) defining what Congress meant by "repeat infringer," (2) addressing the question of what it means to adopt a repeat infringer policy that requires termination in appropriate circumstances ("adoption"), and (3) establishing the minimum requirements for "reasonable implementation" ("implementation").[527]

i. "Repeat Infringer"

Courts interpreting the meaning of "repeat infringer" within section 512(i)(1)(A) largely have given OSPs discretion to define the term themselves. For example, in *Corbis Corp. v. Amazon.com, Inc.*, the court found that the OSP need not publicly specify what constitutes a repeat infringer because section 512(i) uses "open-ended" language that evinced Congress' intent to "leave the policy requirements, and the subsequent obligations of the service providers, loosely defined."[528] As a result, OSPs have not been obligated to decide "ex ante[] the specific types of conduct that will merit restricting access to its services."[529] Furthermore, in *Veoh II*, the district court found that an OSP did not violate section 512(i) by declining to terminate users' accounts after receiving a single takedown notice detailing multiple infringements, instead only

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[526] *Ellison v. Robertson*, 357 F.3d 1072, 1080 (9th Cir. 2004). These requirements, when mentioned in case law of various circuits, have been referred to as the "*Ellison* prongs" and are subject to relatively little variation. *See, e.g.*, *Wolk v. Kodak Imaging Network, Inc.*, 840 F. Supp. 2d 724, 744 (S.D.N.Y. 2012), *aff'd sub nom.*, *Wolk v. Photobucket.com, Inc.*, 569 F. App'x 51 (2d Cir. 2014); *Corbis Corp.*, 351 F. Supp. 2d at 1100; *Hempton v. Pond5, Inc.*, No. 3:15-CV-05696, 2016 WL 6217113, at *4 (W.D. Wash. Oct. 25, 2016). Of the two tests, the Office finds the *Ellison* prongs to be closer to what is needed to fully evaluate compliance with the repeat infringer policy requirement.

[527] Study participants do not separately address the requirement to "inform[] subscribers and account holders of the service provider's system or network" of the repeat infringer policy, instead addressing it as part of a larger discussion of "adopts" and "reasonably implements." Specifically, participants frequently refer to *Ventura Content, Ltd. v. Motherless, Inc.*, in which the court (again, the Ninth Circuit) found that it is not necessary for an OSP to inform users of the contents of such a policy, so long as they inform users that such a policy *exists*. *See infra* section VI.A.1.b.ii.

[528] *Corbis Corp.*, 351 F. Supp. 2d. at 1100–01.

[529] *Corbis Corp.*, 351 F. Supp. 2d at 1101. *See also Hempton v. Pond5, Inc.*, No. 3:15-CV-05696, 2016 WL 6217113, at *6–*7 (W.D. Wash. Oct. 25, 2016) (finding that, despite the OSP's lack of a specific repeat infringer policy, it was sufficient that "[Defendant's] agreements repeatedly exhort against uploading infringing material and warn that a user's access to the website may be terminated at [Defendant's] sole prerogative," stating that the open-ended language of section 512 and legislative history allow for less specificity) (additions in the original) (citing *Corbis Corp.*, 351 F. Supp. 2d at 1100–01).

terminating those accounts after receipt of a second notice.[530] The court cited *Corbis Corp.* for the proposition that OSPs have discretion to define "repeat infringer."[531] The court further limited what constituted "infringement" to actions detailed in notices received from rightsholders, while allowing the OSP to ignore any infringement flags that resulted from the OSP's own filtering system.[532]

More recently, the district court in *Cox* gave slightly more specific guidance to OSPs by holding that the infringement must happen "repeatedly and flagrantly" or in a "blatant" manner.[533] In reviewing the district court's decision in *Cox*, the Fourth Circuit did not question whether OSPs had discretion to define "repeat infringer," though it appeared to drop "flagrantly" and "blatant" from the district court's standard.[534] The Second Circuit, in *EMI Christian Music Group, Inc. v. MP3tunes, LLC*, provided a more specific, although still somewhat ambiguous, definition for "repeat infringer." Citing the Oxford English Dictionary and Black's Law Dictionary, the court held that "repeat" meant "a person who does something . . . again or repeatedly," while an infringer signified "[s]omeone who interferes with one of the exclusive rights of a . . . copyright."[535] The court concluded that, for the purposes of that case, "all it took to be a 'repeat infringer' was to repeatedly sideload copyrighted material for personal use."[536] No further specification was given. While the Second Circuit specifically stressed that the user need not be aware that its activities constitute infringement to be considered an infringer,[537] potentially broadening the definition of repeat infringer in the copyright owner's favor, the court's definition failed to clarify a standard for rightsholders and OSPs for the boundaries of an acceptable repeat infringer policy.

Leaving such discretion to OSPs has resulted in a malleable definition of repeat infringer that not only has allowed each OSP to narrow or broaden its application, but also has made it harder for copyright owners to determine *ex ante* who will qualify as a repeat infringer, as the

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[530] *See Veoh II*, 665 F. Supp. 2d at 1118.

[531] *See id*. at 1118 (citing *Corbis Corp.*, 351 F. Supp. 2d at 1100–01).

[532] *Veoh II*, 665 F. Supp. 2d at 1118.

[533] *See BMG Rights Mgmt. (US) LLC v. Cox Commc'ns, Inc.*, 149 F. Supp. 3d 634, 654–55 (E.D. Va. 2015), *aff'd in part, rev'd in part*, 881 F.3d 293 (4th Cir. 2018).

[534] *See Cox*, 881 F.3d at 302–03.

[535] *EMI Christian Music Grp., Inc. v. MP3tunes, LLC*, 844 F.3d 79, 89 (2d Cir. 2016), *cert. denied sub nom.*, *Robertson v. EMI Christian Music Grp., Inc.*, 138 S. Ct. 43 (2017).

[536] *Id.* at 89. "Sideloading" involves using a free plug-in provided by defendants that enabled users to download free songs they found on the internet directly to their MP3tunes lockers. *Id.* at 86.

[537] *See id*. at 90 ("In other words, the legislative history of the DMCA indicates that a 'repeat infringer' does not need to know of the infringing nature of its online activities. Finally, none of our sister circuits has adopted the District Court's definition of 'repeat infringer' to include only those who willfully infringe copyrights. To the contrary, the Seventh Circuit has suggested that the term covers users of file-sharing services who are 'ignorant or more commonly disdainful of copyright.'") (citations omitted).

standard varies from OSP to OSP. Such discretion, however, appears to track congressional intent. The legislative history regarding the repeat infringer provision is not extensive. But in explaining the purpose behind the provision, the Senate Report mentions that "there are different degrees of on-line copyright infringement, from the inadvertent to the noncommercial, to the willful and commercial," without going into detail about what level of infringement OSPs should be concerned with under section 512(i).[538] This suggests that an OSP must apply its policy on a case-by-case basis, and that the standard for a repeat infringer policy might depend on the type of infringement that occurs and, by extension, the type of OSP (big or small, commercial or non-commercial, etc.). Moreover, such discretion serves the purpose of supporting the diversity of the online ecosystem. As will be discussed in more depth in sub-parts (ii) and (iii), section 512(i) does not dictate that all OSPs adopt a uniform approach; the nature of the OSP can be a key component of the context that influences an OSP's repeat infringer policy.

Another aspect of the "repeat infringer" definition upon which stakeholders disagree is whether the term "repeat infringers" in section 512(i) is limited to adjudicated infringers. In *Cox*, the Fourth Circuit rejected a definition that relied upon an adjudication of infringement.[539] Specifically, the court noted that another provision, section 512(g), refers to activity "ultimately determined to be infringing," and concluded from that language that "Congress knew how to expressly refer to adjudicated infringement, but did not do so in the repeat infringer provision."[540] The court reasoned that the use of broader language in section 512(i) indicated that Congress did not intend for the term "infringer" to refer only to adjudicated repeat infringers. The court found that this was further supported by the legislative history:

> Both the House Commerce and Senate Judiciary Committee Reports explained that "those who repeatedly or flagrantly abuse their access to the Internet through disrespect for the intellectual property rights of others should know that there is a realistic threat of losing that access." H.R. Rep. No. 105-551, pt. 2, at 61 (1998); S. Rep. No. 105-190, at 52 (1998). This passage makes clear that if persons "abuse their access to the Internet through disrespect for the intellectual property rights of others"—that is, if they infringe copyrights—they should face a "realistic threat of losing" their internet access. The passage does not suggest that they should risk losing internet access only once they have been sued in court and found liable for multiple instances of infringement. Indeed, the risk of losing one's internet access would hardly constitute a "realistic threat" capable of deterring infringement if that punishment applied only to those already subject to civil penalties and legal fees as adjudicated infringers.[541]

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[538] S. REP. NO. 105-190, at 52 (1998); *see also* H.R. REP. NO. 105-551, pt. 2, at 61 (1998).

[539] *Cox*, 881 F.3d at 302–03.

[540] *Id*. at 302.

[541] *Id*.

The court went on to discuss how other courts have interpreted "repeat infringer," noting that only one circuit had articulated a definition.[542] The court then quoted the Second Circuit's definition of a repeat infringer as "someone who interferes with one of the exclusive rights of a copyright . . . again or repeatedly."[543] The Fourth Circuit also noted that both the Seventh Circuit and the Ninth Circuit had discussed evidence of whether an OSP had responded appropriately to "repeat infringers" without any mention of "adjudicated infringers."[544] The court thus found no support in the case law for the proposition that a repeat infringer must be an *adjudicated* repeat infringer, noting that "Cox does not cite a single case adopting its contrary view that only adjudicated infringers can be 'repeat infringers' for purposes of the DMCA."[545] Since then, no courts have adopted an adjudication requirement.

On this point, the Office reads the statute and the legislative history to support a finding that Congress did not intend for "repeat infringer" to mean "repeat adjudicated infringer," in alignment with Congress' desire for section 512(i) to serve as a deterrent.[546] If only those infringers who had repeatedly been adjudged by a court to be liable for copyright infringement—and thereby were already potentially liable for monetary damages—had to worry about having their access to an OSPs' facilities terminated, it is unlikely that such a threat would serve as a deterrent where monetary damages already had not. Further, a requirement that a rightsholder seek (multiple) court judgments against a particular user appears to be at odds with a system designed to be extra-judicial and expeditious. While any interpretation of section 512(i) must give OSPs some discretion to define "repeat infringer" in a manner that makes sense given their service and user base, any definition must be consistent with the statutory criteria that repeat infringer means repeat *alleged* infringer, not repeat *adjudicated* infringer.

ii. Adoption of a Policy Requiring Termination in Appropriate Circumstances

To understand the difference between the requirement to adopt a policy and the requirement to reasonably implement it, it helps to think of them as the difference between what OSPs *say* they're going to do, and what OSPs actually *do*. Thus, to determine that an OSP has adopted a policy that complies with the requirements of section 512(i)(1)(A), one needs to ask two questions: (i) did it actually adopt a policy, and (2) does the policy require termination of users' accounts under reasonable circumstances? The first question is largely one of fact—does a policy

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[542] *Id*. (citing *EMI Christian Music*, 844 F.3d at 89).

[543] *Cox*, 881 F.3d at 302.

[544] *See id*. at 302–03 (citing *Ellison*, 357 F.3d at 1080; *In re Aimster*, 334 F.3d at 655).

[545] *Cox*, 881 F.3d at 302–03.

[546] *See id*.; S. REP. NO. 105-190, at 52 (1998).

exist?[547] The second question looks to the contents of the policy—does it require termination of users' accounts, and does it do so under appropriate circumstances?

The standard for when "appropriate circumstances" exist for termination of subscribers or account holders remains unclear. As noted above, courts have not articulated a separate standard for "appropriate circumstances," instead collapsing it with the analysis of either adoption of a policy or implementation of it.[548] Further, courts emphasize different factors to evaluate what the statute means by "appropriate circumstances." The district court in *Perfect 10, Inc. v. Cybernet Ventures, Inc.* came close to articulating a standard by stating that "appropriate circumstances" for termination are "at a minimum, instances where a service provider is given sufficient evidence to create actual knowledge of blatant, repeat infringement by particular users, particularly infringement of a willful and commercial nature."[549]

The absence of a uniform standard has allowed the courts freedom to focus on what they consider to be the unique facts of the case, generally finding that "appropriate circumstances" only exist when a user or the OSP engages in rather egregious practices. The court in *Capitol Records, LLC v. Escape Media Group, Inc.*, for example, interpreted "appropriate circumstances" in the particular context of the defendant's practices in addressing the number of repeat infringers.[550] Specifically, the court pointed to "hundreds or thousands" of infringers who had been the subject of infringement notices without subsequent account termination, as well as the OSP's "DMCA Lite" procedure that institutionalized ignoring a notice if it was deemed defective in some way.[551] (On the latter point, the court found the procedure to be insincerely applied because, of the notifications the OSP received during a two-year period, it classified more than 90 percent as defective.) Similarly, the Fourth Circuit found that a "thirteen strikes" policy, along with the automatic reactivation of the accounts of terminated users, did not constitute termination in appropriate circumstances.[552]

Recently, in *Ventura Content, Ltd. v. Motherless, Inc.*, the Ninth Circuit took a similar approach, but ended up at the opposite conclusion, stating that an OSP may consider a number of factors when determining the existence of appropriate circumstances, "including the number of complaints arising from the user's uploads, the amount of infringing content in the complaint [the OSP] received, and whether [the OSP] thinks the user had maliciously or intentionally uploaded

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[547] As discussed below, this is sometimes more difficult to determine than one would expect. When the details of a policy exist solely in the head of the OSP's operator, it becomes difficult to objectively determine both that a policy exists and that the policy provides for termination in reasonable circumstances.

[548] *See, e.g.*, *Cox*, 881 F.3d at 303.

[549] *Perfect 10, Inc. v. Cybernet Ventures, Inc.*, 213 F. Supp. 2d 1146, 1177 (C.D. Cal. 2002) ("*Cybernet*").

[550] *Escape Media Grp.*, No. 12-CV-6646, 2015 WL 1402049, at *12–*13 (S.D.N.Y. Mar. 25, 2015).

[551] *Id.*

[552] *Cox*, 881 F.3d at 303–04.

infringing content."[553] In *Veoh II*, the district court came to a similar conclusion, finding that termination of a user's account only after continued infringements following a warning letter was sufficient, stating that it "achieve[d] the provision's purpose of deterring infringement."[554] The court likewise found that the OSP did not need to terminate users after multiple infringements were brought to its attention by its digital filtering technology (Audible Magic) because "[defendant] has no way of verifying the accuracy of Audible Magic's database, and even if it did, it would be unreasonable to place that burden on [defendant]."[555]

The courts have interpreted section 512(i)(1)(A) as allowing OSPs to adopt a somewhat casual approach to "inform[ing] subscribers and account holders . . . of[] a [repeat infringer policy]."[556] In *Motherless*, the Ninth Circuit found that the defendant had adopted and informed its users of a repeat infringement policy by including in its Terms of Use a "'partial list of content that is illegal or prohibited,' such as child pornography, bestiality, and copyright-infringing material" and "prohibit[ing] posting copyrighted material without the prior written consent of the copyright owner," even though the details of the what activities would result in termination were not posted on the site, and in fact were not written down anywhere.[557]

The courts have generally reached a conclusion regarding what constitutes reasonable circumstances for termination based not on what the *users* do, but on whether the court believes that the OSP was reasonable in adopting its standard. Thus, failure to terminate an account after receipt of a single notice can constitute both failure to terminate in appropriate circumstances,[558] and an acceptable decision that does not violate the OSP's obligation to terminate in appropriate circumstances.[559] The Office agrees that OSPs need some level of discretion for determining what constitutes appropriate circumstances for termination of their users; an educational board whose young users sometimes inadvertently upload infringing content does not warrant adoption of a strict "two strikes and you're out" policy in the way that a website that is geared to distributing audio files might. Similarly, the requirement that a user be a "repeat infringer" certainly cannot mean that an OSP must terminate a user after receipt of a single notice that identifies only a single instance of infringement. However, the net result of these opinions has been that OSPs have gained so much leeway identifying what circumstances might be reasonable that some OSPs have chosen to adopt policies that have very little deterrent effect.

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[553] *Ventura Content, Ltd. v. Motherless, Inc.*, 885 F.3d 597, 617–18 (9th Cir. 2018), *cert. denied*, 139 S. Ct. 419 (2018) ("*Motherless*").

[554] *Veoh II*, 665 F. Supp. 2d at 1116.

[555] *Id*. at 1118.

[556] 17 U.S.C. § 512(i)(1)(A).

[557] *Motherless*, 885 F.3d at 601, 615–16.

[558] *See Escape Media Grp.*, 2015 WL 1402049, at *12–*13.

[559] *See Veoh II*, 665 F. Supp. 2d at 1116.

In addition, the Office takes issue with some of the particulars of the decisions that courts have issued in such cases. For example, by ignoring internal infringement flags and only acting upon formal notices from rightsholders, the OSP in *Veoh II* allowed a significant amount of activity to continue that would rightly support account termination.[560] The Office further questions an outcome that allows an OSP to "adopt" an unwritten policy, requiring only that the OSP communicate to its users that such a repeat infringer policy exists, but not the terms of the repeat infringer policy. Such a reading is difficult to reconcile when viewed in a larger context, and does not align with Congress' intent for the repeat infringer provision to serve as a deterrent to online infringement. What benefit is it to users if they know only that a policy exists, but are not informed of the code of conduct by which they are expected to govern themselves? If subscribers do not know the circumstances under which their account access will be terminated, from their point of view the operation of that policy becomes a black box, with only a vague connection between their conduct and termination of their service. Without a clear statement from the OSP that X conduct will result in Y action, users are thus left to guess as to what conduct the OSP is seeking to discourage, which undermines any deterrent effect. Similarly, what sense would it make for Congress to condition eligibility for the safe harbors on adoption of a policy, the existence of which, because it is only in the mind of the OSP, can neither be proved nor disproved?

iii. Reasonable Implementation

There have been several cases in which courts have evaluated what qualifies as a "reasonably implemented" repeat infringer policy. Until recently, most such policies, no matter how loosely applied, have qualified. For example, in *Corbis Corp*., Amazon allowed a user selling goods through the Amazon marketplace to repeatedly create new accounts after termination for infringement.[561] To determine whether Amazon's repeat infringer policy was reasonably implemented, the district court asked "whether the service provider adopted a procedure for receiving complaints and conveying those complaints to users," and, if so, "whether the service provider nonetheless still tolerates flagrant or blatant copyright infringement by its users."[562] The court held that an infringer reappearing "under a different user name and identity" did not, on its own, "create a legitimate question of fact" as to whether Amazon had reasonably implemented its repeat infringer policy.[563] The court concluded that Amazon had reasonably implemented its

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[560] At a minimum, when an OSP's filtering technology repeatedly flags the same user for infringement, those users could (and likely should) be referred for human review. That would be consistent with section 512(m), which only says only that OSPs do not have an affirmative duty to "monitor[] its service or affirmatively seek[] facts indicating infringing activity" or to access material when to do so would violate another law, such as the Electronic Communications Privacy Act, but does not say that OSPs may simply ignore information of potential repeated infringement on their system once obtained.

[561] *See Corbis Corp.*, 351 F. Supp. 2d at 1103–04.

[562] *Id.* at 1102.

[563] *Id.* at 1104.

policy and granted Amazon's motion for summary judgment.[564] The court in *Corbis Corp.* set a high bar for copyright owners to clear in challenging OSP implementation of a repeat infringer policy: it is not enough to show that the OSP allowed a repeat infringer to repeatedly open new accounts; rather, the copyright owner needs to demonstrate that the OSP "could have used another, more effective and reasonable, method for preventing disingenuous users from re-accessing" their service.[565]

Courts have repeatedly held that reasonable implementation does not require perfect implementation.[566] In other words, mistakes may be made, but such mistakes are not necessarily fatal to the OSP's safe harbor eligibility. For example, the Ninth Circuit in *Motherless*, while acknowledging that a repeat infringer policy must actually result in the termination of the accounts of repeat infringers, nonetheless allowed the OSP significant discretion in implementing it. The *Motherless* court allowed the OSP to claim reasonable implementation of an unwritten repeat infringer policy that was followed in an "unsystematic and casual" manner by the OSP's sole operator.[567] The court acknowledged that an unwritten policy that is unsystematically applied may generate doubt about whether it has been reasonably implemented, "[b]ut," the court said, "doubt is not evidence."[568] The court then pointed to the fact that between 1,320 and 1,980 accounts had been terminated as evidence that the policy had been reasonably implemented.[569] A dissenting opinion, on the other hand, criticized the majority for "rel[ying] on 'the paucity of proven failures to terminate' as evidence" when "[t]he missing link is how many repeat infringers slipped through the massive cracks in the Motherless/Lange casual monitoring system. And, as the majority concedes, there is evidence in the record that repeat infringers slipped through these cracks."[570] The dissent concluded that, at a minimum, it could not be

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[564] *Id.* at 1103–04.

[565] *Id*. at 1103–04.

[566] *See Motherless*, 885 F.3d at 618 ("Eligibility for the safe harbor is not lost just because some repeat infringers may have slipped through the provider's net for screening them out and terminating their access."); *accord CCBill*, 488 F.3d at 1110 (holding that an OSP's repeat infringer policy was reasonably implemented even though its DMCA log of infringers was missing "a single page from [plaintiffs'] 'DMCA Log' . . . with some empty fields in the spreadsheet column labeled 'Webmasters [sic] Name'"); *Corbis Corp.*, 351 F. Supp. 2d at 1103 ("An infringement policy need not be perfect; it need only be reasonably implemented.").

[567] *Motherless*, 885 F.3d at 619.

[568] *Id*. The Ninth Circuit in *Motherless* appears to place the burden of proof regarding reasonable implementation of a repeat infringer policy on the plaintiff, despite having previously found that the burden of proof for asserting the section 512 safe harbors lies with the OSP. *See Fung*, 710 F.3d at 1039. Placing this burden of proof on the rightsholder is inconsistent with the wording of the statute, which makes clear that the safe harbors are an affirmative defense and that adoption and reasonable implementation of a repeat infringer policy is a "[c]ondition[] for eligibility." 17 U.S.C. § 512(i). *Cf. Cox*, 881 F.3d at 305 (noting that "[defendant] bears the burden of proof on the DMCA safe harbor defense; thus, [defendant] had to point to evidence showing that it reasonably implemented a repeat infringer policy"); *Grande Commc'ns*, 384 F. Supp. 3d and 754. *See also supra* n.443.

[569] *Motherless*, 885 F.3d at 618.

[570] *Id.* at 621–22 (Rawlinson, J., dissenting).

accepted that "a 'policy' that is unwrittten, uncommunicated, and often unimplemented" is reasonably implemented as a matter of law.[571]

Generally, to find that a policy has not been reasonably implemented, courts have required a copyright owner to demonstrate (i) that the OSP encouraged infringement or that the OSP's executives engaged in infringement that the OSP ignored;[572] (ii) that the OSP failed to maintain a system for receiving and responding to infringement notices, letting them "fall into a vacuum and to go unheeded";[573] or (iii) that the OSP did not implement a repeat infringer policy at all.[574] For example, in *Cox*, the Fourth Circuit found that an OSP has not reasonably implemented a repeat infringer policy when it "fails to enforce the terms of its policy in any meaningful fashion."[575] In another case, *Grande Communications*, music companies sued a mere conduit ISP for not terminating the accounts of users whose activity had been the subject of multiple notices.[576] The court concluded that the ISP's "utter failure to terminate any customers at all over a six-and-a-half-year period despite receiving over a million infringement notices and tracking thousands of customers as repeat infringers demonstrates that Grande [Communications] 'made every effort to avoid reasonably implementing [its] policy' and 'very clearly determined *not* to terminate subscribers who in fact repeatedly violated the policy.'"[577]

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[571] *Id*. at 622 (Rawlinson, J. dissenting).

[572] The Seventh Circuit in *In re Aimster Copyright Litigation* affirmed the district court's determination that Aimster did not "reasonably implement[]" its repeat infringer policy because, despite having such a policy, Aimster "invited" infringement. 334 F.3d 643, 655 (7th Cir. 2003); *see also In re Aimster Copyright Litig*., 252 F. Supp. 2d 634, 659 (N.D. Ill. 2002) ("Adopting a repeat infringer policy and then purposely eviscerating any hope that such a policy could ever be carried out is not an 'implementation' as required by § 512(i)."). In *EMI Christian Music*, the Second Circuit found that a reasonable jury might find that MP3tunes did not reasonably implement its repeat infringer policy because, in part, MP3tunes executives were encouraged to, and, in fact, did, engage in illegal downloading about which MP3tunes presumably knew but ignored. *See EMI Christian Music*, 844 F.3d at 88–90 (2d Cir. 2016).

[573] *Ellison v. Robertson*, 357 F.3d 1072, 1080 (9th Cir. 2004). In *Ellison*, the Ninth Circuit determined that AOL's implementation of its repeat infringer policy was lacking because AOL changed its infringement notification email address in the fall of 1999, but waited until April 2000 before updating its DMCA takedown contact info with the Copyright Office. Moreover, AOL failed to employ a forwarding system for old notifications once it corrected the address. *Id.*; *see also Disney Enters., Inc. v. Hotfile Corp*., No. 11-20427-CIV, 2013 WL 6336286, at *21–*22 (S.D. Fla. Sept. 20, 2013) (holding that the OSP did not reasonably implement a repeat infringer policy because, while it did create a policy communicated to users, it ignored any notices of infringement).

[574] *See Escape Media Grp*., 2015 WL 1402049, at *5–*13 (holding that threatening to terminate access is not sufficient and that the OSP's decision to deprive infringers of uploading privileges after a single strike, instead of terminating their accounts after multiple strikes, demonstrated that the OSP's repeat infringer policy was not reasonably implemented); *see also EMI Christian Music*, 844 F.3d at 90–91 (holding that a reasonable jury might find MP3tunes' repeat infringer policy to be unreasonably implemented in part because MP3tunes failed to keep track of repeat infringers because it "did not even try to connect known infringing activity of which it became aware through takedown notices to users who repeatedly [uploaded] files and created links," despite the ability to do so).

[575] *Cox*, 881 F.3d at 303.

[576] *Grande Commc'ns*, 384 F. Supp. 3d at 751–52.

[577] *Id*. at 755 (quoting *Cox*, 881 F.3d at 303).

The Office agrees that OSPs need latitude to adopt and implement repeat infringer policies that will serve their users; however, we note that Congress intended for OSP's repeat infringer policies to serve as an important deterrent for infringing activity, by ultimately terminating the accounts or access of repeat infringers.[578] The Office is of the opinion that such deterrence has been hampered by the courts' overly lenient application of section 512(i)(1)(A). To inhibit the types of activities that Congress sought to place outside of the section 512 safe harbors, enforcement of the repeat infringer requirement cannot be limited only to the most extreme failures.[579]

To be clear, the Office agrees that "reasonable" does not (and should not) mean "perfect." But the Office believes that, as currently interpreted, the repeat infringer requirement fails to address OSP actions that do not comport with the obligations that Congress intended to impose in exchange for the benefit of the safe harbors. By excusing even significant shortcomings in the implementation of a repeat infringer policy, the deterrent value of section 512(i) has been diminished. Further, allowing an OSP to claim reasonable implementation based on the "unsystematic and casual" administration of an unwritten repeat infringer policy creates an unworkable situation for rightsholders. If evaluating whether an OSP follows its own policy is critical to a court determining whether implementation was reasonable, and the OSP records neither the terms of its policy nor the claims of infringement made against users, by what metric can the court accurately evaluate whether the OSP reasonably implemented the policy?[580] For this reason, additional congressional clarity may be necessary.

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Overall, the bar for demonstrating reasonable implementation and appropriate circumstances has been set so low for OSPs as to be largely impractical. Only recently have rulings started to raise the bar a little, but the overall situation is troubling. For this reason, the Office recommends that Congress closely monitor how courts interpret the entire repeat infringer provision going forward, and notes that Congress may wish to consider legislation if the case law continues to place a high burden on rightsholders.

The Office wishes to raise one note of caution, however. Study participants point out, rightly, that colleges and universities which provide internet access and network services to the campus community may require a different approach.[581] The network access that universities

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[578] *See* S. REP. NO. 105-190, at 52 (1998); H.R. REP. NO. 105-551, pt. 2, at 61 (1998).

[579] *See, e.g.*, *Cox*, 881 F.3d 293; *Ellison*, 357 F.3d 1072; *Grande Commc'ns*, 384 F. Supp. 3d 743.

[580] This was a core concern of the dissent in *Motherless*. 885 F.3d at 621–22 (Rawlinson, J., dissenting).

[581] This proposal is consistent with the legislative history of section 512. *See* S. REP. NO. 105-190, at 20 (1998) ("What is more, nothing in this Act should be read to preclude a Federal court from taking into account the special circumstances of a non-profit educational institution in applying agency law to determine whether knowledge should be imputed to such an institution in its capacity as an online service provider.").

provide for college students is used for academic work, career searching and networking, and personal purposes, such as watching television or listening to music. For those students living in university-owned housing, it will often be difficult for the student to switch to another network ISP. Thus, one Study participant describes terminating a student's access to the university network as "tantamount to expelling them from the university."[582] For this reason, a number of Study participants argue that the standard for adoption of a repeat infringer policy should be different (and less stringent than that set forth by the Fourth Circuit in *Cox*) for university ISPs than for other OSPs, and in particular that colleges and universities should be afforded the discretion to define "repeat infringer" and determine what qualifies as "appropriate circumstances" with an eye towards their unique circumstances.[583]

Unlike other ISPs, Congress has required higher education institutions to develop written plans to effectively combat copyright infringement by network users, "including through the use of a variety of technology-based deterrents" and offering alternatives to P2P distribution of copyrighted material.[584] In adopting the Higher Education Opportunity Act, Congress noted the tension between two important facts: one, that college students with access to free, fast broadband represent a significant percentage of copyright infringers on the internet, and two, that internet access is particularly important to this class of users.[585] For this reason, the Office recommends that Congress monitor the effect of *Cox* on universities providing network access, particularly in communities where the university may be the only practical broadband provider for students.[586]

c) Safe Harbor Exclusions: Knowledge Requirements and Financial Benefit

In addition to the obligations that OSPs must meet to be eligible for one of the section 512 safe harbors, section 512 also includes limitations that may prevent web hosting and information location tool OSPs from taking advantage of the safe harbors.[587] First is the requirement that an OSP must lack both actual knowledge of infringement on its system, and "not be aware of facts or circumstances from which infringing activity is apparent." Second is the non-statutory rule that an OSP may not willfully blind itself to infringement occurring on its system. In the analyses

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[582] Tr. at 287:9–11 (May 12, 2016) (Peter Midgley, Brigham Young University). *See also* Tr. at 134:6–9 (Apr. 8, 2019) (Jonathan Band, LCA) ("[I]f you're a university student and you don't have access to the network, you can't get your homework. You can't get your assignments. You can't take your exam.").

[583] *See* Tr. at 133:18–134:5 (Apr. 8, 2019) (Jonathan Band, LCA); Tr. at 116:8–19 (Apr. 8, 2019) (Peter Midgley, Brigham Young University).

[584] Higher Education Opportunity Act § 493, 20 U.S.C. § 1094(a)(29) (2008).

[585] *See* H.R. REP. NO. 110-500, pt. 1, at 270–71 (2007).

[586] One Study participant argues that *Cox* was too high of a standard for *most* mere conduit ISPs, noting that in many communities there may be only one or two broadband ISPs available. *See* ACA, Additional Comments Submitted in Response to U.S. Copyright Office's Nov. 8, 2016, Notice of Inquiry at 11–13 (Feb. 21, 2017).

[587] 17 U.S.C. §§ 512(c)(1)(A), (d)(1).

below, the Office finds that these provisions, as currently interpreted, have contributed to unbalancing the overall section 512 system.

i. Knowledge Requirements

To qualify for the section 512 safe harbors, web hosts (section 512(c)) and information location tools (section 512(d)) must both lack "actual knowledge" that material or activity on their service is infringing and "not [be] aware of facts or circumstances from which infringing activity is apparent."[588] If these types of OSPs obtain either actual or red flag knowledge, they must act "expeditiously" to remove or disable access to infringing material or else risk liability.[589] The statute sets out specific rules, and the legislative history evinces congressional concern with OSPs ignoring infringing material or activity.[590] While Congress did not impose an obligation for OSPs to actively monitor for infringement, the Office believes that Congress' intent was to set up a system whereby an OSP must act upon any red flag knowledge or actual knowledge that it obtains.[591]

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[588] 17 U.S.C. §§ 512(c)(1)(A), (d)(1). This second standard is known as having "red flag knowledge."

[589] 17 U.S.C. §§ 512(c)(1)(A)(iii), (d)(1)(C).

[590] *See NII Copyright Protection Act of 1995 (Part 2): Hearings on H.R. 2441 Before the Subcomm. on Courts & Intellectual Prop. of the H. Comm. on the Judiciary,* 104th Cong. 15 (1996) (statement of Rep. Patricia Schroeder, Ranking Member, H. Subcomm. on Courts & Intellectual Prop.) ("I must also say that I would have to be persuaded of the merits of any liability changes that would have the effect of providing an incentive for ignorance. I have never been one to provide incentives for ignorance, so you are going to have to have a real hard sell if you want to incentivize ignorance and say we are going to reward the failure of a service provider to take reasonable, responsible steps to ensure that subscribers adhere to copyright law in the use of that service.").

[591] 17 U.S.C. §§ 512(c)(1)(A)(iii), (m). Many of the OSPs and user advocacy groups that participated in the Study appear to interpret section 512(m) as a shield that not only protects OSPs from being subject to an affirmative monitoring obligation, but also protects them from having any duty to act upon evidence of infringement of which they become aware, absent receipt of a takedown notice that complies with the requirements of section 512(c)(3) and identifies the specific location of the specific infringing material. Some courts, including the circuit court in *Veoh IV*, appear to be sympathetic to such a reading. *See supra* section VI.A.1.b.iii. Viewing section 512(m) in the context of the rest of section 512 does not support such a reading, however. Of note, section 512(m) is intended not as a protection for OSPs, but to protect the privacy of an OSP's *users*—the section is entitled "Protection of Privacy," and section 512(m)(2) states that an OSP will not have an obligation to access user communications in instances when it has a legal duty not to do so. But absent such a legal prohibition, section 512(m) does not *prohibit* an OSP from either monitoring its system or acting upon evidence of infringement that it gains on its own; instead, it simply provides that an OSP cannot lose its safe harbor for failing to engage in such monitoring "*except to the extent* consistent with a standard technical measure complying with the provisions of subsection (i)." 17 U.S.C. § 512(m) (emphasis added). The existence of some obligation to take action to investigate further upon obtaining evidence of infringement is entirely consistent with legislative history. *See* H.R. REP. NO. 105-551, pt. 1, at 26 (1998) ("[The knowledge standard] shall not be construed to condition the limitation [on liability] on monitoring a network for infringement or searching out suspicious information. Once one becomes aware of such information, however, *one may have an obligation to check further*.") (emphasis added).

This is consistent with the rest of section 512, including section 512(c)(1)(A), in which Congress imposed a duty on hosting providers to "act expeditiously to remove, or disable access to" material if it either has "actual knowledge that the material or an activity using the material on the system or network is infringing" or becomes "aware of facts or

Section 512's knowledge requirements were a critical part of the balance that Congress developed between rightsholders and OSPs. The requirements were intended to play a significant role in whether courts determine that an eligible type of OSP may actually claim the benefit of a safe harbor for a given alleged infringement. Thus, the way courts interpret the knowledge requirements has the potential to dramatically shape the availability of the safe harbors for hosting and information location tool OSPs. And, indeed, a significant amount of litigation during the past 20-plus years has focused on determining the degree of knowledge or awareness at which OSPs are obligated to act or else lose their safe harbor.[592] We turn now to three different issues within the knowledge requirements: the difference between actual knowledge and red flag knowledge; the willful blindness standard; and the extent to which two standards specific to section 512(c)-types of OSPs track the common law vicarious liability standard.[593]

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circumstances from which infringing activity is apparent." 17 U.S.C. § 512(c)(1)(A). Notably, the language of section 512(c)(1)(A) is *not* limited to knowledge or awareness of facts obtained via a takedown notice from a rightsholder or other third party. Section 512(c)(1)(C) states that an OSP has an obligation to remove infringing content expeditiously in the event it receives a compliant notice under section 512(c)(3). Sections 512(c)(1)(A) ("knowledge"), (c)(1)(B) ("right and ability to control"), and (c)(1)(C) (receipt of a compliant takedown notice) are fashioned to be separate analyses, the occurrence of which will place an OSP outside of the safe harbors. This interpretation is supported by the language of section 512(c)(3)(B)(i), which provides that a notice that fails to comply with the requirements of section 512(c)(3)(A) "shall not be considered under paragraph (1)(A) *in determining whether* a service provider has actual knowledge or is aware of facts or circumstances from which infringing activity is apparent." This language anticipates that an OSP could have either actual or red flag knowledge in the absence of a compliant notice, leading to the conclusion there are other ways for an OSP to gain knowledge that it is then obligated to act upon. 17 U.S.C. § 512(c)(3)(B)(i) (emphasis added). These provisions, taken together, support an interpretation that Congress intended OSPs to have an obligation act upon information regarding infringing activity even in the absence of a takedown notice under *some* circumstances. This interpretation is supported by the legislative history of the DMCA. *See* S. REP. NO. 105-190, at 45 (1998) ("A service provider wishing to benefit from the limitation on liability under subsection (c) must 'take down' or disable access to infringing material residing on its system or network of which it has actual knowledge or that meets the 'red flag' test, even if the copyright owner or its agent does not notify it of a claimed infringement."). Thus, reading section 512(m) to shield OSPs from having any duty to act upon evidence of infringement that they uncover, absent a takedown notice, would be in tension with the rest of section 512 and the clearly articulated intent of Congress.

[592] Indeed, judicial application of section 512's knowledge standards was a primary focus for rightsholders' criticism during the Study. *See, e.g.*, A2IM Music Community Initial Comments at 37 ("As a consequence of [court decisions interpreting willful blindness under section 512], rather than providing incentives for cooperation, the DMCA has provided incentives for Internet businesses to turn a blind eye to infringement, or even to build willful blindness into their business models"); MPAA Initial Comments at 31 ("The currently prevailing Circuit Court interpretations of 'actual' and 'red flag' knowledge misread the statutory provisions, undermine Congress's objective for a system of shared responsibility, encourage willful blindness, and are primarily responsible for the ineffectiveness of the section 512 system today.").

[593] While we note significant issues with courts' interpretation of the actual knowledge, red flag, and willful blindness standards below, we caution Congress against ratcheting up the standards too high, to the point that they sweep in generally conscientious OSPs. To guard against this, Congress may want to consider adding additional factors for consideration by the courts in making a determination on whether a particular OSP qualifies for one or more of the section 512 safe harbors, such as an evaluation of the OSP's intent or the frequency and severity with which the OSP ignores red flag knowledge in particular. It is important that any obligation is tailored to the intent and activities of the particular OSP. A personal blog to which users occasionally paste the contents of a newspaper article in the comment

(a) Actual Knowledge vs. Red Flag Knowledge

Congress did not define "actual knowledge" in section 512, nor did it discuss its scope in either the House or Senate Reports. But the concept of actual knowledge is well understood to mean *actual*—as distinct from red flag or constructive—knowledge. Though OSPs may obtain actual knowledge via receipt of a takedown notice that substantially complies with statutory requirements,[594] the legislative history explicitly states that a takedown notice is not a prerequisite for an OSP to obtain either actual or red flag knowledge—indeed, the House Committee Report "emphasizes" this point.[595] As Congress recognized, OSPs can obtain actual knowledge in a number of different ways: by personally using the service and uncovering infringing material or activity, having a monetizing system repeatedly identify a content match, or receiving an email that points out infringement of an unreleased work on the site, in the absence of undertaking to affirmatively monitor the service for infringements.

In the absence of actual knowledge, section 512 holds OSPs to a "red flag" knowledge standard.[596] The phrase "red flag" does not appear in the statute, but Congress used that phrase to refer to "facts or circumstances from which infringing activity is apparent."[597] Congress intended for this red flag standard to obligate OSPs to remove or disable access to infringing content for which they learned *enough* information to indicate a likelihood of infringement—but short of obtaining actual knowledge.

The House and Senate Reports describe red flag knowledge as knowledge that would make "infringing activity . . . apparent to a reasonable person operating under the same or similar circumstances."[598] The legislative history indicates that red flag knowledge entails an objective, reasonable-person standard for determining whether the facts or circumstances are enough to trigger a response, and it uses a subjective standard for determining whether the OSP was aware of those red flag facts or circumstances.[599] Congress intended for red flag knowledge to carefully balance the stated policy objective of not placing a burden on OSPs to "monitor its service or

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section is not, and should not be treated, the same as a website whose business model is premised on distributing primarily infringing content.

[594] *See* 17 U.S.C. §§ 512(c)(1)(A)(iii), (c)(1)(C).

[595] H.R. REP. NO. 105-551, pt. 2, at 54 (1998); *see also* S. REP. NO. 105-190, at 45 (1998).

[596] 17 U.S.C. §§ 512(c)(1)(A)(ii), (d)(1)(B).

[597] S. REP. NO. 105-190, at 44 (1998) ("Subsection (c)(1)(A)(ii) can be described as a 'red flag' test."); *see also* H.R. REP. NO. 105-551, pt. 2, at 53 (1998).

[598] S. REP. NO. 105-190, at 44 (1998); *see also* H.R. REP. NO. 105-551, pt. 2, at 53 (1998).

[599] *See* S. REP. NO. 105-190, at 44 (1998); *see also* H.R. REP. NO. 105-551, pt. 2, at 53 (1998).

affirmatively seek facts indicating infringing activity" with a requirement that an OSP take action if it "becomes aware of a 'red flag' from which infringing activity is apparent."[600]

Congress expressly stated that actual knowledge or red flag knowledge could be obtained without receiving a takedown notice.[601] OSPs could obtain red flag knowledge from merely recognizing infringing content on a site. The Senate and House Reports, in the parlance of late-'90s technology, talked specifically about internet directories,[602] saying that a directory provider would obtain red flag knowledge from viewing a "pirate" site and would then lose its safe harbor if the directory still linked to that site.[603] Congress said the goal was to exclude from the safe harbor directories that "refer Internet users to other selected Internet sites where pirate software, books, movies, and music can be downloaded or transmitted" when infringement "would be apparent from even a brief and casual viewing."[604] Congress noted that such sites may signal their infringing activity with "words such as 'pirate,' 'bootleg,' or slang terms in their uniform resource locator (URL) and header information."[605]

The internet directory example is illustrative, and it is applicable to both section 512(c) and (d) OSPs. If viewing a linked site and finding that it is dedicated to piracy would be red flag knowledge for a directory provider, it is logical that Congress intended similar indicia to be red flag knowledge for section 512(c) OSPs regarding their own sites as well. That might be an upload like "FULL [movie title] part 3" from a user with no affiliation to the studio or the film for content-hosting sites or links to the Pirate Bay or other dedicated piracy sites for information location services. It would also seem that, absent counter-notices, repeated takedown notices alleging infringement by a specific user—or even repeated flags by an OSP's filtering technology of a specific user's uploads or other activity—would likewise provide red flag knowledge.

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[600] S. REP. NO. 105-190, at 44 (1998); H.R. REP. NO. 105-551, pt. 2, at 53 (1998). *See also* S. REP. NO. 105-190, at 48 (1998); H.R. REP. NO. 105-551, pt. 2, at 57 (1998) (discussing section 512(d) and saying that a "service provider would have no obligation to seek out copyright infringement, but it would not qualify for the safe harbor if it had turned a blind eye to 'red flags' of obvious infringement").

[601] *See* S. REP. NO. 105-190, at 45 (1998); H.R. REP. NO. 105-551, pt. 2, at 54 (1998).

[602] The earliest methods for finding things on the web were internet directories, some of which contained only limited, often manually compiled, information about websites such as the title, URL, and some headers. While a handful of commercial search engines powered by web crawling technology were released a few years before passage of the DMCA, one of the most popular search sites at the time was still Yahoo!, which categorized many websites by hand. *See* Danny Sullivan, *Where are they Now? Search Engines We've Known and Loved*, SEARCH ENGINE WATCH (Mar. 4, 2003), https://www.searchenginewatch.com/2003/03/04/where-are-they-now-search-engines-weve-known-loved/; *How to Suggest Your Site*, YAHOO! INFORMATION (capture date: June 30, 1998), https://web.archive.org/web/19980630073429/http://www.yahoo.com/info/suggest/.

[603] S. REP. NO. 105-190, at 48 (1998); H.R. REP. NO. 105-551, pt. 2, at 57 (1998).

[604] S. REP. NO. 105-190, at 48 (1998); H.R. REP. NO. 105-551, pt. 2, at 58 (1998).

[605] S. REP. NO. 105-190, at 48 (1998); H.R. REP. NO. 105-551, pt. 2, at 58 (1998).

Congress' stated purpose for the red flag standard was to prevent OSPs from "be[ing] required to make discriminating judgments about potential copyright infringement" while at the same time requiring them to act to remove or disable access to infringing content that is "obviously pirate[d]."[606] What qualifies as red flag knowledge, and how that differs from actual knowledge, thus has major significance. If the red flag standard is too low, OSPs may not need to act to disable access or remove infringing content at any point short of developing actual knowledge; if the standard is too high, it may require OSPs to respond any time they develop even an inkling that content could be infringing. This single issue may have been the subject of the most frequent and significant debate between rightsholders and OSPs throughout the Study.

Stakeholders express sharply divergent views on how courts have understood both actual and red flag knowledge. With respect to actual knowledge, OSPs assert that courts have correctly required "specific" knowledge of "particular infringing activity" before having an obligation to remove or disable access to the material.[607] Rightsholders focus on a different issue regarding actual knowledge, stating that courts have improperly interpreted the actual knowledge standard by requiring that rightsholders take an affirmative step—*i.e.*, sending a takedown notice—to trigger it.[608]

On red flag knowledge, OSPs and user advocacy groups similarly agree that "the courts that have narrowly interpreted 'red flag' knowledge have been correct."[609] Some of these

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[606] S. REP. NO. 105-190, at 49 (1998); H.R. REP. NO. 105-551, pt. 2, at 58 (1998).

[607] Amazon Initial Comments at 9 (citations omitted); *see also* CTA Initial Comments at 5 ("A general awareness or 'willful blindness' standard for 'actual knowledge' or 'red flag knowledge' would place too high a burden on intermediaries that monitor their services in other ways that are required by law, so become generally aware that some content travelling or residing by virtue of the service is likely to be infringing.").

[608] *See, e.g.*, MPAA Initial Comments at 34 ("As discussed, the courts effectively limited what will suffice for actual knowledge to reviewing the contents of a takedown notice from the copyright owner."). As noted above, the legislative history of the DMCA explicitly *disclaims* an affirmative requirement for a rightsholder to send a takedown notice before enforcing their rights, and leaves open the possibility that an OSP *could* have actual or red flag knowledge obtained from other sources in the absence of such notice. *See, e.g.*, S. REP. NO. 105-190, at 45 (1998); H.R. REP NO. 105-551, pt. 2, at 54 (1998) ("[C]opyright owners are not obligated to give notification of claimed infringement in order to enforce their rights. However, neither actual knowledge nor awareness of a 'red flag' may be *imputed* to an OSP *based on information from a copyright owner or its agent* that does not comply with the notification provisions of new subsection (c)(3), . . . the limitation on liability set forth in new subsection (c) *may* [still] apply.") (emphasis added).

[609] OTW Initial Comments at 19. *See also* Amazon Initial Comments at 9 ("Congress developed the actual knowledge requirement with the intent to limit the liability of service providers and consciously avoid imposing upon them the burden to police the Internet. Courts have recognized Congress's intent, and have consistently interpreted Section 512 to fulfill these aims.") (citations omitted); Center for Democracy & Technology ("CDT") and the R Street Institute, Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015, Notice of Inquiry at 17 (Apr. 1, 2016) ("CDT/R St. Initial Comments") ("Every website or service that allows user-generated content operating at any scale knows that some users will inevitably post infringing content. Congress also knew this, which is why it created the DMCA safe harbor. If such general knowledge disqualified a service provider for the safe harbor, no service provider allowing users to post their own content would qualify for it."); Intel Corporation, Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015, Notice of Inquiry at 8 (Apr. 1, 2016) ("This interpretation both makes sense and distinguishes between the two types of knowledge; it does not render 'red flag' knowledge superfluous."); Internet

arguments are based upon an interpretation of the interplay between knowledge standards and section 512(m)'s lack of a duty to monitor.[610] OSPs note that multiple courts have, citing section 512(m), barred any requirement for OSPs to monitor for repeat infringers.[611] They argue that "shifting the burden away from rightsholders" by mandating monitoring or tracking requirements would "impair the current incentives for compliance with safe harbor conditions."[612] According to OSPs and user advocacy groups, even a standard that requires following up in limited circumstances requires too much of OSPs because "[e]ven in the case of specific uses of specific works, service providers are rarely in a position to know whether a use is licensed, unauthorized, or tolerated because it fits with a marketing strategy."[613]

OSPs reach this conclusion based on their interpretation of the purpose behind section 512: that section 512 exists primarily to ensure that the internet will flourish, and rightsholders bear the responsibility of identifying infringements for OSPs to takedown.[614] For example, in public comments filed in the Study, Google states that:

> Substantial investments have been made by OSPs and their investors predicated on the availability of the DMCA safe harbor, and court decisions have appropriately not upset

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Association Initial Comments at 25 ("Shifting the burden of identifying infringing content online to service providers under a generalized, broad knowledge test would unravel the shared responsibilities at the heart of the DMCA and remove the strong incentives in place for compliance with conditions that combat infringement.") (citations omitted); ICC Initial Comments at 5 ("Courts are interpreting these provisions correctly.").

[610] *See, e.g.*, CTA Initial Comments at 5; Tr. at 239:8–12 (May 12, 2016) (Ellen Schrantz, Internet Association) (stating that "courts understood what Congress understood in 1998, and that's that for the statute to effectively function well in the ecosystem that it does, there has to be that specific knowledge in order to square it legally with [section] 512(m)"). *But see supra* n.591 and accompanying text.

[611] *See* CTIA Initial Comments at 9–10; Engine et al. Initial Comments at 15 (favorably citing *CCBill*, that OSPs need not "affirmatively police its users for evidence of repeat infringement"); *see also* Bridy & Keller Initial Comments at 41–42 (citing *Io Grp., Inc. v. Veoh Networks, Inc.*, 586 F. Supp. 2d 1132 (N.D. Cal. 2008) for the proposition that section 512(i) "cannot be read in light of section 512(m) to impose on qualifying ISPs any affirmative duty to monitor their services to identify repeat infringers.").

[612] Internet Association Initial Comments at 20–21.

[613] CCIA Initial Comments at 21 (citation omitted).

[614] *See, e.g.*, Tr. at 297:20–22 (May 12, 2016) (Andrew Bridges, Fenwick & West LLP) (stating that the DMCA was about "stimulat[ing] the growth of the internet, and it was about cooperation in reducing the incidence of infringement"). Rightsholders, on the other hand, claim that too much emphasis has been put on the growth of the internet. *See, e.g.*, Tr. at 234:8–14 (May 12, 2016) (Ben Sheffner, MPAA) ("[P]art of the purpose of the DMCA was to provide protection to good, innocent service providers that acted in good faith to address infringement. The other half is that it was intended to provide copyright owners with an efficient and an effective way to address online infringement."); *see also* UMG Initial Comments at 13 ("Copyright owners currently shoulder virtually the entire burden of policing the Internet for infringements of their works, while service providers have been incentivized to turn a blind eye to rampant infringement occurring on their sites.").

> those reliance interests by interpreting the knowledge standards in a way that would swallow the safe harbor and inject legal uncertainty into the Internet economy.[615]

Similarly, the Center for Democracy and Technology and the R Street Institute assert that adopting a red flag knowledge standard that requires less than specific knowledge would eviscerate the section 512(c) safe harbor and "would destroy the cooperation between rightsholders and service providers envisaged by the statute."[616]

In contrast, rightsholders assert that red flag knowledge requires less specificity than the actual knowledge provision, and thus does not require rightsholder identification of every instance of infringing material before an OSP's duty is triggered.[617] But rightsholders worry that courts have effectively removed red flag knowledge from the statute by requiring knowledge of *specific* and *identifiable* infringements (down to the specific URL) pursuant to a takedown notice, and in doing so have altered the balance Congress sought to achieve.[618] Rightsholders allege that

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[615] Google Initial Comments at 14.

[616] CDT/R St. Initial Comments at 17.

[617] *See, e.g.*, AAP Initial Comments at 10 ("[A] notification containing a representative list of works serves as a red flag of infringement that obligates a service provider to find and remove such infringing material from its site in order to be eligible for safe harbor protection.") (citation omitted); Authors Guild Initial Comments at 19 ("The plain language of the statute does not require that knowledge of infringing material means knowledge of the location of a specific infringing copy or URL.").

[618] *See* A2IM Music Community Initial Comments at 35 ("Certain judicial interpretations of 'red flag' knowledge[] and 'willful blindness' under the DMCA have significantly undermined the effectiveness of Section 512. These decisions have given rise to a perverse universe where services are incentivized to take efforts to blind themselves to what is occurring over their services, and to take no action to prevent it. This is precisely the opposite of Congressional intent to 'preserve the strong incentives for service providers and copyright owners to detect and deal with copyright infringements that take place in the digital networked environment.'") (citation omitted); Copyright Alliance Initial Comments at 22–24 ("These courts' interpretation of the red flag standard is so restrictive that it has basically eliminated the carefully balanced burden allocation that Congress intended . . . . [T]he result is a toothless statute."); Tr. at 224:25–225:22 (May 2, 2016) (Troy Dow, Disney) ("I think that the Second and Ninth Circuit were clearly wrong deciding that you had to have item-specific knowledge that go down to the level of a URL . . . . I think that they clearly read those provisions of the statute down essentially to nullities and you have a standard now that requires either a showing of knowledge or a showing that someone actually participated in the infringement or induced the infringement, which by the way would kick you out of the statute for other reasons, so that again renders those provisions duplicative."). Some academic commenters supported rightsholders' criticism of how knowledge standards have been applied. *See* Matthew Barblan et al., Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015, Notice of Inquiry at 1 (Apr. 1, 2016) ("Copyright Law Scholars Initial Comments") ("Judicial interpretations of the red flag knowledge standard have disrupted the careful balance of responsibilities that Congress sought to create when it enacted the Digital Millennium Copyright Act. Instead of requiring service providers to take action in the face of red flags, courts have allowed service providers to ignore even the most crimson of flags. Unfortunately, this case law has created an unbalanced atmosphere where service providers are not sufficiently incentivized to work together with copyright owners to develop policies, procedures, and technology to prevent piracy."); Kernochan Initial Comments at 13 ("The requirement that a copyright owner show that service providers have red flag knowledge of, or are willfully blind to, the specific infringements complained of in the suit to deny them safe harbor protection creates a virtually insurmountable barrier, rendering section 512(c)(1)(A)(ii) essentially moot."); Tr. at 327:17–328:3 (May 12, 2016) (Devlin

the courts have conflated actual knowledge and red flag knowledge, rendering the statute's inclusion of red flag knowledge superfluous by holding that "evidence that a service provider knew its site was being used for rampant infringing activity triggered no obligation to act except where the service provider was provided with actual knowledge of specific infringing content at specific individual locations (URLs)—*i.e.*, the type of knowledge provided in a takedown notice."[619]

Public comments submitted by a group of copyright law scholars in the Study make a point closely related to the rightsholders' argument above, focusing on the different language Congress chose for actual and red flag knowledge.[620] They note that the statute's standard for actual knowledge is met when the OSP has "knowledge that the material or an activity using the material on the system or network is infringing"[621] or "knowledge that the material or activity is infringing,"[622] while the red flag knowledge standard is met when the OSP is "aware of facts or circumstances from which infringing activity is apparent."[623] This difference, the copyright law scholars argue, is crucial to understanding the two standards: while the statute uses a definite article—"the"—to refer to material or activity that would provide actual knowledge, it drops "the" to speak more generally about facts or circumstances that would create red flag knowledge. "In Congress's view," the comment concludes, "the critical distinction between the two knowledge standards was this: Actual knowledge turns on specifics, while red flag knowledge turns on generalities."[624]

Generally, courts have defined actual knowledge under section 512 as "specific knowledge of particular infringing activity."[625] In *Veoh IV*, the Ninth Circuit said that "the most

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Hartline, Center for the Protection of Intellectual Property) (claiming that courts have interpreted red flag knowledge "the wrong way").

[619] MPAA Initial Comments at 32 (citation omitted). *See also* Authors Guild Initial Comments at 18–19. Relatedly, the MPAA notes that, though not a duty to monitor, some courts have "required service providers to track DMCA notices so that they can identify repeat infringers." MPAA Initial Comments at 42. The MPAA notes that DMCA notices were "powerful evidence" of knowledge of infringing activity in *Cox*, and observed that the court in *Escape Media Group* looked to whether an OSP "keep[s] adequate records of infringement" and found a policy to be implemented inadequately where the OSP kept no records of repeat infringers. *Id.* at 42–43. The Office notes that such a requirement is also in tension with section 512(c)(3)(A)(ii)'s provision that a rightsholder can provide a notice that includes a "representative list" of its works that are being infringed on the website. *See infra* section VI.A.2.b.

[620] *See* Copyright Law Scholars Initial Comments at 3–5.

[621] 17 U.S.C. § 512(c)(1)(A)(i).

[622] 17 U.S.C. § 512(d)(1)(A).

[623] 17 U.S.C. §§ 512(c)(1)(A)(ii), (d)(1)(B).

[624] Copyright Law Scholars Initial Comments at 4.

[625] *Veoh IV*, 718 F.3d at 1021 ("Requiring specific knowledge of particular infringing activity makes good sense in the context of the DMCA, which Congress enacted to foster cooperation among copyright holders and service providers in dealing with infringement on the Internet.") (citation omitted); *see also Viacom Int'l, Inc. v. YouTube, Inc.*, 676 F.3d 19, 30 (2d Cir. 2012).

powerful evidence of a service provider's knowledge [is] actual notice of infringement from the copyright holder."[626] Both the Second and Ninth Circuits have applied a subjective test to actual knowledge. In other words, it is not enough that the OSP obtain specific knowledge of a particular activity that is infringing—the provider also must believe that the activity is, in fact, infringing.[627]

Courts have opined on the types of information that *do not* give rise to actual knowledge. Courts have found that "merely hosting a category of copyrightable content, such as music videos, with the general knowledge that one's services could be used to share infringing material, is insufficient to meet the actual knowledge requirement."[628] In reaching this conclusion, courts have pointed to notable cases related to contributory copyright infringement, such as *Betamax*[629] and *Napster*,[630] to find that copyright law does not presume that an OSP has actual knowledge based upon the mere fact that its service can be a platform for infringement.

Regarding red flag knowledge, courts have said it is not enough, for example, for an OSP to have a "general knowledge that one's services could be used to share unauthorized copies of copyrighted material."[631] Even if a user promotes its content as stolen or uses a URL signaling illicit content (*e.g.*, "illegal.net"[632]), the Ninth Circuit said these are not red flags because "describing photographs as 'illegal' or 'stolen' may be an attempt to increase their salacious appeal, rather than an admission that the photographs are actually illegal or stolen."[633] Nor, according to the Second and Ninth Circuits, does red flag knowledge follow from generalized knowledge of facts and circumstances from which the infringing nature of the activity should be obvious—the courts have said that both red flag and actual knowledge require *specific* knowledge of a *particular* infringement.[634] Interestingly though, the circuit court in *Veoh IV* said that although a notice alleging infringement from someone other than the copyright owner would not be proof of actual knowledge—because the OSP "would have no assurance that a third party who does not

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[626] *Veoh IV*, 718 F.3d at 1020 (citation omitted).

[627] *See Viacom*, 676 F.3d at 31; *Veoh IV*, 718 F.3d at 1025–26.

[628] *Veoh IV*, 718 F.3d at 1022.

[629] *Betamax*, 464 U.S. 417 (1984).

[630] *Napster*, 239 F.3d 1004 (9th Cir. 2001).

[631] *Veoh IV*, 718 F. 3d at 1021.

[632] *CCBill*, 488 F.3d at 1114.

[633] *CCBill*, 488 F.3d at 1114. *Compare* S. REP. NO. 105-190, at 48 (1998) ("Such pirate directories refer Internet users to sites that are obviously infringing because they typically use words such as 'pirate,' 'bootleg,' or slang terms in their uniform resource locator (URL) and header information to make their illegal purpose obvious to the pirate directories and other Internet users. Because the infringing nature of such sites would be apparent from even a brief and casual viewing, safe harbor status for a provider that views such a site and then establishes a link to it would not be appropriate."); H.R. REP. NO. 105-551, pt. 2, at 58 (1998).

[634] *See Viacom*, 676 F.3d at 31–32; *Veoh IV*, 718 F.3d at 1021–23.

hold the copyright in question would know whether the material was infringing"—it "could act as a red flag."[635]

In the seminal decision distinguishing red flag from actual knowledge, *Viacom International, Inc. v. YouTube, Inc.*, the Second Circuit stated that actual knowledge is judged by a subjective standard and red flag knowledge by both a subjective and an objective one:

> In other words, the actual knowledge provision turns on whether the provider actually or "subjectively" knew of *specific* infringement, while the red flag provision turns on whether the provider was subjectively aware of facts that would have made the *specific* infringement "objectively" obvious to a reasonable person.[636]

The key difference, according to the court, is that red flag knowledge could be broader because the OSP is judged against a reasonable OSP, while actual knowledge lacks an external measuring stick. The Second Circuit also found that YouTube's internal emails regarding site searches could provide red flag knowledge.[637] As discussed below, subsequent courts have consistently applied *Viacom* in a manner that has overall heightened the burden for demonstrating red flag knowledge.[638]

In following *Viacom*, courts have shown how that decision blurs the boundary between actual and red flag knowledge.[639] In *Columbia Pictures Industries, Inc. v. Fung*, for example, the Ninth Circuit said that red flag knowledge was apparent because the OSP had been "actively encouraging infringement, by urging his users to both upload and download *particular* copyrighted works, providing assistance to those seeking to watch copyrighted films, and helping his users burn copyrighted material onto DVDs."[640] Though the court did not go so far as to charge Fung with *actual knowledge*, and thus "Fung's inducing actions *do not necessarily* render him

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[635] *Veoh IV*, 718 F.3d at 1025.

[636] *Viacom*, 676 F.3d at 31 (emphasis added). *But see* S. REP. NO. 105-190, at 44 (1998) ("However, if the service provider becomes aware of a 'red flag' from which infringing activity is apparent, it will lose the limitation of liability if it takes no action. The 'red flag' test has both a subjective and an objective element. In determining whether the service provider was aware of a 'red flag,' the subjective awareness of the service provider of the facts or circumstances in question must be determined. However, in deciding whether those facts or circumstances constitute a 'red flag'—in other words, whether infringing activity would have been apparent to a reasonable person operating under the same or similar circumstances—an objective standard should be used.").

[637] *See Viacom*, 676 F.3d at 34.

[638] One participant at the New York Roundtable describes the result as "the red flag substitute for actual knowledge also requires red flag knowledge of specific infringing material." Tr. at 181:22–24 (May 2, 2016) (Bruce Joseph, Wiley Rein LLP for Verizon).

[639] *See, e.g.*, *Capitol Records, LLC v. Vimeo, LLC*, 826 F.3d 78, 93–94 (2d Cir. 2016); *Veoh IV*, 718 F.3d at 1025–26; *BWP Media USA Inc. v. Clarity Digital Grp., LLC*, Civ. No. 14–cv–00467, 2015 WL 1538366, at *9 (D. Colo. Mar. 31, 2015), *aff'd*, 800 F.3d 1175 (10th Cir. 2016); *Disney Enters., Inc. v. Hotfile Corp.*, No. 11–20427–CIV, 2013 WL 6336286, at *27 (S.D. Fla. Sept. 20, 2013).

[640] *Fung*, 710 F.3d at 1043.

per se ineligible for protection under § 512(c)," Fung would nevertheless be charged with red flag knowledge because the "material in question was sufficiently current and well-known . . . it would have been objectively obvious to a reasonable person that the material . . . was both copyrighted and not licensed to random members of the public."[641]

Similarly, a district court applying *Viacom* found, with respect to domains for which the OSP had received notices identifying ten or more infringing files, that "knowledge that a high percentage of content on a domain is infringing does not establish actual or red flag knowledge of *particular instances* of infringement."[642] The same district court also found that the defendant lacked red flag knowledge with respect to MP3s uploaded to the service before 2007, despite the fact that "[t]he major record labels offered no MP3s for sale until 2007, and [defendant] knew this," reasoning that even "[k]nowledge that a high percentage of a type of content is infringing is insufficient to create *red flag* knowledge."[643] The district court reached these conclusions because it found that the defendant did not have an affirmative duty to monitor, even though the defendant had broad knowledge of pervasive infringement.[644] However, on appeal, the Second Circuit suggested that there may be circumstances nearing a general knowledge of infringement that sufficiently approaches either red flag knowledge or willful blindness as to require action by an OSP. Importantly, though, the Second Circuit reiterated that even that level of red flag knowledge could not "give rise to an 'amorphous' duty to monitor in contravention of the DMCA," but instead that resulting duty would be "a time-limited, targeted duty—even if encompassing a large number of songs."[645]

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[641] *Id*. at 1043 (emphasis added).

[642] *Capitol Records, Inc. v. MP3tunes, LLC*, 48 F. Supp. 3d 703, 716 (S.D.N.Y. 2014), *aff'd in part, rev'd in part and remanded sub nom., EMI Christian Music Grp., Inc. v. MP3tunes, LLC*, 840 F.3d 69 (2d Cir. 2016), *withdrawn from bound volume, and aff'd in part, rev'd in part and remanded sub nom., EMI Christian Music Grp., Inc. v. MP3tunes, LLC*, 844 F.3d 79 (2d Cir. 2016) (emphasis added) (citations omitted). The court further found that defendant lacked willful blindness with respect to this type of material. *Id*. This holding was not addressed on appeal.

[643] *Id*. (emphasis added). The court further found that defendant lacked willful blindness with respect to pre-2007 MP3s because "in the context of the DMCA, willful blindness is limited by the express statutory disavowal of a duty to affirmatively monitor" contained in section 512(m). *Id*.

[644] *Id*.; *see also Veoh IV*, 718 F.3d at 1023 ("'[W]e do not place the burden of determining whether [materials] are actually illegal on a service provider,' and '[w]e impose no such investigative duties on service providers.'") (quoting *CCBill*, 488 F.3d at 1114). In an earlier holding, the *MP3tunes* district court *did* state that a jury could reasonably find that a limited duty of investigation arose upon receipt of an email with a specific blog title and a statement that "[a]lthough I don't like ratting myself out, everything I post is in clear violation of the DMCA . . . . please remove any MP3s that are linked to that site." *Capitol Records, Inc. v. MP3tunes, LLC*, No. 07 CIV. 9931, 2013 WL 1987225, at *3 (S.D.N.Y. May 14, 2013).

[645] *EMI Christian Music*, 844 F.3d at 93. The Second Circuit's second basis for holding that the jury could have found that the defendant had either red flag or willful blindness was the fact that the jury "could reasonably have found that MP3tunes conceived of and was designed to facilitate infringement based in part on evidence presented at trial that MP3tunes 'actively encourage[d] infringement.'" *Id.* at 93.

The Second Circuit's rationale in *Viacom* for the distinction between actual knowledge and red flag knowledge—that it is the difference between a subjective and objective standard[646]—does not mandate the result in that case, defining red flag knowledge as meaning knowledge of *specific* and *identifiable* infringements. Defining red flag knowledge in such a manner is not compelled by either the wording of the statute or the legislative history. As an example of red flag knowledge, Congress described a situation in which the OSP "was aware of facts from which infringing activity was apparent if . . . the location was clearly, at the time the directory provider viewed it, a 'pirate' site of the type described below, where sound recordings, software, movies, or books were available for unauthorized downloading, public performance, or public display."[647] This examination focuses on the *general nature of the site*, not whether the site infringed a particular copyright holders' rights. Congress thus intended for such "red flags" to create some limited duty of inquiry for an OSP to determine whether there is "objectively obvious" infringement. Such a limited duty would not contravene section 512(m)'s bar on a general duty to monitor, but would only be triggered in specific situations by awareness "of facts or circumstances from which infringing activity is apparent."[648] Indeed, in *EMI Christian Music*, the Second Circuit itself recognized that such a "time-limited, targeted duty" does not run afoul of section 512(m) when red flag knowledge is present.[649]

The Copyright Office questions whether the way in which courts have sought to reconcile the competing demands of red flag knowledge and section 512(m) fully comports with congressional intent. As Professor Peter Menell has stated, section 512(m):

> [I]s not inconsistent with general knowledge casting an OSP out of the safe harbor. It merely states that the DMCA does not force an OSP to monitor its service. An OSP is certainly free to monitor its service, and given the risks of UGC [user-generated content] sites not doing so, it is not surprising that Veoh and YouTube eventually chose to implement filtering technologies. Section 512(m) cannot be fairly read to limit subsection [512(c)(1)(A)](ii) to specific knowledge of infringing activity.[650]

This argument is consistent with the limited duty to follow up on red flag knowledge countenanced by the Second Circuit in *EMI Christian Music*, as well as with the instruction in the

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[646] *Viacom*, 676 F.3d at 31.

[647] H.R. REP. NO. 150-551, pt. 2, at 57 (1998).

[648] 17 U.S.C. § 512(c)(1)(A)(ii).

[649] *EMI Christian Music*, 844 F.3d at 93.

[650] Peter S. Menell, *Judicial Regulation of Digital Copyright Windfalls: Making Interpretative and Policy Sense of* Viacom v. YouTube *and* UMG Recordings v. Shelter Capital Partners 6 (U.C. Berkeley Pub. Law Research, Paper No. 2049445, 2012), http://ssrn.com/abstract=2049445. *See also supra* n.591.

legislative history of section 512(m) that "once one becomes aware of [suspicious] information, however, one may have an obligation to check further."[651]

The Office believes a standard that requires an OSP to have knowledge of a *specific* infringement in order to be charged with red flag knowledge has created outcomes that Congress likely did not anticipate. The Copyright Office reads the current interpretations of red flag knowledge as effectively removing the standard from the statute in some cases, while carving an exceptionally narrow path in others that almost requires a user to "fess up" before the OSP will have a duty to act. OSPs are correct that Congress likely did not intend to adopt a *general* awareness standard for red flag knowledge, since such a standard would consume many OSPs Congress otherwise sought to protect.[652] Yet courts have set too high a bar for red flag knowledge, leaving an exceptionally narrow space for facts or circumstances that do not qualify as actual knowledge but will still spur an OSP to act expeditiously to remove infringing content.

Significantly, Congress set up the actual knowledge standard as distinct from red flag knowledge, both through the structure of the statutory text (a disjunctive "or" is used to identify red flag knowledge as something separate from actual knowledge) and through the legislative history (which explicitly states that red flag knowledge can stand in for actual knowledge when actual knowledge is not present). But as interpreted now, there is little space between the two. To that point, at the Washington, D.C., public roundtable in April 2019, participants repeatedly were asked for an example of an activity that would be less than actual knowledge but would create red flag knowledge under the current judicial interpretations of the statute. Stakeholders were unable to identify a single activity.

Such a narrow interpretation of red flag knowledge minimizes an OSP's duty to act upon information of infringement and, in doing so, protects activities that Congress did not intend to protect. The end result is a shift in the balance that Congress originally struck. If Congress intends for the actual knowledge and red flag knowledge standards to be distinct, then Congress may wish add statutory language to that effect. If it chooses to do so, Congress may also wish to clarify whether the prohibition against a duty to monitor found in section 512(m) in fact releases OSPs from a duty to "check further" when it is presented with red flag knowledge of infringement, absent red flag knowledge related to a *specific* piece of copyrighted content or incidence of infringement.

The Office recognizes that the burden imposed on OSPs by the knowledge standards is likely to differ based on circumstances specific to the different types and sizes of OSPs. So too will the level of technological sophistication and availability of staff with the expertise required to address evidence constituting red flag knowledge. For example, a major platform that hosts

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[651] H.R. REP. NO. 105-551, pt. 1, at 26 (1998).

[652] The legislative history indicates that the "intended objective of this standard is to exclude from the safe harbor sophisticated 'pirate' directories," not OSPs who are aware their sites *may* be used to infringe. H.R. REP. NO. 150-551, pt. 2, at 58 (1998).

audiovisual works with a history of hosting infringing content may need to implement costly filtering technologies, while a small craft sales site might just need to assign content review to an existing employee. For this reason, the Office thinks that a reasonableness standard that accounts for each OSP's relevant characteristics would be appropriate for right-sizing section 512, and necessary to continue section 512's promotion of a diverse internet ecosystem.

(b) Willful Blindness

Absent actual knowledge or red flag knowledge, an OSP covered under the section 512(c) or 512(d) safe harbors will lose that protection if a copyright owner can prove that the OSP acted to avoid obtaining actual or red flag knowledge.[653] The willful blindness doctrine, as it is known, asks whether an OSP blinded itself to possible exposure to infringing activity by its users.[654]

Though the phrase does not appear in section 512, in a case of first impression, the Second Circuit in *Viacom* held that the common law concept of willful blindness applied to the question of whether an OSP lacks knowledge of infringing activity. The Second Circuit noted that statutes are not interpreted to abrogate common law doctrines unless the statute "speak[s] directly to the question addressed by the common law."[655] The *Viacom* court noted, in particular, that the doctrine of "willful blindness cannot be defined as an affirmative duty to monitor," and thus was not incompatible with section 512(m), but found that it could be used by rightsholders only to "demonstrate [the OSP's] knowledge or awareness of *specific instances* of infringement."[656] On remand, the district court further narrowed the willful blindness standard by collapsing the analysis with the red flag knowledge standard articulated by the Second Circuit, stating that "under the DMCA, what disqualifies the service provider from the DMCA's protection is blindness to '*specific* and *identifiable* instances of infringement.'"[657] Applying this standard, the district court found that YouTube had not been willfully blind because there was "no showing of willful blindness to specific infringements of clips-in-suit."[658] Subsequent court decisions have largely applied similar reasoning, finding that "willful blindness . . . require[s] a conclusion that

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[653] *See Viacom*, 676 F.3d at 35 (''[W]illful blindness doctrine may be applied, in appropriate circumstances, to demonstrate knowledge or awareness of specific instances of infringement under the DMCA.''); *Hotfile*, 2013 WL 6336286, at *27 ("[W]illful blindness under the common law—i.e., an intentional effort to avoid guilty knowledge—can equate to actual knowledge.").

[654] *See Viacom*, 676 F.3d at 35 (stating that willful blindness involves "conscious avoidance amounting to knowledge where the person was aware of a high probability of the fact in dispute and consciously avoided confirming that fact") (internal quotation marks omitted).

[655] *Viacom*, 676 F.3d at 35 (stating that the willful blindness doctrine was not abrogated by section 512) (citations omitted).

[656] *Viacom*, 676 F.3d at 35 (emphasis added) (citations omitted).

[657] *Viacom Int'l, Inc. v. YouTube, Inc.*, 940 F. Supp. 2d 110, 116 (S.D.N.Y. 2013) (emphasis added) (applying on remand the Second Circuit's standard for red flag knowledge to determining the existence of willful blindness and quoting *Viacom,* 676 F.3d at 32). For an analysis of the red flag knowledge standard, see *supra* section VI.A.1.c.i.(a).

[658] *Viacom Int'l, Inc. v. YouTube, Inc.*, 940 F. Supp. 2d 110, 117 (S.D.N.Y. 2013).

[the OSP] consciously avoided learning about specific instances of infringement."[659] In contrast, the Southern District of New York has, in at least one instance, found that an email stating that "it's not clear if [content from a user's site] is all copyright [sic] material . . . it probably is though," may be sufficient to raise a question of fact regarding willful blindness.[660]

Many rightsholders argue that *Viacom* and its progeny have set the willful blindness standard too high, questioning how an OSP can be willfully blind to a specific infringement if the conscious avoidance of information shields the OSP from ever learning about the specific infringement.[661] That standard, rightsholders claim, has had the consequence of discouraging OSPs from any proactive, voluntary infringement mitigation.[662] In contrast, OSPs and user advocacy groups argue that courts have correctly applied the doctrine by "requir[ing] conscious avoidance of facts concerning specific infringements."[663] They state that a less rigorous standard "that rests on generalized knowledge or imposes monitoring requirements on service providers would directly contradict the statutory language that no such obligation be placed on providers

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[659] *Cox*, 881 F.3d at 312 (quotation marks omitted); *see also Vimeo*, 826 F.3d at 98–99; *Hotfile*, 2013 WL 6336286, at *27; *cf. Veoh IV*, 718 F.3d at 1023 (holding that willful blindness cannot be found when the OSP has "promptly removed infringing material when it became aware of specific instances of infringement").

[660] *Capital Records, Inc. v. MP3tunes, LLC*, No. 07 Civ. 9931, 2013 WL 1987225, at *3 (S.D.N.Y. May 14, 2013) (internal quotes omitted).

[661] *See, e.g.*, Copyright Alliance Initial Comments at 23 ("By definition, then, a service provider that is willfully blind to infringing activity on its system has ensured that it will not have knowledge that is 'tailored to' the 'specific infringing content at issue,' because that is the very knowledge the service provider has consciously avoided."); Tr. at 259:15–21 (May 12, 2016) (George Borkowski, RIAA) ("[T]he specific knowledge concept has been so wrongfully extended that for example, in the *Vimeo* case, talking about willful blindness, the court said that you have to be willfully blind to specific instances of infringement. That's an impossibility. If you're aware of a specific infringement, you're not blind to it."); Tr. at 228:5–9 (May 2, 2016) (Joseph DiMona, Broadcast Music, Inc.) ("[I]n order to show someone who is willfully blind to something, you have to show that they were willfully blind to a specific work, which is a logical fallacy. I mean, you can't be blind to something that you know about."); *cf.* Kernochan Initial Comments at 13.

[662] *See* Authors Guild Initial Comments at 20 ("The result of this misplaced burden is that the safe harbors, intended to protect those service providers undertaking reasonable, good faith efforts to keep their sites piracy-free, instead shield bad actors. Even worse, service providers are penalized for trying to be good digital citizens and monitoring their sites for user-posted infringing content, because that knowledge leads to liability.") (citation omitted); MPAA Initial Comments at 35 ("That judicial interpretation also encourages willful blindness . . . . If a service provider is not liable unless it has knowledge about a specific instance of infringement—even though it is aware of pervasive copyright infringement on its site or service—it will do everything in its power to avoid gaining that knowledge."); Tr. at 41:23–42:11, 43:8–19 (May 3, 2016) (Steven Rosenthal, McGraw-Hill Education); Tr. at 202:22–24 (May 2, 2016) (Marcie Kaufman, ITHAKA/Artstor) ("And the problem when you look at willful blindness, well, all of a sudden, maybe they don't want to run their reports.").

[663] Facebook Initial Comments at 9. *See also* CCIA Initial Comments at 21 (arguing that Congress intended for the safe harbor to be unavailable only when an OSP turns a "blind eye to 'red flags' of obvious infringement") (internal quotes omitted) (citation omitted).

under Section 512(m), which necessarily helps form the frameworks of clarity fundamental to long-term success of the safe harbors."[664]

The Copyright Office is unpersuaded by the willful blindness standard articulated by the *Viacom* district court. The wording of section 512 does not offer specific guidance on how to address the inherent "tension between the doctrine of willful blindness and the DMCA's explicit repudiation of any affirmative duty on the part of service providers to monitor user content," and courts have not yet settled upon a consistent standard.[665] Prior precedent suggests that a finding of willful blindness requires something more than evidence that the OSP has "constructive knowledge of the fact that [their] customers may use that [service] to make unauthorized copies of copyrighted material."[666] Similarly, something more than mere negligence is likely required to establish willful blindness.[667] At the other end of the spectrum, an interpretation of section 512(m) that allows OSPs to assiduously avoid obtaining actual knowledge of specific infringements, regardless of the strength of evidence indicating a likelihood of infringing activity, does not appear to comport with congressional intent. Instead, the standard for willful blindness properly lies somewhere in the middle.

By requiring evidence of specific *instances* of infringing material, rather than facts relating to infringement of specific copyrighted content, the courts have adopted a bar for demonstrating an OSP's willful blindness that is both higher than the criminal willful blindness standard articulated by the Supreme Court[668] and higher than the standard of willful blindness traditionally applied in copyright cases.[669] As with red flag knowledge, section 512(m) has played

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[664] Internet Association Initial Comments at 26. *See also* CDT/R St. Initial Comments at 16 ("A general knowledge standard, particularly when coupled with an understanding of willful blindness that would require service providers to seek such knowledge, would evict nearly any service provider from the safe harbor if they do not either prevent the posting of user-generated content or monitor that content and the users who post it. That obligation would be at odds with the clear language of the statute and Congress' intent not to require service providers to engage in such monitoring.").

[665] *Capitol Records, Inc. v. MP3tunes, LLC*, No. 07 Civ. 9931, 2013 WL 1987225, at *2 (S.D.N.Y. May 14, 2013).

[666] *Betamax*, 464 U.S. at 439.

[667] *See, e.g.*, *Unicolors, Inc. v. Urban Outfitters, Inc.*, 853 F.3d 980, 991 (9th Cir. 2017 ("[T]o prove willfulness under the Copyright Act, the plaintiff must show (1) that the defendant was actually aware of the infringing activity, or (2) that the defendant's actions were the result of *reckless disregard* for, or willful blindness to, the copyright holder's rights.") (emphasis added) (quoting *Wash. Shoe Co. v. A-Z Sporting Goods Inc.*, 704 F.3d 668, 674 (9th Cir. 2012)). *But see Glob.-Tech Appliances, Inc. v. SEB S.A.*, 563 U.S. 754, 769 (2011) (stating, in a case regarding inducement of patent infringement, the articulated standard "give[s] willful blindness an appropriately limited scope that surpasses recklessness and negligence.").

[668] *Glob.–Tech Appliances, Inc. v. SEB S.A.*, 563 U.S. 754, 766 (2011) (a defendant may not "deliberately shield[] themselves from clear evidence of critical facts that are strongly suggested by the circumstances").

[669] *See, e.g.*, *Island Software & Comput. Serv., Inc. v. Microsoft Corp.*, 413 F.3d 257, 263–64 (2d Cir. 2005) (holding that evidence that some, but not all, of the copies supplied by a third party may be counterfeit products can support a finding of willful blindness of copyright infringement, and "even in the absence of evidence establishing the infringer's actual knowledge of infringement, a plaintiff can still prove willfulness by proffering circumstantial evidence that gives rise to an inference of willful conduct"); *In re Aimster Copyright Litig.*, 334 F.3d 643, 650 (7th Cir. 2003) (rejecting

a significant role in courts' articulation of a willful blindness standard. Using section 512(m) as the starting point for interpreting all other parts of section 512 has resulted in a willful blindness standard that is difficult to square with Congress' original intent.[670] In any event, the interpretation certain stakeholders urge—that willful blindness may be imputed to an OSP only if they have evidence of a specific incidence of infringement occurring at a specific URL—is unsupported by either the text of section 512 or the contours of the common law standard for willful blindness.[671]

The Copyright Office believes that the current articulation of the willful blindness standard is likely more narrow than appropriate. This is another instance in which the section 512 system may benefit from congressional action to provide clarity to the proper interaction between section 512(m) and the obligations placed on OSPs elsewhere in the statute.

It is worth noting, however, that there is a tension between strengthening the willful blindness doctrine as applied to section 512, and the value of active content moderation by service

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defendant's claim that use of encryption, which prevents the defendant from ascertaining what files are being shared, leads to the conclusion that defendant "lacked the knowledge of infringing uses that liability for contributory infringement requires," because "[w]illful blindness is knowledge"); *Knitwaves, Inc. v. Lollytogs Ltd.*, 71 F.3d 996, 1010 (2d Cir. 1995) (noting that "[k]nowledge of infringement may be constructive rather than actual; that is, 'it need not be proven directly but may be inferred from the defendant's conduct'") (internal citation omitted).

[670] Based on the standard of willful blindness articulated elsewhere in the law, a willful blindness standard *may* appropriately be somewhat stricter than a red flag knowledge standard, requiring additional evidence suggesting infringement. *Cf. Connors v. Iquique U.S.L.L.C.*, No. C05-334, 2005 WL 3007127, at *3 (W.D. Wash. Nov. 9, 2005) (noting that a jury could find that "[d]efendants' failure to ask follow-up questions in light of *numerous* red flags indicating heart disease shows willful blindness to Plaintiff's condition") (emphasis added). The Office does not believe, however, that either red flag knowledge or willful blindness properly applies only to knowledge of *a* specific *instance* of an act of infringement (such as a notice that a particular instance of infringing material is located at a specific URL), rather than knowledge of broader facts indicating acts of infringement with regard to specific copyrighted *material* (such as receipt of a notice identifying one URL at which infringing content is located, along with a statement that the particular song is not licensed for use on the platform but can be found at multiple URLs throughout the site). *See, e.g.*, *Capitol Records, Inc. v. MP3tunes, LLC*, No. 07 Civ. 9931, 2014 WL 503959, at *5 (S.D.N.Y. Jan. 29, 2014) (rejecting only evidence related to knowledge of infringements of songs not in suit, but allowing evidence regarding communications between plaintiff's employees discussing infringement of songs owned by plaintiff).

[671] While the Office acknowledges that receipt of a notification under section 512(c)(3)(A) does not, in fact, obligate an ISP to actually *remove* content, it does not follow that an ISP may simply *reject* such notices as some argued prior to the Fourth Circuit's decision in *Cox*. *See* Tr. at 65:17–68:13 (May 2, 2016) (Patrick Flaherty, Verizon; Jacqueline Charlesworth, U.S. Copyright Office) (confirming that Verizon's then practice, upon receiving a notice under section 512(c)(3)(A), was to reject the notice and not take any action). To date, no court has found ISPs to be exempt from the requirement to have a repeat infringer policy. As notices containing the information identified in section 512(c)(1)(A)(3) are one of the primary mechanisms for rightsholders to communicate users' infringing actions to an ISP, it logically follows that ISPs must accept such notices and consider the information contained therein, even absent a legal duty to act (unless the notice triggers the repeat infringer policy). Nor does the Office find persuasive support for the contention that a mere conduit ISP lacks willful blindness upon receiving multiple notices regarding a particular individual, in the absence of a court adjudication of infringement. As the Fourth Circuit has noted, *adjudication* of infringement is not necessary to trigger an obligation to apply the ISP's repeat infringer policy. *Cox*, 881 F.3d at 303. Thus, if an ISP elects to ignore infringement notices—and especially if it is their common practice—it is difficult to see how they are not willfully blinding themselves to infringements on their network.

providers promoted by section 230 of the Communications Decency Act.[672] If, as the result of moderating content to address violations of community standards, an OSP becomes aware of facts suggesting a likelihood of infringement, which in turn creates willful blindness liability for the OSP if it does not follow up on these "red flags," this may create a perverse incentive for the provider to reduce its content moderation activities.[673] Congress thus would need to balance these two competing policies.

ii. Financial Benefit/Right and Ability to Control

Section 512(c)(1)(B) articulates an additional requirement: hosting and information location OSPs shall not be liable "for infringement of copyright by reason of the storage at the direction of a user of material . . . if the service provider . . . does not receive a financial benefit directly attributable to the infringing activity, in a case in which the service provider has the right and ability to control such activity."[674] Through this language, Congress sought to codify both the "financial benefit" and "right and ability to control" prongs of the common law vicarious liability standard.[675]

With respect to the "financial benefit" portion of the test, the legislative history makes clear that Congress did not intend for an OSP's receipt of standard set-up fees or monthly service charges from users of its service to constitute a "financial benefit directly attributable to the infringing activity," even when those users ultimately utilize the service to engage in infringing

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[672] *See* 47 U.S.C. § 230(c)(2)(A) (eliminating civil liability for content moderation by OSPs).

[673] *See* CDT/R St. Initial Comments at 17 ("Interpreting actual and red flag knowledge to require specific knowledge of particular infringing activity allows service providers to investigate potential infringement on their services without risking loss of their protection under the safe harbor. In this sense, section 512 resembles section 230 of the Communications Act, which allows service providers to investigate potentially defamatory or otherwise unlawful content without that investigation placing them at risk of liability as the publisher of that content.").

[674] 17 U.S.C. § 512(c)(1)(B).

[675] H.R. REP. NO. 105-551, pt. 1, at 25–26 (1998) (stating that "[t]he financial benefit standard in subparagraph (B) is intended to codify and clarify the direct financial benefit element of vicarious liability," and that "[t]he 'right and ability to control' language in Subparagraph (B) codifies the second element of vicarious liability"). The Senate Report, which was published almost two weeks earlier, contains a significantly more truncated discussion of section 512(c)(1)(B) that omits any discussion of either the common law or the meaning of right and ability to control. *See* S. REP. NO. 105–190, at 44–45 (1998). Explaining the approach taken by the Committee in drafting section 512 generally, the Senate Report states that, while most cases addressing OSP liability to that point "have approached the issue from the standpoint of contributory and vicarious liability," the Committee chose not to "embark[] upon a wholesale clarification of these doctrines," but instead "decided to leave current law in its evolving state" and develop a series of safe harbors for OSPs instead. *Id*. at 19. Some litigants have argued that this change in language indicates that Congress no longer intended to codify the common law of vicarious liability. *See, e.g.*, *Viacom*, 676 F.3d at 37 ("In response, YouTube notes that the codification reference was omitted from the committee reports describing the final legislation, and that Congress ultimately abandoned any attempt to 'embark[ ] upon a wholesale clarification' of vicarious liability, electing instead 'to create a series of "safe harbors" for certain common activities of service providers.'") (quoting S. REP. NO. 105-190, at 19 (1998)).

activity.[676] Instead, Congress noted that this prong of the test would be satisfied if "the value of the service lies in providing access to infringing material."[677] Likewise, Congress specifically clarified that the "right and ability to control" element is not limited to "formal indicia" of control such as a contractual relationship, but rather is "intended to preserve existing case law that examines all relevant aspects of the relationship between the primary and secondary infringer."[678]

The case law, and participants in the Study, disagree over the extent to which section 512(c)(1)(B) does (or should) mirror the common law vicarious liability standard, especially with respect to the "right and ability to control" prong. Section 512(c)(1)(B) has been heavily litigated. As a general matter, courts have interpreted the financial benefit prong in a manner equivalent to the common law test for vicarious liability,[679] asking "whether the infringing activity constitutes a draw for subscribers, not just an added benefit."[680] The Ninth Circuit later added that this standard requires "a causal relationship between the infringing activity and any financial benefit a defendant reaps," but that "flat, periodic payments for service from a person engaging in infringing activities" do not rise to that level.[681] Courts have also found revenue received from displaying ads on the website that contains infringing material to be insufficient.[682] Courts typically have required evidence that customers visited a site *for* the infringing content or that the site owner either promoted the infringing content or marketed the site by pointing to infringing

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[676] H.R. REP. NO. 105-551, pt. 1, at 25–26 (1998).

[677] H.R. REP. NO. 105-551, pt. 1, at 25–26 (1998).

[678] H.R. REP. NO. 105-551, pt. 1, at 26 (1998).

[679] *See, e.g.*, *CCBill*, 488 F.3d at 1117 (holding that "'direct financial benefit' should be interpreted consistent with the similarly-worded common law standard for vicarious copyright liability"); *Wolk v. Kodak Imaging Network, Inc.*, 840 F. Supp. 2d 724, 748 (S.D.N.Y. 2012), *aff'd sub nom.*, *Wolk v. Photobucket.com, Inc.*, 569 F. App'x 51 (2d Cir. 2014).

[680] *Ellison v. Robertson*, 357 F.3d 1072, 1079 (9th Cir. 2004) (defining a "draw" as where "customers either subscribed because of the available infringing material or canceled subscriptions because it was no longer available"); *see also Warner Records Inc. v. Charter Commc'ns, Inc.*, No. 19-CV-00874, 2020 WL 1872387, at *4 (D. Colo. Apr. 15, 2020) (holding that "[i]f subscribers are attracted to Charter's services in part because of the ability to infringe on plaintiffs' copyrighted materials in particular, this is sufficient to show that the materials were 'a draw.'") (citations omitted). Where revenue comes from advertising, the inquiry goes to whether "the connection between the infringing activity and [the OSP's] income stream derived from advertising is sufficiently direct." *Fung*, 710 F.3d at 1045. *See also* Getty Initial Comments at 7 ("The direct financial benefit has been so narrowly construed that platforms that generate revenue through advertising placed on or adjacent to infringing content are not deemed to have directly benefited, even when the infringing content is clearly what drew the users to the site and what allowed the platform to generate substantial revenue.").

[681] *Fung*, 710 F.3d at 1044–45 (citations omitted).

[682] *BWP Media USA Inc. v. Clarity Digital Grp., LLC*, No. 14-CV-00467, 2015 WL 1538366, at *10 (D. Colo. Mar. 31, 2015), *aff'd*, 820 F.3d 1175 (10th Cir. 2016). *But see Venus Fashions, Inc. v. ContextLogic, Inc.*, No. 3:16-CV-907-J-39, 2017 WL 2901695, at *28 (M.D. Fla. Jan. 17, 2017) (holding that receiving a commission on sales, including of infringing articles, made by users through the website qualified as a direct financial benefit).

content.[683] As one participant at the roundtable states, the "direct financial benefit really is akin to aiding and abetting."[684] In one case, the Central District of California articulated a standard that goes beyond this test, holding that a plaintiff must show a direct link between the financial benefit and the infringing material at issue in the case, not merely a link to "infringing material in general" on the site.[685]

The primary dispute between rightsholders and OSPs on the application of section 512(c)(1)(B), however, concerns how this provision interacts with the other provisions of section 512, and, as a result, whether the "right and ability to control" standard under section 512 should deviate from the common law vicarious liability standard. In their comments, a few Study participants specifically note this potential conflict between section 512(c)(1)(B) and other provisions of section 512 as resulting in a lack of clarity for courts and stakeholders.[686]

Generally, rightsholders participating in the Study assert that Congress intended to preserve common law rules on vicarious liability, but that the courts have adopted a higher standard for demonstrating a right and ability to control.[687] In their comments, rightsholders broadly oppose an interpretation that "something more" beyond the ability to locate and remove infringing material is required to demonstrate the "right and ability to control,"[688] as required by the standards articulated in the Second and Ninth Circuits.[689] Nor do rightsholders believe that courts applied an adequate standard in the few cases in which courts have found the "right and ability to control," describing the actions that resulted in liability under these cases as merely "egregious cases" of conduct by OSPs.[690] Another rightsholder explains that "it is hard to imagine" which activities would qualify as having a right and ability to control, citing

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[683] *BWP Media USA*, 2015 WL 1538366, at *10; *see also Hempton v. Pond5, Inc.*, No. 3:15-CV-05696, 2016 WL 6217113, at *10 (W.D. Wash. Oct. 25, 2016), *reconsideration denied*, No. 3:15-CV-05696, 2017 WL 132453 (W.D. Wash. Jan. 13, 2017), *dismissed*, No. 17-35125, 2017 WL 3444065 (9th Cir. Mar. 15, 2017).

[684] Tr. at 267:15–16 (May 2, 2016) (Jim Halpert, DLA Piper for ICC).

[685] *Perfect 10, Inc. v. Giganews, Inc.*, No. CV 11-07098, 2014 WL 8628031, at *4 (C.D. Cal. Nov. 14, 2014), *aff'd*, 847 F.3d 657 (9th Cir. 2017). *Compare* H.R. REP. NO. 105-551, pt. 1, at 25–26 (1998) (noting that financial benefit would "include any such fees where the value of the service lies in providing access *to infringing material*," rather than a specific piece of infringing material) (emphasis added).

[686] *See, e.g.*, Authors Guild Initial Comments at 24; Kernochan Initial Comments at 14–16. *But see* MPAA Initial Comments at 38 ("Nothing in section 512's language, structure or history suggests that a service provider lacks the 'right and ability to control' unless it participates in the infringement.").

[687] *See, e.g.*, A2IM Music Community Initial Comments at 38–39; Authors Guild Initial Comments at 22–23.

[688] *See, e.g.*, Authors Guild Initial Comments at 23 (listing a series of fact patterns that courts have found do not constitute the right and ability to control, and noting that "[i]f none of these activities qualify as 'the right and ability to control,' it is hard to imagine what would"); MPAA Initial Comments at 36 ("The Second and Ninth Circuits, however, have incorrectly interpreted section 512 to require even more than that, rendering the standards nearly impossible to meet.").

[689] *See Viacom*, 676 F.3d at 38; *Fung*, 710 F.3d at 1045.

[690] A2IM Music Community Initial Comments at 38 n.126.

enforcement of policies that prohibit users from engaging in illegal or unauthorized content as activity that should qualify.[691] With so few OSPs found to have been ineligible on both the "financial benefit" and "right and ability to control" prongs, one rightsholder responds that the "bar has been set so high, services feel they can profit from infringing content with near impunity."[692] These rightsholders conclude that these decisions "have worked to enable and even encourage infringement to the detriment of copyright holders,"[693] by "remov[ing] [the OSPs'] incentive to work with copyright owners to detect and combat infringement."[694]

In contrast, OSPs state that courts have interpreted section 512(c)(1)(B) as Congress intended,[695] noting in particular that multiple circuits have concluded that it would be inconsistent with other provisions of section 512 to hold OSPs to a common law vicarious liability standard.[696] In fact, one commenter notes that "secondary liability theories were exactly what Congress intended to protect intermediaries from with the DMCA."[697] OSPs, moreover, credited courts' interpretations of section 512(c)(1)(B) with facilitating the development of online platforms by affording latitude for generating services that are beneficial to both users and rightsholders.[698]

A few OSPs in their comments claim that the greater potential for liability associated with the common law vicarious liability standard would ultimately discourage compliance with section 512.[699] OSPs typically implement compliance programs in order to receive the protection of the safe harbor, they assert, and in doing so, they provide benefits to rightsholders through

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[691] Authors Guild Initial Comments at 23.

[692] A2IM Music Community Initial Comments at 39.

[693] *See* Getty Initial Comments at 7; MPAA Initial Comments at 39 ("The courts' erroneous construction of the financial benefit/right and ability to control provisions has negative consequences").

[694] MPAA Initial Comments at 39.

[695] *See, e.g.*, CCIA Initial Comments at 22; Google Initial Comments at 14; Internet Association Initial Comments at 27; ICC Initial Comments at 5; SoundCloud Operations, Inc., Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015, Notice of Inquiry at 15 (Apr. 1, 2016) ("SoundCloud Initial Comments").

[696] *See, e.g.*, ICC Initial Comments at 5 (saying that section 512(c) "[did] not simply recapitulate the standard for vicarious liability"); OTW Initial Comments at 19 ("[C]ourts have reached the right conclusions . . . [by] eschewing interpretations that would find such an ability [of control] from the mere ability to comply with the takedown procedure."); SoundCloud Initial Comments at 15; *see also Veoh IV*, 718 F.3d at 1028 n.17 (collecting cases); *CoStar Grp., Inc. v. LoopNet, Inc.*, 373 F.3d 544, 555 (4th Cir. 2004). OSPs largely address this potential inconsistency by arguing that Congress never intended a vicarious liability interpretation, thus eliminating any conflict.

[697] CCIA Initial Comments at 22.

[698] *See* Facebook Initial Comments at 9. Google claims that, in contrast, a vicarious liability standard "would have rendered the safe harbors ineffective . . . and potentially subjected OSPs to strict liability for infringing activity by [a] tiny minority of users," which "would have drastically changed the nature of online platforms" to the detriment of the tech industry and non-infringing users. Google Initial Comments at 14–15; *see also* ICC Initial Comments at 5 ("[B]ecause the vicarious liability standard for copyright infringement is unacceptably uncertain in the Internet context . . . Congress chose to enact [section 512(c)].").

[699] *See, e.g.*, CCIA Initial Comments at 23; Google Initial Comments at 14–15.

"access to expeditious extra-judicial takedowns."[700] CCIA states that, if liability was imposed under the common law standard, the protection that the safe harbor offers would be essentially nullified, and OSPs would thus lack the incentive to assist rightsholders with the efficient removal of infringing content, thereby harming both parties.[701] Similarly, Facebook explains that "platforms need the latitude to optimize the appearance and organization of user-generated content in a manner they deem appropriate and that users expect" by controlling the presentation of content.[702]

In its comments, the Kernochan Center notes the tension between section 512(c)(1)(b) and other provisions of section 512(c), noting that "[t]o qualify for the statutory exemption . . . the service provider must have the ability to block access . . . . [b]ut if the ability to block access also meets part of the standard for disqualification from the exemption, then the statute would be incoherent."[703] Thus, the Kernochan Center reasons, the "right and ability to control" provision "must mean something more than [the] ability to block access."[704]

Addressing this question, the Second Circuit in *Viacom* acknowledged that "[t]he general rule with respect to common law codification is that when 'Congress uses terms that have accumulated settled meaning under the common law, a court must infer, unless the statute otherwise dictates, that Congress means to incorporate the established meaning of those terms.'"[705] Nonetheless, the Second Circuit rejected "the common law vicarious liability standard, [that] the ability to block infringers' access to a particular environment for any reason whatsoever is evidence of the right and ability to supervise."[706] Instead, the court found that section 512(c)(1)(B) "requires something more than the ability to remove or block access to materials posted on a service provider's website," such as the "service provider exerting substantial influence on the activities of users."[707]

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[700] CCIA Initial Comments at 22–23.

[701] *See* CCIA Initial Comments at 22–23.

[702] Facebook Initial Comments at 9.

[703] Kernochan Initial Comments at 14.

[704] Kernochan Initial Comments at 14.

[705] *Viacom*, 676 F.3d at 37 (quoting *Neder v. U.S.*, 527 U.S. 1, 21 (1999)).

[706] *Id*. (quotation marks omitted) (quoting *Arista Records LLC v. Usenet.com, Inc*., 633 F. Supp. 124, 157 (S.D.N.Y. 2009)).

[707] *Viacom*, 676 F.3d at 38 (citations omitted); *see also Veoh IV*, 718 F.3d at 1030 (concluding that the ability to remove infringing content or search for it, to implement filtering systems, or to enforce rules against types of content do not meet the threshold for the right and ability to control); *Viacom Int'l Inc. v. YouTube, Inc.*, 940 F. Supp. 2d 110, 119–21 (S.D.N.Y. 2013) (concluding that "YouTube's decisions to remove some but not all infringing material, by its efforts to organize and facilitate search of the videos appearing on the site, and by its enforcement of rules prohibiting, e.g., pornographic content" did not amount to substantial influence); *Greg Young Publ'g, Inc. v. Zazzle, Inc.*, No. 2:16-CV-04587, 2017 WL 2729584, at *8 (C.D. Cal. May 1, 2017) (noting that "'[s]ubstantial influence' . . . will be found where the service provider plays an active role in selecting, monitoring, or marketing user content").

Justifying this "something more" requirement, the Second Circuit explained that adoption of the common law vicarious liability standard would "render [section 512] internally inconsistent."[708] In support of this conclusion, the Second Circuit pointed to section 512(c)(1)(C), which requires OSPs to "expeditiously . . . remove, or disable access to" material claimed to be infringing upon notice, in order to qualify for the safe harbor. The Second Circuit reasoned that an OSP, upon taking such an action, would be "admitting the 'right and ability to control' the infringing material" and thus disqualified under section 512(c)(1)(B).[709] The court said that "if Congress had intended [section] 512(c)(1)(B) to be coextensive with vicarious liability, 'the statute could have accomplished that result in a more direct manner.'"[710] The Ninth Circuit in *Veoh IV*, citing *Viacom*, likewise held that in order to have the "right and ability to control," the OSP must exert "substantial influence on the activities of the users" and such substantial influence may include "high levels of control over activities of users . . . [o]r it may include purposeful conduct."[711]

In the few cases finding that an OSP had a right and ability to control the infringing activity, the courts appear to have required affirmative steps by the OSP, entailing some active involvement in the infringing activity.[712] For example, the Ninth Circuit in *Fung* found an OSP to have had "control" under section 512(c)(1)(B) because he "organized torrent files on his sites using a program that matches file names and content with specific search terms describing material likely to be infringing . . . [and] personally assisted [users] in locating [likely infringing] files."[713] As this activity "went well beyond merely locating and terminating users' access to infringing material," the court found that Fung's activity met the "right and ability to control" prong of section 512(c)(1)(B).[714]

The Copyright Office does not believe that Congress intended to subject an OSP to liability under section 512(c)(1)(B) for either operating in the normal course of business or complying with

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[708] *Viacom*, 676 F.3d at 37.

[709] *Id.* (citing 17 U.S.C. §§ 512(c)(1)(A)(iii), (c)(1)(C)).

[710] *Id*. (quoting *Veoh III*, 667 F.3d at 1045). *See also Corbis Corp.*, 351 F. Supp. 2d at 1110 ("Courts have routinely held that the right and ability to control infringing activity, as the concept is used in the DMCA, cannot simply mean the ability of a service provider to remove or block access to materials posted on its website or stored in its system.") (quotation marks omitted).

[711] *Veoh IV*, 718 F.3d at 1030 (citations omitted).

[712] *See Fung*, 710 F.3d at 1046; *Greg Young Publ'g*, 2017 WL 2729584, at *8 (finding the defendant had "the right and ability to control the types of products it produced" because the defendant was "actively involved in selecting the products that are sold, pricing those products, selling the products, manufacturing the products, inspecting the products, and finally packaging and delivering the products."); *Gardner v. CafePress Inc.*, No. 3:13-CV-1108, 2014 WL 794216, at *9 (S.D. Cal. Feb. 26, 2014) (stating that being "actively involved in the listing, sale, manufacture, and delivery of items offered for sale" on one's website may provide a defendant with the right and ability to control).

[713] *Fung*, 710 F.3d at 1046.

[714] *Id*.

a takedown notice. But the Office is not sure that current interpretations of this section are fully in line with congressional intent.

With respect to the financial benefit prong, although most courts appear to adhere to the common law standard,[715] the Copyright Office questions the Central District of California's formulation of the financial benefit prong as requiring a plaintiff to show a direct link between the financial benefit and the infringing material at issue in the case.[716] There does not appear to be support for such a requirement in either the common law of vicarious liability or the legislative history of section 512. Nor do the cases cited by the Central District support this proposition. For example, one of the cases the court cites to for this interpretation of financial benefit is *Napster*[717] The Central District of California appears to be the only court to interpret the cited language, namely that "[f]inancial benefit exists where the availability of infringing material acts as a 'draw' for customers," as requiring a showing that customers of the site value not just infringing material generally, but the plaintiff's material specifically.[718] The Central District's standard is not only unsupported, but would be fundamentally unworkable in practice. Trying to parse the exact infringing work that drew a particular user to a site would be nearly impossible, unless the plaintiff went through the time and expense of identifying and deposing a large number of the site's users. Placing such a requirement on a plaintiff would be at odds with the animating purpose underlying vicarious liability.[719] Instead, the Office is of the opinion that a more appropriate test for financial benefit is to ask whether the existence of infringing material on the site is one of the primary draws for users, and whether the plaintiff's works were infringed by being performed or distributed through the site.

The Copyright Office acknowledges that determining the proper standard for the right and ability to control prong is somewhat more difficult, and concedes that there is some degree of

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[715] The Second Circuit has formulated the common law test as: "[w]hen the right and ability to supervise coalesce with an obvious and direct financial interest in the exploitation of copyrighted materials—even in the absence of actual knowledge that the copyright monopoly is being impaired—the purposes of copyright law may be best effectuated by the imposition of liability upon the beneficiary of that exploitation." *Shapiro, Bernstein & Co. v. H.L. Green Co.*, 316 F.2d 304, 307 (2d Cir. 1963) (internal citations omitted).

[716] *Perfect 10, Inc. v. Giganews, Inc.*, No. CV 11-07098, 2014 WL 8628031, at *4 (C.D. Cal. Nov. 14, 2014), *aff'd*, 847 F.3d 657 (9th Cir. 2017). *Cf.* H.R. REP. NO. 105-551, pt. 1, at 25–26 (1998) (noting that financial benefit would "include any such fees where the value of the service lies in providing access *to infringing material*," rather than a specific piece of infringing material) (emphasis added).

[717] *Napster*, 239 F.3d 1004 (9th Cir. 2001).

[718] *Perfect 10, Inc. v. Giganews, Inc.*, No. CV 11-07098, 2014 WL 8628031, at *3–*4 (C.D. Cal. Nov. 14, 2014), *aff'd*, 847 F.3d 657 (9th Cir. 2017).

[719] As the Supreme Court noted, "[w]hen a widely shared product is used to commit infringement, it may be impossible to enforce rights in the protected work effectively against all direct infringers, [so that] the only practical alternative [is] to go against the device's distributor . . . for secondary liability on a theory of contributory or vicarious infringement." *Grokster*, 545 U.S. at 929–30.

tension between section 512(c)(1)(B) and other provisions in section 512.[720] Nonetheless, the Office is unconvinced that Congress, in drafting section 512, intended to abrogate the common law standard for right and ability to control to require "something more."[721] For this reason, the Office is of the opinion that the right and ability to control prong should correctly be interpreted in accordance with the common law standard.[722]

This does not mean, however, that OSPs could (or should) be held liable merely because they have the "ability to block infringers' access to a particular environment for any reason whatsoever."[723] Those courts that have found a right and ability to control under a test other than that articulated in *Viacom* and *Veoh IV* have done so upon a showing of something more than having the ability to deny admittance to the general public.[724] Outside of the section 512 cases, courts generally have not found that defendants had a right and ability to control based merely on a showing that the defendants *could* control what members of the public access their facilities. Instead, such decisions typically rest upon a finding that a contractual or other close relationship exists between the infringer and the defendant, such as a concessionaire that rents space inside of a department store[725] or a band that is managed by and performs at a concert promoted by the defendant.[726] Even the line of dance hall cases, which are typically cited for the proposition that right and ability to control results when the defendant has an ability to "control the premises," in fact provide secondary liability for the actions of performers chosen and allowed to perform by the owner, not the actions of general members of the public who happen to be in attendance.[727]

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[720] As we have shown throughout this Report, this tension is not an uncommon occurrence.

[721] *Neder v. U.S.*, 527 U.S. 1, 21 (1999).

[722] The Office is sympathetic to concerns that adoption of the common law standard could significantly broaden the number of OSPs that may find themselves liable under section 512(c)(1)(B). The Office is not convinced, however, that the threat is as great as the Second Circuit, and some stakeholders, envision. Importantly, the right and ability to control the infringement is not the only element a plaintiff would need to show in order to hold an OSP liable. The Office finds it noteworthy that neither the Second and Ninth Circuits, nor the stakeholders that raise the specter of liability gone wild, address the limiting effect of the financial benefit prong. Certainly, if courts began to significantly loosen the standard for determining whether an OSP's financial benefit is directly related to infringing material that appears on its site, such a fear would not be unfounded. However, such an expansion of the doctrine would be incompatible with both the common law articulation of the standard and the clear legislative history of section 512.

[723] *Viacom*, 676 F.3d at 37 (quoting *Arista Records LLC v. Usenet.com, Inc*., 633 F. Supp. 124, 157 (S.D.N.Y. 2009)).

[724] *See, e.g.*, *Cybernet*, 213 F. Supp. 2d at 1173 (finding the OSP to have a right and ability to control where it instituted a monitoring program that provided users with "detailed instructions regard[ing] issues of layout, appearance, and content," forbade certain content, and actively denied access to users who failed to comply with its instructions). One of the more expansive definitions that the Office identified during the Study was from the Ninth Circuit's opinion in *Perfect 10, Inc. v. Amazon.com, Inc*., 508 F.3d 1146 (9th Cir. 2007). There, the court held that "right and ability to control" can be found when the defendant has "a closed system *requiring user registration*, and could *terminate its users' accounts* and block their access to the [defendant's] system." *Id*. at 1174 (emphasis added) (citations omitted). Even this standard, however, requires more than the mere ability to block users from the site.

[725] *H.L. Green Co*., 316 F.2d at 308–09.

[726] *Gershwin Publ'g Corp. v. Columbia Artists Mgmt., Inc.*, 443 F.2d 1159, 1160–63 (2d Cir. 1971).

[727] *See, e.g.*, *Dreamland Ball Room, Inc. v. Shapiro, Bernstein & Co*., 36 F.2d 354, 355 (7th Cir. 1929).

For this reason, the Office is not convinced that the proper standard should be *significantly* broader than that articulated by the Second and Ninth Circuits. Vicarious liability *should not* extend to merely providing a service that has potentially infringing uses; as the Supreme Court noted, it is properly limited to "instances of more acute fault than the mere understanding that some of one's products will be misused."[728]

For this reason, while the Copyright Office acknowledges that there could be some room for Congressional clarification to resolve the perceived tension between section 512(c)(1)(B), section 512(m), and the common law standard for vicarious liability, the Office cautions that lowering the bar for either "financial benefit" or "right and ability to control" too far may overly disrupt the financial risk calculation underlying some online services developed since the enactment of section 512. Because most OSPs are for-profit (or at least display ads), significant expansion of this doctrine could threaten to swallow the safe harbors, creating significant tension between the two fundamental goals outlined by Congress when adopting the section 512 framework. For this reason, the Office is of the opinion that modifications to section 512(c)(1)(B) would have less beneficial impact on restoring the section 512 balance than other options discussed in this Report.

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Overall, the Copyright Office finds that the cumulative effect of courts' interpretations of how an OSP qualifies for a particular safe harbor, what the OSP's obligations are with respect to repeat infringers, and the application of the various safe harbor exclusions in section 512(c)(1) has been to increase the burden on rightsholders seeking to enforce their rights online. The cumulative effect has been to either broaden the safe harbors or narrow the safe harbor exclusions, ultimately altering the balance of the equities as originally weighed by Congress in 1998. The Copyright Office therefore would support a Congressional effort to clarify select provisions of section 512 in order to restore its original balance.

2. Notice-and-Takedown Process

In addition to looking at the scope and qualifications for the section 512 safe harbors, the Study examined various aspects of the notice-and-takedown process itself. Congress envisioned the notice-and-takedown process as "a formalization and refinement of a cooperative process that has been employed to deal efficiently with network-based copyright infringement."[729] Does the notice-and-takedown process today operate in a manner that fulfills this vision?

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[728] *Grokster*, 545 U.S. at 932–33. One potential option for addressing this concern could be to add an additional prong to the test, utilizing language similar to that of § 1201(a)(2) to evaluate whether the OSP's service is "primarily designed" to facilitate infringement or "has only limited commercially significant purpose or use" other than to facilitate infringement. 17 U.S.C. §§ 1201(b)(1)(A), (B). Such a change would be consistent with the vicarious liability standard articulated by the Supreme Court in *Bexamax*, 464 U.S. 417, 439–43 (1984).

[729] S. REP. NO. 105-190, at 45 (1998); H.R. REP. NO. 105-551, pt. 2, at 54 (1998).

Rightsholders generally note that large-scale infringement has rendered the notice-and-takedown process as "burdensome and ineffective"[730] in addressing online infringement, highlighting the sheer number of notices and the time, financial resources, and effort demanded by the process.[731] Rightsholders also extensively discussed the impact of certain judicial interpretations of section 512 that have shaped the functioning of the notice-and-takedown process, asserting that the result of such rulings is that courts have wrenched the notice-and-takedown process out of alignment with Congress' initial intentions.[732]

OSPs report, however, that the growth in the volume of notices does not reflect a growth in infringement but that "free, automated tools developed by service providers and a growing market of enforcement vendors have reduced cost, increased efficacy, and thus increased demand for takedowns."[733] One OSP asserts in its comments that changes to the current system, such as legislative prescriptions of uniformity in the takedown process, "ultimately would interfere with, rather than promote, positive innovation for all relevant stakeholders."[734] Another OSP cautions against changes to the current notice-and-takedown practice, which would upset the balance of the "roles, responsibilities, liabilities and immunities of all impacted stakeholders."[735]

The following sections will examine the statutory framework of the notice-and-takedown process, including provisions relating to (a) notice requirements, (b) representative list and identifiable location information, (c) knowing misrepresentation and good faith requirements, (d) fair use, (e) adoption of non-section 512 notification requirements by some OSPs, and (f) timeframes in the notice-and-takedown process. This includes examining the market factors, technological developments, and judicial interpretations of section 512 that have shaped these various parts of the process.

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[730] AAP Initial Comments at 5.

[731] *See* Copyright Alliance Initial Comments at 9.

[732] *See, e.g.*, MPAA Initial Comments at 18 ("First, if courts interpreted section 512's knowledge, representative list, and expeditious removal requirements as Congress intended, the notice-and takedown process would be more effective."); UMG Initial Comments at 2 ("Instead, the protections of Section 512, as interpreted by the courts, have overwhelmingly favored online service providers, imposed enormous burdens on copyright owners such as UMG, and fundamentally skewed the marketplace for music content.").

[733] CCIA Initial Comments at 8. Certainly, larger rightsholders are increasingly relying on automated infringement detection systems to locate material for which they will then issue takedown notices. Tr. at 32:9–11, 33:5–13 (May 13, 2016) (Gabriel Miller, Paramount Pictures Corp.); Tr. at 31:1–10 (May 2, 2016) (Deborah Robinson, Viacom). But such use of automated tools and enforcement vendors cannot be said to have trickled down to smaller and individual rightsholders. *See* Tr. at 75:4–8 (May 2, 2016) (Natalie Madaj, NMPA) ("NMPA probably falls somewhere between the level of resource we're able to contribute between individual creators and larger organizations and that we do not use the automated processes.").

[734] Facebook, Inc., Additional Comments Submitted in Response to the U.S. Copyright Office's Nov. 8, 2016, Notice of Inquiry at 5 (Feb. 21, 2017) ("Facebook Additional Comments").

[735] Microsoft Initial Comments at 12–13.

a) Notice Requirements

Congress formalized the intended cooperation between rightsholders and OSPs with statutory requirements for a takedown notice. A compliant notice must include "substantially the following" elements: (i) the signature of the copyright owner or authorized agent; (ii) identification of the copyright-protected work allegedly infringed or, for multiple works, "a representative list"; (iii) identification of the infringing material or activity sufficient for the OSP to locate the material; (iv) contact information for the copyright owner or authorized agent; (v) a statement of "a good faith belief that use of the material in the manner complained of is not authorized by the copyright owner, its agent, or the law"; and (vi) a statement that the information is accurate and, under penalty of perjury, that the complaining party is authorized to act.[736]

A takedown notice that does not substantially comply with these requirements will not, on its own, be interpreted to provide the OSP with actual or red flag knowledge.[737] However, OSPs that want to avail themselves of a safe harbor are required to "promptly attempt[] to contact the person making the notification or take[] other reasonable steps to assist in the receipt of notification that substantially complies with [clauses (ii), (iii), and (iv)]."[738] Congress specified a substantial compliance standard "so that technical errors (such as misspelling a name, or supplying an outdated area code if the phone number is accompanied by an accurate address, supplying an outdated name if accompanied by an email address that remains valid for the successor of the prior designated agent or agent of a copyright owner) do not disqualify service providers and copyright owners from the protections afforded under subsection (c)."[739] The Office has not found a case in which failure to follow up on a deficient notice was ultimately held to abrogate the OSP's immunity.[740]

Generally, courts have properly noted that a takedown notice must contain *substantially* all of information listed in section 512(c)(3). As the Fourth Circuit stated, "the DMCA requires that a copyright owner put the service provider on notice in a detailed manner but allows notice by means that comport with the prescribed format only 'substantially,' rather than perfectly."[741] Additionally, as the D.C. Circuit noted, the legislative history indicates "that 'technical errors . . . such as misspelling a name' or 'supplying an outdated area code' will not render ineffective an

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[736] 17 U.S.C. § 512(c)(3)(A).

[737] 17 U.S.C. § 512(c)(3)(B)(i).

[738] 17 U.S.C. § 512(c)(3)(B)(ii).

[739] S. REP. NO. 105-190, at 47 (1998); *see also* H.R. REP. NO. 105-551, pt. 2, at 56 (1998).

[740] *But see Cybernet*, 213 F. Supp. 2d at 1180 (failure to follow up as required by section 512(c)(3)(B)(ii), when combined with imposition of notice standards more stringent than those set out in section 512(c)(3), resulted in a finding that the defendant "failed to structure a notice system that complies with section 512.").

[741] *ALS Scan, Inc. v. RemarQ Cmtys., Inc.*, 239 F.3d 619, 625 (4th Cir. 2001).

otherwise complete § 512(c)(3)(A) notification."[742] Some courts have gone further, and required that the information must appear within the four corners of the notice for that request.[743]

The substantial compliance doctrine was not a major focus of stakeholder comments in the Study. Based on the general silence regarding this issue, both rightsholders and OSPs appear to at least acquiesce to the standard that courts have set.

In contrast, stakeholders on all sides of the issue offered opinions on the specificity of the information that must be included in a compliant notice, which has been a frequent source of frustration and litigation among stakeholders. In particular, Study participants disagree regarding the definitions of "representative list" and "identifiable location," and the activities that qualify as misrepresentation or good faith in notice sending.

b) Representative List and Identifiable Location

As noted above, section 512 contains multiple requirements a rightsholder must meet for a notice to be deemed compliant. In addition to information about the copyright owner and its rights, section 512(c)(3)(A) contains two provisions that require information about the work that has been infringed and the location of the infringing material: first, "[i]dentification of the copyrighted work claimed to have been infringed, or, if multiple copyrighted works at a single online site are covered by a single notification, a representative list of such works at that site"[744] (referred to herein as the "representative list" provision); and second, "[i]dentification of the material that is claimed to be infringing or to be the subject of infringing activity and that is to be removed or access to which is to be disabled, and information reasonably sufficient to permit the service provider to locate the material"[745] (referred to herein as the "identifiable location" provision). Stakeholders sharply disagree, however, on what constitutes a representative list, and whether something less than specific URLs for every piece of material satisfies the identifiable location requirement as sufficient notice.[746]

In their comments, both rightsholders and OSPs tended to collapse their analysis of the "representative list" provision, which addresses the identification of the copyrighted works, with the "identifiable location" provision, which addresses the OSP's ability to identify the location of

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[742] *Recording Indus. Ass'n of Am., Inc. v. Verizon Internet Servs., Inc.*, 351 F.3d 1229, 1236 (D.C. Cir. 2003) (citing S. REP. NO. 105-190, at 47 (1998); H.R. REP. NO. 105-551, pt. 2, at 56 (1998)).

[743] *See CCBill*, 488 F.3d at 1112. In *CCBill*, the Ninth Circuit noted, as a policy matter, that though the plaintiff provided all the information required under section 512(c)(3), that information was spread across separate notices, submitted over the course of 14 months, and that "[p]ermitting a copyright holder to cobble together adequate notice from separately defective notices also unduly burdens service providers." *Id.* at 1113.

[744] 17 U.S.C. § 512(c)(3)(A)(ii).

[745] 17 U.S.C. § 512(c)(3)(A)(iii).

[746] *Compare* CCIA Initial Comments at 19, *and* Facebook Initial Comments at 7, *and* Google Initial Comments at 12, *with* Authors Guild Initial Comments at 16, *and* c3 Initial Comments at 26, *and* UMG Initial Comments at 27.

the material that infringes those works.[747] This resulted in each side either relying on the "identifiable location" provision to interpret "representative list" or vice versa.

For example, OSPs and user advocacy groups in their representative list analysis often emphasize the obligations of the identifiable location provision when discussing what qualifies as a representative list. Some OSPs go so far as to argue that the identifiable location requirement in fact prohibits the use of a representative list of copyrighted works.[748] Most of the OSPs interpret the identifiable location provision to require, at a minimum, identification of specific URLs or file locations at which the infringing material reside.[749] According to one OSP, "anything other than specific, individual URLs makes the identification and removal of allegedly infringing content extremely difficult, if not impossible," due to the time required to investigate and identify each instance in which the allegedly infringing content may appear on the platform and to determine whether that use is authorized.[750] Furthermore, OSPs assert that an absence of specific location identification information would shift the burden on to OSPs to monitor their services in contravention to section 512(m).[751] According to one OSP, interpreting "representative list" and "identifiable location" to require an OSP to search and monitor its platform for all works potentially identified in the list would be inconsistent with this provision.[752]

Beyond textual arguments, several OSPs argue in favor of requiring rightsholders to provide specific URLs on practical or policy grounds. One OSP states that "it is imperative that rightsholders provide specific details on allegedly infringing content in order for the system to work," otherwise "content matching a vague description would have to be taken down, resulting

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[747] *See, e.g.*, Copyright Alliance Initial Comments at 18; Facebook Initial Comments at 7; Internet Association Initial Comments at 18–19; ICC Initial Comments at 4; Kernochan Initial Comments at 10–11; MPAA Initial Comments at 5; SiteGround, Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015, Notice of Inquiry at 2 (Apr. 1, 2016); UMG Initial Comments at 27; Wikimedia Foundation, Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015, Notice of Inquiry at 11 (Apr. 1, 2016) ("Wikimedia Initial Comments").

[748] *See, e.g.*, Facebook Initial Comments at 7 (stating that "a rights owner's failure to specifically identify all infringed works (and thus all instances of infringement) compels the very proactive monitoring that section 512(m) expressly does not require"); Wikimedia Initial Comments at 11 (stating that rightsholders "should be required to provide specific links to each file they want taken down, *as well as* provide links to the copyrighted works they claim are infringed") (emphasis added).

[749] *See, e.g.*, SoundCloud Initial Comments at 12; Wikimedia Initial Comments at 11; Tr. at 225:22–226:12 (May 12, 2016) (Brian Willen, Wilson Sonsini Goodrich) (stating that the combination of the identifiable location provision with section 512(m) results in the conclusion that "the burden and the responsibility is on the copyright owner to identify the instances by URL or some other mechanism that points directly to the material that they consider to be unlawful."). *But see* Internet Association Initial Comments at 19 (stating that even a URL plus identification of a particular artist that should be removed is insufficient, because "[o]ne URL may contain links to hundreds of pages and sources of content.").

[750] SoundCloud Initial Comments at 12–13.

[751] *See, e.g.*, CCIA Initial Comments at 19; Facebook Initial Comments at 7; *see also supra* n.591.

[752] Google Initial Comments at 12.

in many improper removals of content."[753] A lack of specificity in the notice, they argue, "would inevitably result in the censorship of lawful online content, thus harming the public interest."[754] These OSPs support this position by arguing that the rightsholder is in "the best position to identify infringing uses of their own works" ensuring the balance of shared responsibilities on which the notice-and-takedown framework is predicated.[755]

In contrast, many rightsholders argue that interpreting the identifiable location provision to require notices to contain the specific URL of each instance of infringement is, in fact, incompatible with the representative list provision.[756] Parsing the interrelation between the two provisions, one rightsholder argues that:

> It is critical to note in this regard that the [representative list] provision refers to use of a representative list of works at "a single online *site*," not at "a single online *location*." . . . . This provision should not be read as inconsistent with the requirement of Section 512(c)(3)(A)(iii) for a notification to include information "reasonably sufficient" to permit the service provider to locate the material claimed to be infringing. Instead, it suggests that, upon receipt of a notification including a "representative list," a service provider should review its site for such infringing materials, possibly including infringements of works that are not explicitly identified in the representative list but of which the list is "representative."[757]

Collapsing the two standards, rightsholders argue, renders the representative list provision "meaningless as rights holders are now obligated to provide specific notice for each infringing work."[758] Rightsholders also reject an interpretation of identifiable location that requires a notice to identify every instance of infringing material appearing on a site by (file-specific) URL in order to be compliant.[759] While one rightsholder notes that "a complete list

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[753] Amazon Initial Comments at 8–9.

[754] Internet Association Initial Comments at 9.

[755] ICC Initial Comments at 5. Similarly, the district court in *Perfect 10, Inc. v. Giganews, Inc.* found that if the OSP, instead of the rightsholder, had to find and identify "Message-IDs," unique identifiers for content on its service, "for the hundreds of millions of messages identified in DMCA notices it has received, it would not be able to function." *Giganews*, 993 F. Supp. 2d at 1201.

[756] *See, e.g.*, UMG Initial Comments at 28 ("But limiting the takedown obligation to only specifically-identified infringements renders the 'representative list' provision of the preceding statutory section a dead letter; if a copyright owner can provide a 'representative' (e.g., non-exhaustive) list of works, but the service provider is required only to take down specifically-identified works at specifically-identified locations on the website, then the 'representative list' provision is meaningless.").

[757] AAP Initial Comments at 10.

[758] *Id.*; *see also* MPAA Initial Comments at 25.

[759] *See, e.g.*, A2IM Music Community Initial Comments at 17; MPAA Initial Comments at 23 ("The statute on its face does not require the copyright owner to reference a specific file; the statute discussed 'activity' claimed to be infringing. There is therefore no reason to conclude that Congress intended its reach to be limited to specific URLs."); UMG Initial Comments at 28 ("There is no reason to believe that the copyright owner could [locate specific instances of infringing

detailing every infringing copy of every work on sites replete with infringement" is impractical,[760] another explains in its comment that "creators too often lack the time, money, and resources to list with specificity every single URL containing infringing copies of their work," resulting in a burden that ultimately discourages creators from enforcing their rights.[761]

Court interpretations of the two provisions have done little to clarify the interrelationship between the representative list and the identifiable location provisions. Only a few courts have directly addressed the question of what constitutes a representative list. The Office is aware of only two instances (excluding cases overturned on appeal) in which a court found that the plaintiff's representative list was sufficient for the notice to comply with section 512(c)(3)(A).[762] In one, the Fourth Circuit found the notice sufficient, stating:

> This subsection [section 512(c)(3)(A)] specifying the requirements of a notification does not seek to burden copyright holders with the responsibility of identifying every infringing work—or even most of them—when multiple copyrights are involved. Instead, the requirements are written so as to reduce the burden of holders of multiple copyrights who face extensive infringement of their works. Thus, when a letter provides notice equivalent to a list of representative works that can be easily identified by the service provider, the notice substantially complies with the notification requirements.[763]

In contrast, a few district court cases have rejected plaintiffs' attempts at providing a representative list using an analysis that collapses the representative list and identifiable location requirements. For example, the Southern District of New York found that "a bare list of musical artists whose songs were allegedly linked to did not constitute a representative list of works, or

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material] any more readily than the service provider, and that should be the standard: provide sufficient information to permit the service provider to locate and identify infringing files as readily as the copyright owner could.") (citation omitted).

[760] Authors Guild Initial Comments at 16.

[761] Copyright Alliance Initial Comments at 18.

[762] *See ALS Scan*, 239 F.3d at 625; *Venus Fashions,* 2017 WL 2901695, at *27 (recognizing the distinction of the representative list and identifiable location tests and citing *ALS Scan* for the proposition that the inclusion of the "representative list" language means that a plaintiff is not required to provide specific URLs for each instance of infringement, and holding that a duty to conduct "a routine search requirement on [defendant] does not run afoul of the DMCA's admonition that the provider is not required to continuously monitor its servers for infringement"). A third case found that the notice requirements imposed by the defendant did not comply with section 512(c)(3)(A) because the defendant required the specific "web page at which a given [copyrighted] work is located, rather than the site," but didn't ultimately rule on the sufficiency of the plaintiff's notice. *Cybernet*, 213 F. Supp. 2d at 1180. Unsurprisingly, several rightsholders cite the *ALS Scan* opinion as a preferable interpretation of "representative list." *See* MPAA Initial Comments at 23.

[763] *ALS Scan*, 239 F.3d at 625.

notice equivalent to a list of representative works that can be easily identified by the service provider."[764]

Part of this confusion may stem from the ambiguity of the language used in section 512(c)(3)(A), which requires that a notification include:

> (ii) Identification of the *copyrighted work* claimed to have been infringed, or, if *multiple copyrighted works* at a *single online site* are covered by a single notification, a representative list of such works at *that site*, and
>
> (iii) Identification of the *material* that is claimed to be infringing or to be the subject of infringing activity and that is to be removed or access to which is to be disabled, and information reasonably sufficient to permit the service provider to locate the *material*.[765]

Looking at this provision in context, "site" in (ii) would appear to be addressing material located on the OSP's site. This fits with the legislative history, which states that "where a party is operating an unauthorized Internet jukebox from a particular *site*, it is not necessary for a compliant notification to list every musical composition or sound recording that has been or could be *infringed at that site*, so long as a representative list of those compositions or recordings is provided so that the service provider can understand the nature and scope of the infringement being claimed."[766] But the next provision distinguishes (legitimate) copyrighted works from *material that is claimed to be infringing* located on the OSP's network, stating that a rightsholder must provide information reasonably sufficient to locate this *material*.[767] Thus, it would appear that Congress may have *intended* to state that, if a given OSP *site* contains multiple instances of *material* that infringes a rightsholder's *copyrighted works*, a rightsholder can send a representative list of *copyrighted works* they *claim[] to have been infringed* on the OSP *site*, with the expectation that the OSP will remove not just the material that the rightsholder specifically *claimed to be infringing* but also any other *materials* located at that OSP *site* that are *the subject of infringing activity*, which could include other *copyrighted works* not identified in the *representative list* of *copyrighted works*. But because section 512(c)(3)(A) refers to the material on the OSP's site as both "copyrighted works" and "infringing material," the result is internal inconsistency.

Rather than attempting to untangle the meaning of the representative list requirement, many courts appear to have instead focused their analysis on the identifiable location requirement to determine whether a notice is sufficient under section 512(c)(3). A number of cases interpreting the identifiable location prong require the identification of specific locations of

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[764] *Arista Records, Inc. v. MP3Board, Inc.*, No. 00 CIV. 4660, 2002 WL 1997918, at *15 (S.D.N.Y. Aug. 29, 2002); *cf. Veoh II*, 665 F. Supp. 2d at 1110.

[765] 17 U.S.C. §§ 512(c)(3)(A)(ii), (c)(3)(A)(iii).

[766] S. REP. NO. 105-90, at 46 (1998).

[767] Demonstrating the confusion that results from such conflation, one district court stated that section 512(c)(3)(A)(ii) required "a 'representative list' of *infringing works*." *Venus Fashions*, 2017 WL 2901695, at *23 (emphasis added).

infringing material, usually by the URL that corresponds to the file, rather than the page on which the material appears.[768] The Southern District of New York found that a notice that contained "merely generic description[s] . . . without also giving the works' locations . . . would put the provider to the factual search forbidden by section 512(m)."[769] Such a reading appears, on the surface, to comport with the legislative history that states that a compliant notice can include "a copy or description of the allegedly infringing material and the URL address of the location (*web page*) which is alleged to *contain* the infringing material."[770]

In contrast, the Fourth Circuit in *ALS Scan* allowed the plaintiff to identify two websites generally, without requiring identification of specific instances or locations of infringement, finding a statement by the copyright owner that "virtually all the images at the two sites were its copyrighted material" to be sufficient.[771] Similarly, the district court in *Venus Fashions, Inc. v. ContextLogic, Inc.*, found that, while the rightsholder did not "provide[] . . . specific Notice of the URL addresses of the 17,035 Images that [defendant] was able to take down," the notification was sufficient, and as a result the defendant "nonetheless has 'reason to know' of the continued Images which have appeared and no doubt will appear on the Wish Website in the future, as well as the indeterminate number of slightly altered but readily identifiable substantially similar Images to those noticed that remain."[772] In a case decided before *Viacom*, the Southern District of New York, while rejecting plaintiff's first two notices that contained a list of artists as not constituting a representative list, found that plaintiff's third letter, which contained "printouts of screen shots of MP3Board's Web site, on which the [plaintiff] highlighted and placed an asterisk next to 662 links which the [plaintiff] believed to infringe upon the record companies' copyrights" was sufficient to qualify as identifiable location information.[773]

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[768] *See, e.g.*, *Capitol Records, Inc. v. MP3tunes, LLC*, 821 F. Supp. 2d 627, 643 (S.D.N.Y. 2011) (finding that plaintiff "had to provide sufficient information—namely, additional web addresses—for [defendant] to locate other infringing material."); *Perfect 10, Inc. v. Google, Inc.*, No. CV 04-9484, 2010 WL 9479059, at *8 (C.D. Cal. July 26, 2010) (finding notices that "lack *image-specific* URLs" to be among the types of notices that did not provide information reasonably sufficient for the defendant to locate the infringing material) (emphasis added); *cf. Perfect 10, Inc. v. CCBill, LLC*, 340 F. Supp. 2d 1077, 1090 (C.D. Cal. 2004), *aff'd in part, rev'd in part and remanded*, 481 F.3d 751 (9th Cir. 2007), *opinion amended and superseded on denial of reh'g*, 488 F.3d 1102 (9th Cir. 2007) (finding that an email that provided the file location of an image sufficient to allow the OSP to identify the infringing material, but finding the notice deficient on other grounds).

[769] *Viacom*, 718 F. Supp. 2d at 528–29.

[770] S. REP. NO. 105-90, at 46 (1998). By referencing "web page," however, it appears that Congress intended to refer to the web page from which the infringing material was linked or displayed (even if that page contains dozens of instances of infringing material), rather than the specific file location (*i.e.*, abc.com/infringingpage.html, not abc.com/infringingpage/thisisinfringing.mp3). Nonetheless, many courts appear to have interpreted "URL" as a reference to the specific file location.

[771] *ALS Scan*, 239 F.3d at 625.

[772] *Venus Fashions*, 2017 WL 2901695, at *23.

[773] *Arista Records*, 2002 WL 1997918, at *9 ("Despite the fact that the [plaintiff] did not provide [defendant] with the specific Universal Resource Locators ('URLs') of the pages to which the links connected, the [plaintiff] provided [defendant] with the pages on [defendant's] own site where the links appeared. Overall, the letter and its attachments

The Office recognizes that teasing out the correct contours of the representative list and identifiable location provisions is difficult, in large part due to ambiguities in the statutory language itself, and appreciates that the ultimate interpretation of these provisions will have a significant impact on the balance of rights and responsibilities between OSPs and rightsholders. Congress intended the "representative list" provision, along with other components of the notice-and-takedown framework, to encourage cooperation among rightsholders and OSPs by properly apportioning the responsibility for identifying and removing allegedly infringing content on the internet.[774] But the ultimate result of statutory ambiguity has been, in most cases, to collapse the two provisions, allowing a representative list of copyrighted works, but then rejecting use of that list to provide notice with respect to infringing materials that are not specifically enumerated and located.[775] Such a result does not appear to be in keeping with Congress' original intent, but addressing any disconnect between application of the statute and congressional intent would likely require statutory clarification.

Similarly, while Congress originally cited a URL as an *"example* of such sufficient information" to allow an OSP to locate the allegedly infringing material, a number of courts have interpreted this to mean that *only* a (file-specific) URL can satisfy the location identification requirement.[776] For this reason, Congress may wish to consider clarifying "information reasonably sufficient to permit the service provider to locate the material," including whether a URL is a necessary identifier or merely an example of the type of information a rightsholder can provide in a notice, and identifying the level of specificity a notice must meet to qualify under section 512(c)(3)(A)(iii).

c) Knowing Misrepresentation

Another element that is nearly as important to the adequate functioning of the notice-and-takedown process is the accuracy and appropriateness of notices and counter-notices, codified in section 512(f)'s prohibition against the making of knowing misrepresentations in such notices. Under section 512(f) a person who "knowingly materially misrepresents . . . that material or activity is infringing" in a notice[777] "shall be liable for damages" incurred as the result of the

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identified the material or activity claimed to be infringing and provided information reasonably sufficient to permit [defendant] to locate the links and thus complied with the DMCA.") (citations omitted).

[774] *See* H.R. REP. NO. 105-551, pt. 2, at 49 (1998) ("Title II preserves 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.").

[775] Kernochan Initial Comments at 11.

[776] *See* H.R. REP. NO. 105-551, pt. 2, at 55 (1998) (emphasis added).

[777] Section 512(f) applies to both notices and counter-notices. *See* Brief for the United States as Amicus Curiae Against Petition for a Writ of Certiorari at 6, *Lenz v. Universal Music Corp.*, 815 F.3d 1145 (9th Cir. 2016), *cert. denied sub nom., Universal Music Corp. v. Lenz,* 137 S. Ct. 2263 (2017) ("U.S. *Lenz* Amicus Curiae Brief"), https://www.copyright.gov /rulings-filings/briefs/lenz-v-universal-music-corp-137-s-ct-2263-2017.pdf ("Section 512(f) provides a cause of action for

"service provider relying upon such misrepresentation in removing or disabling access to the material . . . or ceasing to disable access to it."[778] Congress believed that misrepresentations in a notice are detrimental to "rights holders, service providers, and Internet users."[779] It intended section 512(f), therefore, to help maintain the balance of responsibilities shared by rightsholders and service providers by "deter[ing] knowingly false allegations to service providers" and, thus, "protect[ing] against losses caused by reliance on false information."[780]

During the course of the Study, participants from all sides of the issue offered an interpretation of the functionality of section 512(f) and suggestions on how it should operate within the notice-and-takedown framework to deter abusive notices.[781] Participants disagree, however, over the extent to which section 512(f) in fact deters abusive notices and counter-notices.[782] Rightsholders generally take the position that section 512(f) poses a significant deterrent to fraudulent notices without unduly burdening rightsholders and users.[783] OSPs, however, argue that section 512(f) is "completely toothless"[784] and does not provide an adequate safeguard for abusive notices.[785] Several participants during the Washington, D.C. roundtable particularly point out that section 512(f) neither incentivizes potential notice-senders to carefully consider whether a notice is appropriate nor disincentives others in sending abusive notices.[786]

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users or copyright owners who are injured by certain misrepresentations in takedown notices and counter notifications.").

[778] 17 U.S.C. § 512(f).

[779] S. REP. NO. 105-90, at 49 (1998); H.R. REP. NO. 105-551, pt. 2, at 59 (1998).

[780] H.R. REP. NO. 105-551, pt. 1, at 27 (1998).

[781] *See* Authors Guild Initial Comments at 29; Automattic Initial Comments at 2; Copyright Alliance Initial Comments at 28; Engine et al. Initial Comments at 10–11; Internet Archive, Additional Comments Submitted in Response to U.S. Copyright Office's Nov. 8, 2016, Notice of Inquiry at 4 (Feb. 21, 2017) ("Internet Archive Additional Comments"); MPAA Initial Comments at 48; Mozilla Initial Comments at 6.

[782] A few rightsholders made passing assertions that abusive counter-notices were a problem under the current system. *See* A2IM Music Community Initial Comments at 45; American Federation of Musicians ("AFM") et al., Additional Comments Submitted in Response to U.S. Copyright Office's Nov. 8, 2016, Notice of Inquiry at 10–11 (Feb. 21, 2017) ("AFM Music Community Additional Comments"); AAP, Additional Comments Submitted in Response to U.S. Copyright Office's Nov. 8, 2016, Notice of Inquiry at 35 (Feb. 21, 2017) ("AAP Additional Comments"); Copyright Alliance, Additional Comments Submitted in Response to U.S. Copyright Office's Nov. 8, 2016, Notice of Inquiry at 9 (Feb. 21, 2017) ("Copyright Alliance Additional Comments"); Sony Additional Comments at 23. However, Study participants primarily dedicated their discussion of section 512(f) to the issue of abusive takedown notices. The Copyright Office notes that the following discussion likewise applies to abusive counter-notices, with a few of the stakeholder positions reversed.

[783] *See* Authors Guild Initial Comments at 29; Copyright Alliance Initial Comments at 28; MPAA Initial Comments at 48.

[784] Internet Archive Additional Comments at 4.

[785] *See* Automattic Initial Comments at 3–5; Engine et al. Initial Comments at 10–11; Mozilla Initial Comments at 6–7.

[786] *See* Tr. at 223:2–5 (Apr. 8, 2019) (Catherine Gellis, The Copia Institute) (stating that "notice and takedown becomes a weapon that that person can use and abuse, and if [section] 512(f) has no teeth, it's very easy for them to abuse it"); Tr. at 211:11–16 (Apr. 8, 2019) (Joseph Gratz, Durie Tangri LLP) ("[Section] 512(f) is not a sufficient deterrent for many

In support of their position on the lack of effectiveness of section 512(f), several OSPs cite, in their comments and at the roundtables, evidence they believe highlights the significant number of inappropriate notices under the current system.[787] Because much of the data relating to notice-and-takedown requests is not public, it is difficult to ascertain the extent to which some of these examples are representative of what's happening in the section 512 ecosystem. The most comprehensive resource available to research takedown requests is the Lumen database, which receives most of its data from Google, but does not represent even all of the requests received by Google.[788]

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kinds of abusive notices and counter-notifications . . . . The competitive incentives to send bogus . . . notifications and counter-notifications will become so large that there will all of a sudden be an economic incentive or situations that support economic incentives for litigation."); Tr. at 112:3–14 (Apr. 8, 2019) (Douglas T. Hudson, Etsy) ("I've heard from IP owners and marketplaces and others that there's a dramatic increase in the amount of the fraud in the process. Fraud in terms of false takedowns, in terms of phishing and scamming . . . . On the other side . . . people are seeing fraud in counter-notices. I think we need . . . to put some more teeth into the process to protect both copyright owners, marketplaces and end users."); Tr. at 18:19–19:2 (Apr. 8, 2019) (Rebecca L. Tushnet, OTW) ("[E]ven very big sites like ours, which have millions of users, millions of works, can receive very few legitimate takedowns. Amazon Kindle Worlds, for example, mostly receives anti-competitive takedowns from competing writers trying to get books off the list.").

[787] *See, e.g.*, EFF Initial Comments at 11–12 (collecting anecdotal evidence of improper takedowns) (citation omitted); Engine et al. Initial Comments at 9 ("Data from blogging platform Word-Press shows that . . . around 39 percent of notices it receives are defective or fraudulent."); Urban et al. Empirical Study at 78 (stating that an analysis of all takedowns in the Lumen database for a six month period revealed that "one in twenty-five [4%] requests targeted content that clearly did not match the identified infringed work at all," and "about a third (31%) [the 4.2% of requests targeting incorrect content, above, plus 28.4% of requests coded as questionable, minus any duplicates] raised substantive questions, including problems identifying and locating the disputed works and potential fair use issues"); Tr. at 458:10–14 (Apr. 8, 2019) (Brian Carver, Google) ("So just in one week last June, when a particular fraudulent reporter decided to automate their submission process, over 50 percent of the DMCA notices we received that week were fraudulent, that we were able to detect.").

[788] Urban et al. Empirical Study at 78–79. Professor Urban and her co-authors attempted to utilize the information in this database to analyze the extent to which improper notices are prevalent under the current system. While their findings indicate that a not-insignificant portion of individual takedown requests may have important deficiencies, it is hard to extrapolate from that data the true extent of the problem. For example, the Office notes that the study coded each instance of alleged infringement contained in a single takedown notice separately. Urban et al. Empirical Study at 155. As Google notes in its comments, during one month in early 2016, Google received notices from "more than 6,000 individuals or entities . . . to request that Google remove from its search index more than 80 million webpages," which amounts to approximately 13,300 notices per individual or entity, likely spread out over multiple notices. *See* Google Initial Comments at 7. While there were likely fewer notices sent during the period sampled by the Urban study, without reanalyzing the data to group questionable notices by sender, it is unclear the extent to which a few (either rogue or unsophisticated) notice senders may be responsible for the 31% of notices that were viewed as raising substantive questions. The study does note, however, that almost 78% of the nearly 74,000 requests targeting shuttered file sharing services, which the researchers interpret as raising questions of accuracy, came from a single notice sender. Urban et al. Empirical Study at 90, figure 6. The 31% of questionable notices also included 13.3% of requests for which it was "difficult to locate the allegedly infringing material," which included any notices that linked to aggregator pages instead of the individual URLs of the infringing files. *Id*. at 93–94. The researchers identified as "mistargeted" instances where the allegedly infringed *work* did not match the allegedly infringing *material* (4.2% of total notices). But this number included any notices that listed one work owned by the rightsholder as the allegedly infringed work, but linked to an instance of allegedly infringing material that featured a different work owned by the same rightsholder.

Rightsholders, however, challenge the notion that takedown notices misrepresenting infringement are common. "In reality," wrote the Authors Guild, "they are incredibly rare."[789] The Office acknowledges that an inaccurate notice, however minor, does incur cost for the OSP in reviewing and evaluating the content of the notice, as well as potentially impacting important free speech concerns. Some of the individual anecdotes proffered by user advocacy groups likely represent improper uses of the notice-and-takedown system.[790] However, the Office notes that it is difficult to ascertain, in the notice-and-takedown system as a whole, either the true rate of inaccurate notices or the relative frequency of merely inaccurate or incomplete notices versus notices sent containing knowingly false misrepresentations. Only the latter is covered by the prohibitions of section 512(f), and only to the extent that the misrepresentation relates to the assertion that "the material or activity is infringing."[791] Not unexpectedly, then, OSPs attribute some of the alleged inadequacy of section 512(f) to the requirement that the sender "knowingly materially misrepresent[] . . . that material or activity is infringing," or that the "material or activity was removed or disabled by mistake or misidentification."[792]

The courts have generally applied a *subjective* knowledge standard in section 512(f) cases, asking whether the sender subjectively knew of the misrepresentation, rather than whether an objectively reasonable person *should have known*.[793] In *Lenz v. Universal Music Corp*. and *Rossi v. Motion Picture Association of America*, the Ninth Circuit found that a notice sender is liable under section 512(f) if it had actual knowledge that the assertion in a takedown notice that the material activity was infringing was false, or was willfully blind to the non-infringing nature of the

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Id. at 90–91. Thus, it is difficult to ascertain the extent to which some of these mistargeted notices actually impact legitimate speech, rather than accidentally sweeping in speech that was nonetheless infringing, although of a different right than that asserted. It is worth noting that the researcher's analysis of the data set found that over two-thirds of the notices were sent to torrent or file search sites, which the study authors note "lend[s] credence to major rightsholder claims that they focus on unauthorized file-sharing services when sending notices." *Id*. at 86–87.

[789] Authors Guild Initial Comments at 15; *see also* AFM Music Community Additional Comments at 11 (charging that OSPs "grossly exaggerate" the prevalence of erroneous takedown notices).

[790] In particular, the *Wall Street Journal* has published a series of extensively researched articles detailing tactics used by individuals and reputation management firms to hide or remove negative content. This includes abuses of the notice-and-takedown process, such as by creating fake websites with "backdated" content that then forms the basis of a takedown notice. *See* Rachel Levy, *How the 1% Scrubs its Image Online*, THE WALL STREET JOURNAL (Dec. 13, 2019 12:18 PM), https://www.wsj.com/articles/how-the-1-scrubs-its-image-online-11576233000; Andrea Fuller et al., *Google Hides News, Tricked by Fake Claims*, THE WALL STREET JOURNAL (May 15, 2020 11:43 AM), https://www.wsj.com/articles/google-dmca-copyright-claims-takedown-online-reputation-11589557001. Such abuses of the DMCA system do call for some enforcement mechanism. Hundreds or thousands of individual lawsuits under section 512(f), even with heightened statutory damages or recovery of attorneys' fees, would not appear to be an effective or efficient deterrent, however. To the extent that such tactics represent ongoing patterns of abusive business practices, governmental enforcement outside the context of section 512 would appear to be a better avenue for addressing their proliferation.

[791] 17 U.S.C. § 512(f)(1).

[792] 17 U.S.C. §§ 512(f)(1), (2).

[793] *See, e.g.*, *Tuteur v. Crosley-Corcoran*, 961 F. Supp. 2d 333, 342 (D. Mass. 2013); *Design Furnishings, Inc. v. Zen Path, LLC*, No. CIV. 2:10-2765, 2010 WL 5418893, at *5 (E.D. Cal. Dec. 23, 2010).

material or activity.[794] The Ninth Circuit in *Lenz* further explained that a willfully blind defendant is "one who takes deliberate actions to avoid confirming a high probability of wrongdoing and who can almost be said to have actually known the critical facts."[795] The subjective knowledge standard does not result in liability for errors resulting from an inadvertent inaccuracy or lack of oversight. As explained by the court in *Rossi*, a notice-sender cannot be liable under section 512(f) "simply because an unknowing mistake is made, even if the copyright owner acted unreasonably in making the mistake."[796]

Several OSPs question the effectiveness and appropriateness of the subjective knowledge standard to the extent that it fails to capture false and abusive notices. One commenter notes that the subjective knowledge standard renders section 512(f) ineffective because an "objectively unreasonable takedown notice targeting clearly non-infringing material will not support a § 512(f) claim unless the defendant admits that it knew it sent a false notice."[797] Another commenter unequivocally states that the subjective standard, particularly as articulated in *Lenz*, "may reward sloppiness and creates a perverse incentive for copyright owners not to learn about the law before sending a takedown."[798] One OSP also suggests that since the subjective knowledge standard shields some instances of objectively false takedown notices from liability, the penalties should be strengthened in order to provide adequate deterrence.[799] Rightsholders, conversely, argue that the subjective knowledge standard, as articulated in *Lenz* and *Rossi*, is entirely appropriate. They point out that, if the threshold for a false notice under the statute were lowered, it would risk subjecting copyright owners to "limitless lawsuits just [for] policing [their] copyrighted material on the Internet," on top of the burdens rightsholders already face in enforcing their rights online.[800]

As the United States noted in its amicus curiae brief before the Supreme Court in *Lenz*, the plain meaning of the statute gives rise to the conclusion that the knowledge standard under

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[794] *Lenz v. Universal Music Corp.*, 815 F.3d 1145, 1154–55 (9th Cir. 2016), *cert. denied sub nom., Universal Music Corp. v. Lenz*, 137 S. Ct. 2263 (2017); *Rossi v. Motion Picture Ass'n of Am., Inc.*, 391 F.3d 1000, 1005 (9th Cir. 2004). The Office notes that a subjective standard is likewise applied by the Second and Ninth Circuits to determine whether an OSP has actual knowledge of infringement. *See supra* section VI.A.1.c.i.(a).

[795] *Lenz*, 815 F.3d at 1155 (quoting *Glob.-Tech Appliances, Inc. v. SEB S.A.*, 563 U.S. 754, 769 (2011)).

[796] *Rossi*, 391 F.3d at 1005.

[797] Engine et al. Initial Comments at 10.

[798] EFF Initial Comments at 24.

[799] *See* Engine Advocacy, Additional Comments Submitted in Response to U.S. Copyright Office's Nov. 8, 2016, Notice of Inquiry at 15 (Feb. 21, 2017) ("Engine Additional Comments"); *see also* Facebook Additional Comments at 6 ("Instead of amending the DMCA, responsibility for more vigorously enforcing section 512(f) and imposing appropriate sanctions for fraudulent notices should remain with the courts."); Mozilla Initial Comments at 6. *But see* Etsy, Inc., Additional Comments Submitted in Response to U.S. Copyright Office's Nov. 8, 2016, Notice of Inquiry at 5 (Feb. 21, 2017) ("Etsy Additional Comments") ("In theory, [strengthening penalties] would dissuade improper uses of the DMCA process, but in practice, this is not an adequate safeguard.").

[800] Copyright Alliance Initial Comments at 28 (citation omitted).

section 512(f) is most appropriately viewed as a subjective standard.[801] Black's Law Dictionary defines "knowingly" as "[i]n such a manner that the actor engaged in prohibited conduct with the knowledge that the social harm that the law was designed to prevent was practically certain to result; deliberately."[802] Because Congress incorporated *objective* standards of liability in other provisions of the DMCA,[803] the fact that it chose not to do so in section 512(f) indicates that Congress did not want an objective standard of liability for notices and counter-notices.[804] A lower knowledge standard, moreover, could potentially raise the risk of liability for even good-faith notice senders, deterring legitimate takedown or put-back requests and ultimately undermining the notice-and-takedown framework. Further, as noted earlier, it is not clear to what extent notices that would violate section 512(f) under a more lenient standard (absent an expansion of the categories of material misrepresentations beyond those currently articulated in section 512(f)) are actually a significant problem within the system. If Congress wishes to reevaluate the purpose and role of section 512(f) to target notices whose inaccuracy stems from negligence or lack of care in addition to knowingly false assertions by the sender, then it may consider the adoption of a different standard, such adding liability for "reckless disregard" of the accuracy of the notice. In such an event, it would be worth evaluating whether knowing or reckless disregard of falsity should receive the same sanction.

d) Fair Use

Many Study participants raise concerns related to the interplay of "good faith," fair use, and misrepresentation, especially in light of the Ninth Circuit's decision in *Lenz*.[805] Section 512(c)(3)(A)(v) requires notice senders to include a signed statement, under penalty of perjury, that they have "a good faith belief that use of the material in the manner complained of is not

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[801] U.S. *Lenz* Amicus Curiae Brief at 11–13.

[802] *Knowingly*, BLACK'S LAW DICTIONARY (11th ed. 2019).

[803] *See* 17 U.S.C. § 1202. Section 1202(a) states that "[n]o person shall *knowingly* and with the intent to induce, enable, facilitate, or conceal infringement (1) provide copyright management information that is false, or (2) distribute or import for distribution copyright management information that is false." A "knowing" violation under section 1202(a) may be subject to both civil remedies under section 1203 and criminal remedies under section 1204. Section 1202(b), in contrast, carefully distinguishes between criminal and civil remedies, making criminal remedies available based only on a "knowing" violation, but making civil remedies available based on an objective "reasonable grounds to know" standard.

[804] *See Rossi*, 391 F.3d at 1004 ("When enacting the DMCA, Congress could have easily incorporated an objective standard of reasonableness. The fact that it did not do so indicates an intent to adhere to the subjective standard traditionally associated with a good faith requirement.").

[805] *See, e.g.*, American Intellectual Property Law Association ("AIPLA"), Additional Comments Submitted in Response to U.S. Copyright Office's Nov. 8, 2016, Notice of Inquiry at 3 (Feb. 21, 2017) ("AIPLA Additional Comments"); AAP Initial Comments at 8–9; Engine et al. Initial Comments at 10; Etsy Additional Comments at 8; Kernochan Initial Comments at 8–9; UMG, Additional Comments Submitted in Response to U.S. Copyright Office's Nov. 8, 2016, Notice of Inquiry at 27 (Feb. 21, 2017) ("UMG Additional Comments"); Verizon Communications, Additional Comments Submitted in Response to U.S. Copyright Office's Nov. 8, 2016, Notice of Inquiry at 8 (Feb. 21, 2017) ("Verizon Additional Comments").

authorized by the copyright owner, its agent, or the law."[806] The legislative history is silent on why Congress included this, and makes no mention of any possible interaction between section 512(c)(3)(A)(v)'s good faith requirement and section 512(f)'s prohibition on misrepresentation.

In *Lenz*, the Ninth Circuit held that "a copyright holder must consider the existence of fair use before sending a takedown notification under § 512(c)," because fair use is "authorized by the law," within the meaning of section 512(c)(3)(A)(v).[807] If the copyright holder does not consider fair use before sending the takedown notification, then the copyright holder, according to the Ninth Circuit, may be liable for damages under section 512(f).[808] The court further explained, however, that the copyright holder would not be liable if they form a *subjective* good faith belief that the use does not constitute a fair use, even if the court would later disagree with the fair use determination.[809]

Several participants at the D.C. roundtable addressed the Ninth Circuit's interpretation of good faith, questioning the practical application of the court's determination that a copyright owner must evaluate whether a use is permitted by the fair use doctrine and affirmatively decide that it is not before sending a takedown notice.[810] A number of rightsholders were uncertain about implication of *Lenz* for their ability to use automated processes to identify infringing material and send takedown notices.[811] One OSP asserts unequivocally that, under *Lenz*, "automated notices should not be considered valid notices, in part because algorithms that generate automated notices are not able to assess whether a particular use is infringing or might be lawful," since "a conclusion [on fair use is one] that is impossible for an algorithm to draw."[812] Several rightsholders rejoin such an assertion, stating that automated programs, assisted by some

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[806] 17 U.S.C. § 512(c)(3)(A)(v).

[807] *Lenz*, 815 F.3d at 1153.

[808] *Lenz*, 815 F.3d at 1151.

[809] *Lenz*, 815 F.3d at 1153–54.

[810] *See* Tr. at 188:11–14 (Apr. 8, 2019) (Stephen Carlisle, Nova Southeastern University) ("From my standpoint as a musician or a creator, it's much easier to figure out whether something's infringing, than whether something is in fact fair use."); Tr. at 185:2–16 (Apr. 8, 2019) (Arthur Levy, Association of Independent Music Publishers ("AIMP")) ("*Lenz* is still a major problem for us . . . . It's kind of hanging out there as a potential time bomb . . . for small publishers and certainly for songwriters, who may have just massive amounts of infringing examples of their works out on the internet.").

[811] *See, e.g.*, AIPLA Additional Comments at 3; AAP Initial Comments at 8–9 ("[The] ability to use an automated process of notification recently has been clouded by the judicially-imposed requirement that, as part of the notification requirements under Section 512(c)(3), a copyright owner must consider the applicability of 'fair use' before stating that it has 'a good faith belief that use of the material in the manner complained of is not authorized by the copyright owner, its agent, or the law.'") (citation omitted); Kernochan Initial Comments at 8.

[812] Verizon Initial Comments at 16; *see also* Annemarie Bridy & Daphne Keller, Additional Comments Submitted in Response to U.S. Copyright Office's, Nov. 8, 2016, Notice of Inquiry at 2 (Feb. 21, 2017) ("Bridy & Keller Additional Comments") ("There is no algorithm that can do the kind of contextual and legal analysis required to identify fair use.").

type of human review either in design or execution, do provide the necessary level of review to meet section 512's notice requirements.[813] The Ninth Circuit in *Lenz*, unfortunately, did not speak directly to automated aspects of monitoring for infringements and sending notices.[814]

As outlined in the United States' amicus curiae brief in *Lenz*, the Ninth Circuit's holding imports the "good faith belief" standard from section 512(c)(3)(A) into its evaluation of whether the rightsholder made a knowing representation within the meaning of section 512(f).[815] The result is placing potential liability on rightsholders who fail to undertake a fair use inquiry before sending a takedown notice, *without regard* to whether or not the material is actually infringing.[816] Instead, based on the language of the statute, section 512(f) properly looks to whether the rightsholder "knowingly materially misrepresent[]" that "the material or activity is infringing" (or, for counter-notices, that the "material or activity was removed or disabled by mistake or misidentification").[817] Thus, to find a rightsholder liable under section 512(f), a court must first determine whether or not the use is, in fact, infringing, and if not, "whether the copyright owner made the misrepresentation [regarding the infringing nature of the material" 'knowingly.'"[818] The Office suggests that Congress monitor how the courts apply *Lenz*, and consider clarifying the statutory language if needed.

e) Extra-Section 512 Processes and Requirements

From the Study submissions, it is apparent that many participants in the notice-and-takedown system have adapted their practices to accommodate its increasing usage since the

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[813] *See, e.g.*, Tr. at 15:9–16 (May 13, 2016) (Keith Kupferschmid, Copyright Alliance) ("[Y]ou talk to lawyers and the response is going to be, gee, how can a computer program possibly do what we can do, which is decide whether something is fair use or can be used in a context. And I think it absolutely can. It's just software programs are created by humans. They can build that into the program to a large extent."); Tr. at 186:15–21 (Apr. 8, 2019) (Arthur Levy, AIMP) ("It seems as if language regarding automation has been taken out of the second version of the opinion. That's a concern for us. It might very well mean that they're going to interpret it so that we cannot use automation, which again increases our cost burden and ability to protect our works."); Tr. at 102:18-103:3 (May 12, 2016) (Braxton Perkins, NBC Universal) ("We take great care in putting together an operation that is scalable but yet also accurate. We use a variety of technologies and automation systems combined with human review. In all cases, the technology is designed by humans, controlled by humans, aimed by humans. And so therefore, there's really not a dichotomy of automation versus humans. You have to use them together."); Tr. at 237:21–238:2 (Apr. 8, 2019) (Nancy Wolff, DMLA) ("I'm not sure *Lenz* has changed the landscape for members of DMLA. They may use image recognition technology to find matches, but there's always been a level of human involvement to review.").

[814] *See* Kernochan Initial Comments at 8 ("The Ninth Circuit's desistence from articulating ways to balance the competing concerns of users to avoid the blockage of non-infringing fair use postings on the one hand, and those of copyright owners for effective enforcement in a fast-moving technological environment on the other, is disappointing.").

[815] *See* U.S. *Lenz* Amicus Curiae Brief at 17–18.

[816] *Id. at* 17.

[817] 17 U.S.C. § 512(f).

[818] U.S. *Lenz* Amicus Curiae Brief at 18.

DMCA's enactment.[819] Congress, legislating in a time before the larger platforms received millions of notices a week, set up a notice system under section 512 premised on written postal or electronic communications, combined with what they expected to be a minimalist intake process. For example, section 512 requires OSPs to register with the Copyright Office and to "make available through its service, including on its website in a location accessible to the public" the "name, [physical] address, phone number, and electronic mail address" of an agent designated to receive written takedown notices.[820] The takedown process envisioned in section 512 is similarly low-tech, with OSPs performing the ministerial actions of: (i) receiving a takedown notice via email or physical mail, (ii) "expeditiously" removing access to the material, (iii) undertaking "reasonable steps promptly to notify the subscriber" regarding the removal of the material, (iv) receiving and forwarding to the rightsholder any counter-notice filed by the subscriber, and (v) restoring access to material that is the subject of a counter-notice within 10–14 days of receipt of the counter-notice unless the OSP receives a notice from the rightsholder that it has filed a court action.[821] Section 512 does not anticipate an OSP taking on the role of adjudicator for infringement claims, and in fact insulates them from monetary liability for removing access to material in good faith, "regardless of whether the material or activity is ultimately determined to be infringing."[822]

Based on the information obtained during the course of the Study, the Office notes that the mechanisms and requirements for submission of takedown notices, adopted in recent years by many of the larger OSPs, are no longer in sync with these provisions. Two developments in particular have reshaped a rightsholder's experience of submitting a takedown notice under section 512: (i) the adoption of additional notification requirements by many OSPs, and (ii) the increasing reliance on web-based submission forms with friction deliberately built into the process.

While Congress exempted OSPs from liability for the removal of content that ultimately turns out to be non-infringing, a number of larger OSPs have sought to advance the interests of their users by attempting to "weed out overbroad and abusive DMCA takedown notices, so that our users' speech isn't needlessly censored."[823] Rather than engaging in a passive intake and automatic removal of material in response to a section 512 notice, some OSPs thus have begun taking a more active role in evaluating the sufficiency of such notices. During the course of the Study, the Office received information relating to several methods OSPs have deployed to do so. These methods include:

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[819] This includes the use of automated identification services by rightsholders and DMCA+ content management systems, like Google's Content ID or Facebooks Rights Manager, by OSPs.

[820] *See* 17 U.S.C. § 512(c)(2).

[821] *See* 17 U.S.C. §§ 512(c)(1)(C), (g)(2).

[822] *See* 17 U.S.C. § 512(g)(1).

[823] Automattic Initial Comments at 2.

- Requiring a rightsholder to submit a registration certificate or other "proof" of ownership before processing a takedown notice;[824]
- Adding questions to the notification form requiring the rightsholder to confirm whether they are the subject of a photograph, combined with "warnings" if they answer affirmatively;[825]
- Sending follow-up emails asking a rightsholder to "provide more detail [to] explain[]" how they are the copyright owner;[826]
- Following up with a rightsholders who submits a takedown notice, or outright refusing to act upon the takedown notice, if the OSP believes it's a "case[] of apparent fair use";[827] and
- Declining to act on takedown notices that the OSP determines are "directed at clear fair uses, clearly uncopyrightable content, or contain clear misrepresentations regarding copyright ownership."[828]

For those OSPs that have launched DMCA+ systems, use of these systems is often predicated on complying with additional requirements for submission of takedown notices, such as the exact timestamp of the video at which the infringing content occurs.[829]

OSPs offered several defenses for use of these additional notice requirements, including as a way to address problems with the quality of the takedown notices they receive[830] and to protect

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[824] *See* Tr. at 57:14–19 (May 2, 2016) (Lisa Shaftel, Graphic Artists Guild ("GAG")) ("Creators have found that they can't satisfy the requirements from a lot of the ISPs in their takedown notices. In particular, artists have said that many ISPs have required that they prove copyright registration as part of their takedown notice or other means of proving ownership of the image.").

[825] *See* Google Inc., Additional Comments Submitted in Response to U.S. Copyright Office's Nov. 8, 2016, Notice of Inquiry at 9–10 (Feb. 21, 2017) ("Google Additional Comments") ("The commenter also pointed out that we explain at the appropriate step in our form that merely being the subject of a photo does not give one a copyright interest in the photo. In our experience, this warning dramatically cut down on the number of misguided notices. This, in turn, streamlined the removal process for meritorious notices and decreased our turnaround time for removal of images.") (internal citation omitted).

[826] Mason Clinic, Additional Comments Submitted in Response to U.S. Copyright Office's Nov. 8, 2016, Notice of Inquiry at 28 (Feb. 21, 2017) ("Mason Clinic Additional Comments").

[827] Mason Clinic Additional Comments at 29.

[828] Automattic Initial Comments at 6.

[829] *See* Jordan (TeamYouTube), *Timestamps and Editing Tools to Help You Resolve Manual Content ID Claims*, YOUTUBE HELP: COMMUNITY (July 9, 2019), https://support.google.com/youtube/thread/9566717 ("Starting today, we're requiring copyright owners to provide timestamps for all new manual Content ID claims so creators know exactly which part of their video is being claimed.").

[830] *See, e.g.*, Tr. at 157:15–20 (May 2, 2016) (Rebecca Tushnet, OTW) (noting that such questions are a result of ISPs trying to educate users, "because when YouTube asks is it a picture of you, the reason they're asking that is to figure out if it's

free speech.[831] In contrast, rightsholders criticized them as adding unnecessary friction into the process, resulting in delays up to several days in processing takedown notices.[832] The Office is not aware of any court cases addressing whether the imposition of such additional requirements are compatible with maintaining an OSP's section 512 safe harbors. While OSPs are always free to decline to participate in the notice-and-takedown system, with the result that they lose the safe harbor but maintain any other defenses to copyright infringement claims they would otherwise have,[833] adoption of these additional requirements situates them in a sort of no-man's land. While the OSPs don't formally reject the benefit of the safe harbors, by requiring additional supporting documentation that goes beyond the requirements of section 512(c)(3), the OSPs do not appear to be fully honoring the requirement in section 512(c)(1)(C) that, upon receiving a takedown notice that is compliant with section 512(c)(3), they "respond[] expeditiously to remove, or disable access to" the material.[834]

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a copyright claim because people don't understand that"); Tr. at 161:14–22 (May 2, 2016) (Michael Weinberg, Shapeways) ("[W]e struggle all the time trying to set a balance between either setting up gates on the front end of that takedown request process to ask people [']are you sure that you're a copyright holder[' . . . to] standardize the errors that we see over and over[,] or working a way in the backend through what is essentially an email conversation to get from the unstructured complaint that we received initially to something that we're willing to act on."). *But see* Tr. at 69:13–71:13 (May 3, 2016) (Lisa Willmer, Getty Images) (noting that, while rightsholders submitting takedown notices are provided prompts and educational links during the process, similar prompts are not instituted by OSPs prior to a user uploading potentially copyrighted content).

[831] *See, e.g.*, OTW, Additional Comments Submitted in Response to U.S. Copyright Office's Nov. 8, 2016, Notice of Inquiry at 4 (Feb. 21, 2017) ("OTW Additional Comments") ("Given the abuse of the DMCA to achieve non-copyright goals that the OTW, Wordpress, Wikipedia, and numerous other ISPs have found, it is not just *acceptable* to ask certain submitters for further information such as a copyright registration for the challenged material: it is the only way to protect free speech online.") (emphasis in original).

[832] *See* Tr. at 130:7–11 (May 2, 2016) (Hillary Johnson, author) ("I have started initially by sending takedown notices to Facebook and what I learned was it took about three days of my time to satisfy Facebook's demands to prove that I was the author, that I owned the copyright.").

[833] *See* 17 U.S.C. § 512(l).

[834] 17 U.S.C. § 512(c)(1)(C). Some rightsholders urge that an OSP that requires such additional proof should thereby forfeit the benefits of the safe harbors. *See* Tr. at 48:3–16 (May 3, 2016) (Maria Schneider, musician). At least one court has found that the imposition of stricter standards than those listed in section 512(c)(3)(A), combined with a failure to seek additional information from the rightsholder for those notices that substantially comply with the statutory standards as required by section 512(c)(3)(B)(ii), "leads the Court to conclude that [defendant] has failed to structure a notice system that complies with section 512." *Cybernet*, 213 F. Supp. 2d at 1180. *But see Perfect 10, Inc. v. Giganews, Inc.*, No. CV 11-07098, 2015 WL 1746406, at *11 (C.D. Cal. Mar. 6, 2015) (finding that plaintiff's failure to provide Message-IDs in the manner required by the OSP's automated takedown processes did not provide information sufficient to locate the infringing material, in part because the process that plaintiff chose for providing location information would have required manual transcription of the Message-IDs by the defendant while the plaintiff could "simply copy-and-paste the Message-ID," with the result that "[e]very aspect of [plaintiff's] . . . notices undermined the fundamental purpose of the DMCA notice procedure").

The recently-adopted OSP approach that was the subject of the most complaints by rightsholders, however, was the use of (and various methods to discourage the non-use of)[835] specialized webforms.[836] Several of the larger OSPs have attempted to supplant physical and email takedown notices with webforms that are integrated into their backends, often coupled with a series of questions—sometimes across multiple pages or collapsible sections—that the notice sender must answer to ensure that the claim they are submitting contains the required information and is appropriate for a section 512 notice.[837] For example, Google's current online submission form requires a copyright owner wishing to submit a takedown notice to make five or more radio button selections before reaching a page that says "Create Request," after which the rightsholder must create and log into a Google account and then fill out ten explanation boxes.[838]

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[835] Getty Initial Comments at 4 ("There is no one standard process and each platform creates its own unique submission form with its own unique submission requirements . . . . Google makes it [difficult] to submit takedown notices by email, requiring additional hurdles not required by the DMCA."); Ellen Seidler, *Google Really, Really Doesn't Like You to Send DMCA Requests Via Email*, VOX INDIE (Mar. 18, 2016), http://voxindie.org/google-hates-dmca-emails/ (describing requirements to complete a takedown notice via email, including a requirement that a rightsholder respond to an auto-generated email with a statement that "This notice is complete.").

[836] Not all rightsholders took issue with this trend. While many of the Study participants representing smaller rightsholders took issue with webforms as currently deployed, several of the larger rightsholders expressed appreciation for additional mechanisms for submitting takedown notices. *See, e.g.*, MPAA Additional Comments at 6 (arguing against requiring standardized takedown processes and stating that any such standardized form "should not be required of all service providers or copyright owners, in lieu of other, more effective systems").

[837] Those OSPs that have adopted webform submissions differ as to how easy or difficult they make it to submit a takedown request via one of the statutory mechanisms. At one end of the spectrum, Pinterest's "Copyright" page provides a link to its web form as well as the fax number, physical address, and email addresses (but not the phone number) for its designated agent (the latter with a mailto: link). *See Copyright*, PINTEREST, https://policy.pinterest.com/en/copyright. Facebook likewise provides the address, phone number, and (non-mailto: linked) email address of its designated agent. *How Do I Contact Facebook's Digital Millennium Copyright Act (DMCA) Designated Agent?*, FACEBOOK: HELP CENTER, https://www.facebook.com/help/190268144407210. At the other end of the spectrum, the Google Help Center entry for takedown notice submissions with respect to non-YouTube products does not mention the option of submitting a notice to its designated agent. *See Removing Content from Google*, GOOGLE: LEGAL HELP, https://support.google.com/legal/troubleshooter/1114905. In fact, Google does not appear to list the address or email address of its (non-YouTube) designated agent anywhere on its website. A search on google.com for "'dmca-agent@google.com' site:google.com" (the email address registered with the Copyright Office as the designated agent for Google LLC) returns no results as of May 2020. YouTube, in contrast lists the email address for its designated agent and also, helpfully, the contact emails for the designated agents of Dailymotion, Facebook, Instagram, Periscope, Twitter, and Vimeo. *See*, *Answer*, "*How do I Remove a Copy of My Video from Another Website*," YOUTUBE HELP: FREQUENTLY ASKED COPYRIGHT QUESTIONS, https://support.google.com/youtube/answer/2797449 (last visited May 12, 2020). It is worth noting that section 512(c)(2) requires OSPs to not just designate an agent with the Copyright Office, but also to display somewhere on its website in a location accessible to the public "substantially the following information" about that agent: "name, address, phone number, and electronic mail address." 17 U.S.C. § 512(c)(2).

[838] *See Removing Content from Google*, GOOGLE: LEGAL HELP, https://support.google.com/legal/troubleshooter/1114905 (last visited May 12, 2020). (This screen was reached from the homepage by clicking "Terms" > "What we expect from you" > "Copyright Help Center" >"What is 'Copyright'?" > "legal troubleshooter," with a few dead ends along the way. It may be possible to reach this screen with fewer clicks.) From this screen, selecting "Blogger" > ""I would like to report an intellectual property issue (copyright infringement, circumvention, etc.) > "I have found content that *may* violate my copyright" (emphasis added) > "Yes, I am the copyright owner or am authorized to act on the copyright owner's behalf" > "Image/Video" > "No" finally reaches a screen with a button that says "Create request." Clicking on

Similarly, Facebook's online submission form has over a dozen radio buttons, one check box, three drop down boxes, and nine text entry boxes.[839]

Several OSPs assert that these webforms, like the additional notice requirements discussed above, help to weed out incorrect notices as well as to improve the efficiency of—not to mention speed up—the takedown process.[840] Not surprisingly, though, OSPs and rightsholders disagree regarding the extent to which inaccurate or insufficient takedown notices are a problem requiring technological fixes like web-based takedown forms.[841] Many rightsholders instead point to webforms as a significant source of inefficiency and needless friction in the notice-sending process.[842] As one roundtable participant notes, while some OSPs have adopted forms that are

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this button should result in the rightsholder reaching a Google account sign in, but certain browser configurations appear to prevent you from getting past this screen (after clicking "Create request," the author's browser was redirected to *Improve Your Performance on Google Search*, GOOGLE: SEARCH CONSOLE, https://search.google.com/search-console/about). Anyone selecting "YouTube" as the product on the first screen is redirected to a Google account sign in up front.

[839] *Reporting a Violation or Infringement of Your Rights*, FACEBOOK: HELP CENTER, https://www.facebook.com/help/contact/634636770043106 (last visited May 3, 2020). (This screen was reached from the homepage by clicking "Help" > "Policies and Reporting" > "Intellectual Property" > "reporting copyright violations" > "How do I report copyright infringement on Facebook" > "form.") From here, a rightsholder must select "Copyright" > "Continue with your copyright report" > "I found content which [sic] I believe infringes my copyright" > "Continue with my copyright report" > "Contact Information" > "Me or my organization" > [Form asking for a Name, Job responsibility, Mailing address, Phone number, Email address, Confirm your email address, Name of the Rightsholder] > "United States" > "Provide the content you want to report" > "Photo, video or post" > [Form to fill in links] > [Drop down menu for "Why are you reporting this content?"] > "This content copies my work" > "Provide your copyrighted work" > [Drop down menu for "Which of these best describes your original copyrighted work?] > "Artwork" > [Form asking "Where can we see an authorized example of your work?"] > "Confirm declaration statement" > "Yes" > "Electronic signature" > "Submit."

[840] *See* Facebook Additional Comments at 5 ("Any legislatively prescribed reporting mechanism for takedown reporting forms, while potentially having the value of uniformity, ultimately would interfere with, rather than promote, positive innovation for all relevant stakeholders."); Tr. at 59:8–18 (May 3, 2016) (Matthew Schruers, CCIA) (noting the frustration of smaller ISPs regarding receipt of "messy hand-written or typed notices that pile on a bunch of different issues," and the resulting incentive for ISPs to deploy new technological tools to improve the notice intake process); *see also What Information do I Need to Include in a Copyright Report on Facebook?*, FACEBOOK: HELP CENTER, https://www.facebook.com/help/231463960277847 (last visited May 10, 2020) (touting the form as the "fastest and easiest way to submit a claim of copyright infringement to us").

[841] *Compare* Tr. at 160:10–161:13 (May 2, 2016) (Michael Weinberg, Shapeways) (discussing how people attempt to use the notice-and-takedown system to remove content from the internet for non-copyright reasons), *with* Tr. at 143:10–16 (May 2, 2016) (Jennifer Pariser, MPAA) (noting that recent Google Transparency Report claimed "hundreds of improper notices per month," out of 85 million takedown requests per month).

[842] *See, e.g.*, Tr. at 72:4–22 (May 2, 2016) (Stephen Carlisle, Nova Southeastern University) ("[Y]ou are asked a series of questions to justify your takedown before you can even file your takedown, including [a question about whether you are] the subject of the photograph, in which, if you say yes, you get this bright red warning saying if you're the subject of the photograph, you're most likely not the copyright owner, as if the selfie had never been invented . . . . Google will not let you file a takedown notice unless you create a Google account, which requires you to agree to Google's terms of service[]. This includes a choice of jurisdiction and venue in Google's favor. And this is before you even get to the takedown page."); Tr. at 133:3–10 (May 2, 2016) (Hillary Johnson, author); Tr. at 59:7–9 (May 2, 2016) (Lisa Shaftel,

user-friendly and create dashboards to track the status of notices, other forms "require captchas, different sort[s] of manual procedures that . . . preclude anyone [sending notices] at scale for copyright holders."[843] Additional rightsholder complaints include that the DMCA information is too difficult to find on OSP's websites[844] and that some of the content of the webforms appear geared towards dissuading a rightsholder from submitting a takedown notice.[845]

Of course, both things can be true simultaneously. The Office agrees with many OSPs that new technologies, like webforms, *can*, if executed properly, offer benefits like increased efficiency in ingesting and acting upon takedown notices when compared to the statutory methods of email and physical mail. The Office also agrees with many rightsholders that the bespoke nature of each OSP's webform, combined with DMCA pages that are not readily accessible from the homepage and do not always contain direct contact information for the OSP's designated agent, results in significant increases in the time and effort that must be invested by a rightsholder to submit a takedown notice.

The Office acknowledges that the use of nonstandard and handwritten takedown notices requires OSPs to expend additional time and effort to process them, and that some users seek redress for issues other than copyright through a takedown notice under section 512. To help alleviate some of this burden in the near term, the Copyright Office will publish standard notice and counter-notice forms and will develop additional user education materials regarding the types of notices that are appropriate under section 512.

There is an opportunity, however, for Congress to address the growing disconnect between a statute written for communications prevalent in the late 1990s and current technological expectations and capacities while simultaneously creating a more standardized system that benefits OSPs, rightsholders, and the public. Congress may want to consider a mechanism for "future-proofing" the standard notice requirements under section 512 by shifting enumeration of notification methods from a statutory mandate towards a regulatory process. For

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GAG) ("Every ISP has a different process. There's kind of no standardization. And most artists give up."); Tr. at 20:4–12 (May 12, 2016) (Devon Weston, Digimarc).

[843] Tr. at 20:9–11 (May 12, 2016) (Devon Weston, Digimarc); *see also* AAP Initial Comments at 7.

[844] *See* Tr. at 71:21–72:3 (May 2, 2016) (Stephen Carlisle, Nova Southeastern University) ("If you go to Google's filing with the Copyright Office and say here is where to send your copyright takedown notice, if you copy that and paste that into your browser, you land on a page that does not take you to a takedown form. It takes you to a page which is several different pages removed from every getting to the takedown form."); *see also* Ellen Seidler, *Why Does Google Make it so Damn Difficult to Send a DMCA Notice?*, VOX INDIE (Feb. 24, 2016), http://www.voxindie.org/why-does-google-make-it-so-damn-difficult-to-send-dmca-notice/ (noting, among other complaints, that "Google makes finding the correct form a laborious 9 step process").

[845] *See* Tr. at 64:18–65:1 (May 2, 2016) (Sandra Aistars, Mason Clinic) ("[W]hen you're submitting a takedown notice, most sites will, you know, certainly walk you through the requirements of the DMCA takedown notice. Many of them will emphasize the penalties that might be associated with sending an inaccurate notice, the fact that the notice and your personal information will be made publicly available, the fact that the notice will be forwarded on to the Chilling Effects website and so forth.").

example, since section 512 requires only that an OSP's agent information be "publicly available" on its website, there is currently no standardized practice for the location or content of user notifications regarding the takedown process. Further, many websites require navigating through multiple links (such as "Help" or "Terms of Service") before reaching the web-based submission form or designated agent contact information. Congress could modify the language of section 512(c)(2) to provide that the designated agent's information be not just "on its website in a location accessible to the public,"[846] but also "prominently displayed," and delegate to the Copyright Office the power to set regulations regarding minimal placement and content standards. Similarly, Congress may wish to provide the Office with regulatory authority for the Register of Copyrights to adopt new notice methods as they are developed and become widespread, while sunsetting older, seldom-used methods. In the short term, this could include an opportunity for adding user-friendly webforms or APIs[847] for submission of takedown notices, so that OSPs could utilize new(er) technologies to better integrate notices into their backend and existing workflows. In the long term, it would technology-proof section 512 by allowing older communications methods (*e.g.*, physical mail in the not-too-distant future, perhaps email at some subsequent point) to be replaced by new communications methods in the future.

f) Timeframes in Notice-and-Takedown Process

Study participants expressed concerns about several of the timeframes established in section 512, including what constitutes "expeditious" removal as well as issues related to the 10–14 day window in which content remains down following a counter-notice.[848] As with many issues addressed in this Report, a timeframe viewed as too long by some participants was seen as unacceptably short by others.

The first issue upon which Study participants disagree is the proper interpretation of "expeditious" under the various safe harbors.[849] Upon obtaining actual or red flag knowledge of infringing activity, including via a takedown notice sent by the rightsholder, the OSP must act *expeditiously* to remove or disable access to the allegedly infringing material in order to qualify for

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[846] 17 U.S.C. § 512(c)(2).

[847] APIs are used to enable data exchanges and could allow an organization to submit a single, standardized takedown notice to a central repository, from which it could in turn be accessed by the appropriate OSP.

[848] *See, e.g.*, A2IM Music Community Initial at 19; CCIA Initial Comments at 12; LaPolt Initial Comments at 10; MPAA Initial Comments at 15; UMG Initial Comments at 15–16.

[849] These can be grouped into three categories: (i) provisions protecting an OSP from liability if it "responds expeditiously to remove, or disable access to, the material that is claimed to be infringing" upon receipt of a takedown notice; (ii) provisions protecting an OSP from liability if, upon gaining actual or red flag knowledge of infringement, it "responds expeditiously to remove, or disable access to, the material"; and (iii) provisions relating to aspects of the process for obtaining a subpoena. For the purposes of this section, the Office focuses on the first two categories. The provisions that fall under the first category are sections 512(b)(2)(E), (c)(1)(C), and (d)(3). The provisions that fall under the second category are sections 512(c)(1)(A)(iii) and (d)(1)(C). (Section 512(b) does not contain a knowledge limitation.)

the safe harbor.[850] Congress found that it was "not possible to identify a uniform time limit for expeditious action" in the statute because "the factual circumstances and technical parameters may vary from case to case."[851] In the absence of any specific Congressional guidance, courts, rightsholders, and OSPs have been left to evaluate the "expeditiousness" of removal on a case-by-case basis.

While Study participants note uncertainty about what qualifies as expeditious,[852] they largely agree that the analysis is a fact-specific inquiry, requiring an evaluation of different factors to determine what constitutes "expeditious" in a particular case.[853] OSPs and rightsholders focus on the importance of different factors, however.

The primary factor identified by OSPs is the completeness and accuracy of the notice.[854] The courts that have considered this factor have largely found that a defendant does not violate the "expeditious" requirement when the takedown notice fails to meet the requirements under section 512(c)(3)(A), triggering an obligation to act.[855] The Second Circuit in *Viacom* further explained that "expeditious removal is possible only if the service provider knows with particularity which items to remove."[856] Similarly, the Ninth Circuit in *Motherless* found that the OSP expeditiously removed the allegedly infringing content, thirty-three video clips, when it

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[850] 17 U.S.C. §§ 512(b)(2)(E), (c)(1)(A)(iii), (c)(1)(C), (d)(1)(C), (d)(3).

[851] H.R. REP. NO. 105-551, pt. 2, at 53–54 (1998).

[852] *See, e.g.*, A2IM Music Community Initial Comments at 19 ("Another major inefficiency in the DMCA, as implemented in today's environment, is the lack of clarity about what is meant by 'expeditious' takedown."); LaPolt Initial Comments at 10 (saying that expeditiousness is one of many "ambiguities" in section 512); Tr. at 230:8–10 (Apr. 8, 2019) (Alex Feerst, Medium) ("[T]he definition of expeditiously is something that might be defined later in whatever form."); Tr. at 75:14–20 (May 2, 2016) (Natalie Madaj, NMPA) ("There aren't really any clear guidelines in the DMCA about what constitutes expeditious.").

[853] *See, e.g.*, A2IM Music Community Initial Comments at 19 ("'Expeditious' takedown must be interpreted to be commensurate with the speed at which infringing material can be uploaded, indexed and disseminated over the Internet. Google touts that it removes noticed infringing URLs from its system within six hours, but fails to provide transparency about the speed by which it indexes those infringing sites. Six hours on its own is a meaningless statistic in thinking about what 'expeditious' means without an understanding of Google's capabilities and speed in indexing infringing services in the first place.") (citation omitted); CCIA Initial Comments at 12 ("'[E]xpeditious' will naturally vary, such that small service providers or individuals are not held to the same standard as large service providers."); Tr. at 453:18–454:3 (Apr. 8, 2019) (Joseph Gratz, Durie Tangri LLP) (discussing the *Long v. Dorsett* decision finding 5 days expeditious and saying that "there may be situations in which that amount of time isn't expeditious, and there are likely to be lots of situations where a much longer amount of time might well be expeditious, particularly where on service provider receives a notice, and there are downstream [section] 512 online service providers downstream of them who are in contact with the actual user").

[854] *See, e.g.*, CCIA Initial Comments at 11.

[855] *See, e.g.*, *Motherless*, 885 F.3d at 612; *Viacom Int'l v. YouTube, Inc.*, 676 F.3d 19, 30–31 (2d Cir. 2012) ("[T]o require expeditious removal in the absence of specific knowledge or awareness would be to mandate an amorphous obligation to 'take commercially reasonable steps' in response to a generalized awareness of infringement. Such a view cannot be reconciled with the language of the statute.") (citations omitted).

[856] *Viacom*, 676 F.3d at 30.

removed the clips the same day that the copyright owner provided the individual URLs linking to the content.[857] District court decisions have found that deficiencies in the takedown notice can support a delay of several days.[858]

Rather than focusing on the content of the takedown notice to determine whether removal was "expeditious," many rightsholders emphasize the nature of the content itself as an important factor in determining whether a removal was sufficiently expeditious. One such example offered by rightsholders is streams of live sporting events; as one rightsholder notes "[g]iven the unique and perishable nature of live sports telecasts, the appropriate takedown time for those telecasts is not the same as it may be for other copyrighted works."[859] Other copyright owners point not to the particular type of content, but instead to the compounding nature of the potential economic harm that continues to occur as long as unauthorized content remains available on the internet, and express frustration with the amount of time it sometimes takes OSPs to remove infringing content.[860] The Copyright Office acknowledges that the amount of time that elapses before a takedown notice is acted upon has significant implications. For works that are incredibly time-sensitive, such as live sports and major new music releases,[861] the market for these products is largest right at the time it first becomes available; if too much time has passed, customers lost to the infringing versions are unlikely to be regained after the takedown. The Office believes, however, that the case law largely demonstrates that courts correctly recognize that a determination of expeditiousness is a fact-specific inquiry that depends on the circumstances. A standard like expeditiousness offers courts some flexibility to account for the specific circumstances surrounding the takedown notice, including technological changes that have

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[857] *Motherless*, 885 F.3d at 612.

[858] *See, e.g.*, *Wolk v. Kodak Imaging Network, Inc.*, 840 F. Supp. 2d 724, 734, 746–47 (S.D.N.Y. 2012), *aff'd sub nom.*, *Wolk v. Photobucket.com, Inc.*, 569 F. App'x 51 (2d Cir. 2014) (excusing a delay of several days for 700 images as a result of deficiencies in the takedown notice). *Cf. Io Grp., Inc. v. Veoh Networks, Inc.*, 586 F. Supp. 2d 1132, 1150 (N.D. Cal. 2008) (noting that defendant removed allegedly infringing files without even receiving takedown notices, but finding that defendant's practice of "remov[ing] noticed content as necessary on the same day the notice is received (or within a few days thereafter)" is sufficient).

[859] National Basketball Association et al., Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015, Notice of Inquiry at 2 (Apr. 1, 2016) ("An ISP does not act 'expeditiously,' for purposes of Section 512, unless it either removes infringing streams of a live sports telecast at the same time it receives a DMCA-compliant notice (i.e., immediately) or provides the copyright owners of those telecasts with the means to remove the infringing streams when they afford such notice."); *see also* UMG Initial Comments at 15–16 ("Section 512 should be amended to provide a maximum time—and an extremely short time—within which content must be taken down for a service provider to get the benefit of a safe harbor.").

[860] *See, e.g.*, MPAA Initial Comments at 15 ("Waiting days or weeks to take action in response to a takedown notice is not acting 'expeditiously' to remove infringing content."); UMG Initial Comments at 15 ("[T]here is no reason that the time to take *down* infringing content should materially exceed the time it requires to *upload* infringing content (i.e., nearly instantaneously).").

[861] For example, Beyoncé (and her record company) released her 12-track music album *Lemonade* exclusively on the streaming platform Tidal the day before it was released for purchase and two weeks before it appeared at physical retailers. *See* Marcus J. Moore, *Beyonce's* Lemonade, *Explained: An Artistic Triumph That's Also An Economic Powerhouse*, VOX (Apr. 28, 2016 2:50 PM), https://www.vox.com/2016/4/28/11518702/lemonade-beyonce-explained.

rendered what was once expeditions far less so. Congress recognized the importance of this flexibility, stating that "[b]ecause the factual circumstances and technical parameters may vary from case to case, it is not possible to identify a uniform time limit for expeditious action."[862] For this reason, the Copyright Office favors either a flexible statutory standard, or creation of a regulatory framework to update the recommended range of times as needed to reflect current business practices and needs.

Another aspect of section 512 that received significant attention from stakeholders on all sides was the ten–fourteen day period between when the OSP receives a counter-notice and when the copyright holder must file a federal lawsuit or see the material get replaced set forth in section 512(g)(2)(C).[863] This particular statutory timeframe turns out to present something like a Schrödinger's timeframe: both too long to have non-infringing speech down, and too short to enable a copyright owner to adequately research and file a complaint in federal court.

One OSP notes that this timeline seems unbalanced, suggesting that a "more balanced system would allow the service provider freedom to restore the material immediately with cause to do so."[864] Rightsholders, albeit for a different reason, criticize this timeline as well, arguing that ten business-days after receiving a counter-notice is not a sufficient time period to allow filing a federal lawsuit before the OSP reinstates the allegedly infringing material.[865] Rightsholders discuss in their comments the inadequacy of such a short period to prepare the steps necessary to file lawsuit[866] as well as the inherent costs of pursuing a federal court action.[867]

The Copyright Office, therefore, agrees with the concerns of both OSPs and copyright owners that this length of time does not comport with current business models. Congress' specific intentions with this particular time period are unclear, and certainly do not reflect the time-sensitive nature of content on the internet.[868] Notice senders cannot reasonably commence

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[862] H.R. REP. NO. 101-551, pt. 2, at 53–54 (1998).

[863] 17 U.S.C. § 512(g)(2)(C).

[864] Mozilla Initial Comments at 7.

[865] *See* Authors Guild Initial Comments at 28; IPO Initial Comments at 7; RIPG Initial Comments at 6.

[866] *See* IPO Initial Comments at 7.

[867] *See* Professional Photographers of America ("PPA"), Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015, Notice of Inquiry at 1 (Apr. 1, 2016) ("PPA Initial Comments") ("When an infringer files a counter-notification, the photographer's only option is to file legal action within ten days, which is too time-consuming and expensive."); RIPG Initial Comments at 6 ("The requirement to bring a federal lawsuit within 10 business days is overly burdensome and impractical except in situations where the monetary losses can be quantified with sufficient certainty to establish that pursuing costly federal litigation is a viable option. Often times, when coupled with the investment of time (away from revenue-generating activities) and up front legal costs, the chance of securing maximum statutory damages for infringement of an audio file or other copyrighted material does not warrant the pursuit of a federal court action.").

[868] *See* Mozilla, Additional Comments Submitted in Response to U.S. Copyright Office's Nov. 8, 2016, Notice of Inquiry at 4 (Feb. 21, 2017) ("Mozilla Additional Comments") ("The group who are most unfairly disadvantaged by the inaccessibility of their content are those who regularly attempt to take advantage of their fair use rights, perhaps as part

federal litigation within ten days to prevent an inappropriate put-back due to an unjustified counter-notice.[869] At the same time, requiring court action to contest a counter-notice is not feasible given the volume of infringement and the associated federal court costs. Moreover, before filing in federal court, a plaintiff's attorney must fully investigate their claims, per Rule 11 of the Federal Rules of Civil Procedure.[870] Because of these time constraints, federal court is likely not a good option for disputing counter-notices, and Congress may want to consider alternative dispute resolution solutions.[871]

3. Other Section 512 Statutory Provisions

Several provisions that Congress included in section 512 to balance the interests of rightsholders and OSPs have been little-used in the two decades since its passage. These provisions include those relating to subpoenas (section 512(h)) and injunctions (section 512(j)).

a) Subpoenas

Section 512(h) provides a mechanism for a copyright owner to subpoena an OSP to seek identification of an alleged infringer.[872] According to the legislative history, Congress intended to limit the scope of the subpoena to "information in the possession of the service provider, rather than obliging the service provider to conduct searches for information that is available from other systems or networks," and articulated the role of courts in issuing subpoenas as "a ministerial function performed quickly for this provision to have its intended effect."[873] Subpoenas were to

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of a business or a hobby. Such people can find themselves in receipt of a large number of DMCA notices, and have to take the time and effort to challenge each one. If their understanding of fair use is correct, their challenges will be successful—but in the interim, their content has been inaccessible, and their production costs have skyrocketed."); Urban et al. Empirical Study at 45 ("[T]en to fourteen days represents 'an eternity on the Internet' for small businesses, for community sites where content has a short lifespan, or for political speech."); Li Yu, Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015, Notice of Inquiry at 1 (Mar. 22, 2016) ("[T]he long waiting time of counter-notification process may still harm some users' speech interests and financial profit. For example, advertising videos for film marketing campaign.").

[869] *See also Fourth Estate Pub. Benefit Corp. v. Wall-Street.com LLC*, 139 S. Ct. 881, 892 (2019) (holding that a copyright infringement lawsuit may be brought only after the Copyright Office registers or refuses the application to register).

[870] FED. R. CIV. P. 11(b) ("By presenting to the court a pleading, written motion, or other paper—whether by signing, filing, submitting, or later advocating it—an attorney or unrepresented party certifies that to the best of the person's knowledge, information, and belief, formed after an inquiry reasonable under the circumstances: (1) it is not being presented for any improper purpose, such as to harass, cause unnecessary delay, or needlessly increase the cost of litigation; (2) the claims, defenses, and other legal contentions are warranted by existing law or by a nonfrivolous argument for extending, modifying, or reversing existing law or for establishing new law; (3) the factual contentions have evidentiary support or, if specifically so identified, will likely have evidentiary support after a reasonable opportunity for further investigation or discovery; and (4) the denials of factual contentions are warranted on the evidence or, if specifically so identified, are reasonably based on belief or a lack of information.").

[871] *See infra* section VI.C.1.

[872] 17 U.S.C. § 512(h).

[873] H.R. REP. NO. 105-551, pt. 2, at 61 (1998).

be "expeditiously issued" if the rightsholder's paperwork was in order, including a notification that complies with the elements required under section 512(c)(3)(A).[874]

Only a few Study participants address section 512(h) in their submissions and testimony. Among those that address the issue, rightsholders uniformly decry the current (lack of) utility of section 512(h). These rightsholders argue that the tool which Congress envisioned has not come to fruition, and that the section 512(h) subpoena "requirements have, over the course of time, become overwritten and judicially glossed with a series of additional requirements before compliance with a subpoena may be ordered."[875] Under the rightsholder's analysis, as a result of these requirements and current business practices, section 512(h) has become a costly and ineffective mechanism—that they gain little even with a subpoena because an OSP may have already deleted its data logs in the interim and, even if not, the information rightsholders receive is often inaccurate or useless. Among OSPs, only the ISPs weigh in, asserting that courts have largely interpreted section 512(h) correctly, particularly in finding that section 512(h) does not apply to mere conduits.[876] User advocacy groups, on the other hand, focus their discussion of section 512(h) on the potential speech chilling effects of allowing rightsholders to uncover the identity of anonymous internet users via "the ease of demanding user information with subsection 512(h) subpoenas that [] do not need to be predicated on actual lawsuits"[877]

In practice, courts have largely excluded from coverage the most relevant OSPs for uncovering the identity of individuals using BitTorrent and similar file-sharing protocols to exchange portions of infringing works: section 512(a) ISPs.[878] In one of the earliest cases to consider the availability of section 512(h) subpoenas against an ISP, the D.C. Circuit in *Recording*

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[874] 17 U.S.C. § 512(h)(4) ("If the notification filed satisfies the provisions of subsection (c)(3)(A), the proposed subpoena is in proper form, and the accompanying declaration is properly executed, the clerk shall expeditiously issue and sign the proposed subpoena and return it to the requester for delivery to the service provider.").

[875] APA et al., Additional Comments Submitted in Response to U.S. Copyright Office's Nov. 8, 2016, Notice of Inquiry at 5 (Feb. 21, 2017).

[876] *See* ACA Initial Comments at 12 ("Finally, Congress and the Office should resist any suggestions that the subpoena provisions of Section 512(h) be expanded to apply to conduit service providers."); USTelecom Initial Comments at 6 ("Multiple courts have affirmed that the plain language and structure of Section 512 unambiguously links the subpoena power of § 512(h) only to the storage and linking functions that are the subject of §§ 512(b)–(d)."); Verizon Initial Comments at 13 ("The courts have been consistently correct to conclude that the special expedited subpoena provisions of section 512(h) are inextricably tied to the notice and takedown process, and, therefore, do not apply where the alleged infringement arises out of a service provider's acting as a conduit for third-party transmissions.") (citations omitted).

[877] Copia Institute Initial Comments at 12 (citations omitted).

[878] Since the BitTorrent protocol has largely been designed to avoid requiring a central OSP in order to operate, there are relatively few ways to identify a particular user absent information from the user's ISP. Instead, many companies seeking the identity of a user file John Doe lawsuits against the user and request a subpoena to obtain the information from the ISP under Federal Rules of Civil Procedure 26(d)(1) and 45. *See, e.g.*, *Strike 3 Holdings, LLC v. Doe*, 337 F. Supp. 3d 246, 256 (W.D.N.Y. 2018); *TCYK, LLC v. Does 1-87*, No. 13 C 3845, 2013 WL 5567772, at *3, *5 (N.D. Ill. Oct. 9, 2013); *Virgin Records Am., Inc. v. Doe*, No. 5:08-CV-389, 2009 WL 700207, at *1 (E.D.N.C. Mar. 16, 2009).

Industry Association of America, Inc. v. Verizon Internet Services, Inc., held that "a subpoena may be issued only to an [O]SP engaged in storing on its servers material that is infringing or the subject of infringing activity."[879] In reaching this conclusion, the court relied upon an analysis of the text of section 512(h) and the overall structure of section 512. The court reasoned that the reference to "a copy of a notification [of claimed infringement, as] described in [section 512](c)(3)(A)" indicates that only those OSPs who host material that can be removed pursuant to that section may properly be subject to a subpoena under section 512(h).[880] Subsequent court decisions have largely adopted a similar statutory analysis as the one the court conducted in *Verizon*.[881]

Even outside the context of mere conduit ISPs, section 512(h) has proved to be a less useful tool for rightsholders than Congress may have anticipated. Section 512(h) requires a clerk to ascertain that the request "notification filed satisfies the provisions of subsection (c)(3)(A), the proposed subpoena is in proper form, and the accompanying declaration is properly executed."[882] While Congress initially expected this to be a largely ministerial task,[883] district courts have increasingly been called on to evaluate the rightsholders' compliance with these requirements, often as the result of a motion by the user to quash the subpoena.[884] As a result of such requests, courts have adopted various tests under Fed. R. Civ. P. 45(c)(3)(A)(iii) to weigh the rightsholder's need for the subpoena against the First Amendment and privacy rights of the user.[885] Other

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[879] *Verizon*, 351 F.3d at 1233. Following the D.C. Circuit's decision, some individuals who had been identified pursuant to section 512(h) subpoenas directed to ISPs in turn sued the ISPs for disclosing their information. *See, e.g.*, *Garrett v. Comcast Cable Commc'ns, LLC*, No. 3:04-CV-2152, 2005 WL 8158342 (N.D. Tex. Mar. 2, 2005).

[880] *Verizon*, 351 F.3d at 1234–36.

[881] *See In re Charter Commc'ns, Inc., Subpoena Enf't Matter*, 393 F.3d 771, 777 (8th Cir. 2005) ("[B]ecause the parties do not dispute that Charter's function was limited to acting as a conduit for the allegedly copyright protected material, we agree § 512(h) does not authorize the subpoenas issued here."); *In re Subpoena Issued to Birch Commc'ns, Inc.*, No. 1:14–cv–3904, 2015 WL 2091735, at *5 (N.D. Ga. May 5, 2015) ("Beyond does not store or host on its servers the allegedly infringing material, and thus there is no allegedly infringing material to be removed or access to which must be disabled. Because Rightscorp therefore cannot satisfy the notice requirements of Section 512(c)(3)(A), a subpoena cannot be issued under Section 512(h)."); *Pac. Century Int'l, Ltd. v. Does 1*–37, 282 F.R.D. 189, 201 n.6 (N.D. Ill. 2012) (noting the inadequacy of section 512(h) subpoenas in light of the D.C. Circuit's ruling in *Verizon* that section 512(h) does not apply to conduit ISPs); *Well Go USA, Inc. v. Unknown Participants in Filesharing Swarm Identified by Hash*, Civ. No. 4:12–cv–00963, 2012 WL 4387420, at *3 (S.D. Tex. Sept. 25, 2012) ("Because of the nature of P2P activity, these ISPs were likely used only as conduits to download any infringing material. Thus, these ISPs likely fall within the safe harbor described in [section] 512(a) and discovery should be granted through a different mechanism if possible."); *In re Subpoena to Univ. of N.C. at Chapel Hill*, 367 F. Supp. 2d 945, 955–56 (M.D.N.C. 2005) (denying a subpoena because the ISP was a mere conduit and did not store allegedly infringing material).

[882] 17 U.S.C. § 512(h)(4).

[883] H.R. REP. NO. 105-551, pt. 2, at 60–61 (1998).

[884] *See In re Watch Tower Bible and Tract Society of Pa.'s Request For Issuance Of A Subpoena*, No. 18mc301, 2018 WL 3187355, at *1–*2 (S.D.N.Y. June 28, 2018) (denying issuance of a subpoena pursuant to a users' motion to quash); *Maximized Living, Inc. v. Google, Inc.*, No. C 11–80061 MISC, 2011 WL 6749017, at *6 (N.D. Cal. Dec. 22, 2011) (same).

[885] *See Sony Music Entm't Inc. v. Does 1*–40, 326 F. Supp. 2d 556, 564–65 (S.D.N.Y. 2004) (stating that the principal factors for determining whether to grant a motion to quash are: "(1) [the] concrete[ness of the plaintiff's] showing of a prima facie claim of actionable harm, . . . (2) [the] specificity of the discovery request, . . . (3) the absence of alternative means

courts have interpreted section 512(h)'s reference to section 512(c)(3)(A) as limiting the scope of a subpoena to cover only ongoing infringement.[886]

Section 512(h)'s language is ambiguous, at best, and raises questions as to its proper scope (for example, its applicability to mere conduits). The Office has elsewhere noted that receipt of a section 512(c)(3)(A) notification, while not obligating an ISP to actually takedown material, nonetheless creates a duty to act on the *information* contained therein, either for the purpose of implementing a repeat infringer policy or for avoiding conduct that amounts to willful blindness.[887] Here, however, section 512(h) makes multiple references to receipt of "*a* notification *described* in [section 512](c)(3)(A)" or a copy of such a notice.[888] Unlike language such as "a notice containing the information set forth in [section 512](c)(3)(A)," which would clearly be referencing section 512(c)(3)(A) for purposes of describing the *content* of the notice rather than invoking the larger notice-and-takedown structure, the current language of section 512(h) *can* be interpreted to limit its scope to ISPs subject to notice-and-takedown requirements. On the other hand, section 512(h) states that the copyright owner may request the court "to issue a subpoena to a *service provider*,"[889] which, as defined in section 512(k), includes mere conduits.[890]

While the language of section 512(h) is thus open to multiple interpretations, it is not clear to the Office that Congress explicitly *intended* to exclude ISPs from section 512(h) as asserted by the Second Circuit.[891] While the D.C. Circuit's conclusion in *Verizon* rests, in part, on the assertion that Congress drafted the DMCA too narrowly "to reach the new technology when it came along,"[892] this finding does not seem to take into account the legislative history that demonstrates Congress' desire for the DMCA to be forward looking.[893]

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to obtain the subpoenaed information, . . . (4) [the] need for the subpoenaed information to advance the claim, . . . and (5) the [objecting] party's expectation of privacy") (citations omitted); *see also Arista Records LLC v. Doe 3*, 604 F.3d 110, 119 (2d Cir. 2010) (quoting *Sony Music*, 326 F. Supp. 2d at 564–65).

[886] *See, e.g.*, *Maximized Living, Inc. v. Google, Inc.*, No. C 11–80061 MISC, 2011 WL 6749017, at *5–*6 (N.D. Cal. Dec. 22, 2011) (relying on the reasoning in *Verizon* to find that the subpoena is "limited to currently infringing activity" because the subpoena must be "susceptible to the notice and take down provisions of the DMCA") (citation omitted).

[887] *See supra* n.671.

[888] 17 U.S.C. §§ 512(h)(2)(A), (h)(5) (stating that an OSP shall act expeditiously "[u]pon receipt of the issued subpoena, either accompanying or subsequent to the receipt of *a notification* described in subsection (c)(3)(A)") (emphasis added).

[889] 17 U.S.C. § 512(h)(1) (emphasis added).

[890] *See* 17 U.S.C. § 512(k)(1)(A).

[891] As the court in *In re Subpoena to University of North Carolina at Chapel Hill* recognized, Congress might have wanted section 512(h) to apply to mere conduits, but "for whatever reason, the drafters of Section 512(h) crafted a mechanism which focuses on the notification provisions of the Act which only apply to Sections 512(b)–(d) service providers." *In re Subpoena to Univ. of N.C. at Chapel Hill*, 367 F. Supp. 2d 945, 955 (M.D.N.C. 2005).

[892] *Verizon*, 351 F.3d at 1238.

[893] *See, e.g.*, H.R. REP. NO. 105-551, pt. 2, at 21 (1998) (noting that one of the purposes of section 512 was to "foster the continued development of electronic commerce and the growth of the Internet").

As a policy matter, the Office notes that an inability to uncover the identity of a user behind an IP address, information that is likely to reside nowhere else than with the ISP, "dooms [a plaintiff's] claim[s]," since a plaintiff's "inability to identify defendant makes effectuating service or prosecuting the case impossible."[894] Weighing on the other side, user advocacy groups articulate not insignificant public policy arguments against facilitating the actions of a certain class of individuals and companies that purchase and then assert copyright rights against individual users, uncovered pursuant to some form of subpoena or discovery, primarily as a mechanism to gain a quick settlement payment rather than to actually stop the infringement of their rights.[895] Ultimately, however, the Office does not countenance stripping rightsholders from any realistic ability to enforce their (Congressionally mandated and constitutionally supported) rights, even if doing so may prevent some bad actors from abusing the primary mechanism by which rightsholders may vindicate those rights. As the Office noted earlier in this Report, it has long been a fundamental axiom of U.S. jurisprudence that an effective remedy must be available for the vindication of a right that has been transgressed.[896] While the Office would favor a legislative fix to address ambiguity of section 512(h) and clarify whether ISPs are properly subject to subpoenas under section 512(h) (such as replacing references to "a notice described in [section 512](c)(3)(A)" with language such as "a notice containing substantially the same information as a notice under section 512(c)(3)(A)"), it agrees that there is a larger substantive discussion to be had regarding the litigation tactics used by certain companies. To properly address these concerns, however, the conversation should focus on the actual tactics at issue, rather than using section 512(h) as a proxy to wage those battles.

b) Injunctions

Section 512(j) is another provision that has received relatively little attention since the DMCA's enactment.[897] Though section 512's limitation on liability guards eligible OSPs against

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[894] *Strike 3 Holdings, LLC v. Doe*, 351 F. Supp. 3d 160, 165 (D.D.C. 2018).

[895] Such individuals and companies are often referred to as "copyright trolls." *See Malibu Media, LLC v. John Does 1, 6, 13, 14*, 950 F. Supp. 2d 779, 780 (E.D. Pa. 2013) (defining a "copyright troll" as "a non-producer who merely has acquired the right to bring lawsuits against alleged infringers" but noting that "Malibu is an actual producer of adult films"). *See, e.g.*, Tr. at 257:17–21 (Apr. 8, 2019) (Eric Goldman, Santa Clara University School of Law) ("I'd say [section] 512(h)'s fast lane to getting identity has become one of the sources of copyright trolling, that it has enabled people to go and bring lawsuits with the sole intent of extracting settlements."); Tr. at 321:13–16 (My 12, 2016) (Steven Ellerd, graduate student) (describing this practice as a "business model set up under the DMCA"). The Office will not here go into the debate surrounding such activities.

[896] *See Marbury v. Madison*, 5 U.S. (1 Cranch) 137, 163 (1803) ("The very essence of civil liberty certainly consists in the right of every individual to claim the protection of the laws, whenever he receives an injury. One of the first duties of government is to afford that protection.").

[897] While rightsholders have sought a handful of injunctions under section 512(j), their primary method of obtaining injunctive relief against serial infringers (be they OSPs or individual users) appears to have been to sue for contributory infringement or inducement, and then seek a permanent injunction from the court. *See, e.g.*, *Columbia Pictures Indus., Inc. v. Fung*, 710 F.3d 1020, 1049 (9th Cir. 2013) *cert. denied sub nom.*, *Fung v. Columbia Pictures Indus., Inc.*, 571 U.S. 1007

monetary damages, a copyright owner may still seek injunctive relief under section 512(j).[898] Section 512(j) limits the injunctive relief available against both non-conduit and conduit OSPs. Section 512(j)(1)(A) sets forth three forms of relief available against non-conduit OSPs (*i.e.*, section 512(b)–(d) OSPs). A copyright owner can obtain relief in the form of (1) disabling access to the infringing material; (2) terminating specific accounts that engage in infringement; and (3) enjoining the OSP from continuing to allow access to the infringing material by what the court deems the least burdensome effective remedy.[899] Section 512(j)(1)(B) applies to mere conduit ISPs and only allows for termination of accounts and/or blocking access to foreign websites.[900] When ruling on an application for an injunction under section 512(j), a court must take into account four considerations: (1) the burden on the OSP of the injunction alone, or combined with other injunctions; (2) the "magnitude of the harm" that the copyright owner may face if the infringement is not halted; (3) the technical feasibility of the injunction, and whether the injunction would interfere with access to noninfringing material at other online locations; and (4) the availability of "less burdensome and comparably effective" measures to deny access to the infringing material.[901] Congress intended for section 512(j) to enable rightsholders "to secure the cooperation of those with the capacity to prevent ongoing infringement."[902] In practice, the applicability of section 512(j)—and how it differs from the relief available under notice-and-takedown—has been unclear, and, accordingly, rightsholders have rarely pursued injunctions under section 512(j).

During the Study, rightsholders acknowledge that there have been few cases involving section 512(j), but assert that this is because courts have interpreted the injunctive relief too narrowly.[903] Smaller rightsholders also note that the cost of pursing an injunction is too high for

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(2013) (affirming the district court's granting of an injunction with modification); *Grady v. Swisher*, No. 11-CV-02880, 2014 WL 3562794 (D. Colo. July 18, 2014).

[898] 17 U.S.C. § 512(j).

[899] 17 U.S.C. §§ 512(j)(1)(A)(i)–(iii).

[900] 17 U.S.C. §§ 512(j)(1)(B)(i)–(ii).

[901] 17 U.S.C. §§ 512(j)(2)(A)–(D).

[902] H.R. REP. NO. 105-551, pt. 1, at 11 (1998). The legislative history also notes that, though injunctive relief under section 512(j) is limited, OSPs remain subject to injunctions under existing principles of law. *See* H.R. REP. NO. 105-551, pt. 2, at 62 (1998); S. REP. NO. 105-190, at 52 (1998).

[903] A2IM Music Community Initial Comments at 45 ("The few cases that have addressed Section 512(j) have found the issue of injunctive relief to be moot because the service provider had already removed the infringing material and/or terminated the accounts of the infringers by the time the case was heard. Further, even if Section 512(j) were applied more commonly, it would not offer much more relief from the whack-a-mole problem than notice-and-takedown measures do.") (citations omitted); c3 Initial Comments at 42 ("There are very few cases applying the standards in [section] 512(j), and those that do state that an injunction would be moot because the service provider had already removed the infringing material and/or terminated the accounts of the infringers. These cases seem to assume that subsections (i) and (ii) are coextensive with the requirements for safe harbor regarding takedown and removal of repeat infringers.") (citations omitted); Tr. at 404:13–16 (Apr. 8, 2019) (Mary Rasenberger, Authors Guild) ("It has not been

most individual creators.[904] As a result, rightsholders argue, section 512(j) provides an insufficient remedy for fighting copyright infringement both domestically and abroad.[905]

OSPs and user advocacy groups, on the other hand, argue that section 512(j) injunctive relief is sufficient as is, and that expanding it would jeopardize OSPs' protection under the safe harbors.[906] Additionally, some Study participants note that the purpose of section 512(j)(1)(A) is achieved by the relief available through the notice-and-takedown provisions.[907]

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used because of how narrow the relief is, and the uncertainty as to its application, particularly with what the courts have done with other sections of 512.").

[904] *See, e.g.*, AAP Initial Comments at 25–26 ("The costs and risk inherent in the implied requisite conditions to bring a suit against a service provider for inducement, contributory infringement, or vicarious liability provide strong disincentives to attempting to seek such injunctive relief."); IFTA Initial Comments at 13 ("Such limited injunctive relief may be too expensive for small companies to justify or pursue, especially in light of the flood of infringements that rights holders face in the online environment. Additionally, it is unclear as to whether a court would require a rights holder to establish a service provider's liability for copyright infringement before issuing injunctive relief under section 512(j)."); Schneider Initial Comments at 20 ("For an individual musician such as myself, it is a complete impossibility to consider starting any sort of 'injunction lawsuit,' let alone paying the legal fees to see it to fruition . . . . And since the law passed in 1998, there haven't been any such 'injunction' suits by musicians. None. Of course there haven't. It's a completely unrealistic and impossibly expensive 'remedy.'").

[905] *See* A2IM Music Community Initial Comments at 45 ("Increasingly, responsible governments are pushing back against this 'offshoring' of enforcement responsibility, by developing means and processes for restricting or blocking access from within their borders to these overseas pirate sites. In due course, the U.S. must join the growing number of its trading partners by stepping up to this problem . . . [t]he current provision in Section 512(j) is clearly insufficient."); c3 Initial Comments at 41–42 ("Section 512(j) is not a sufficient remedy to address the posting of infringing material. Many of the most blatant and deliberate infringing service providers reside in countries outside of the United States, which despite lawsuits, fees, injunctions, and jail sentencing, just will not go away; with the most infamous website being The Pirate Bay.") (citations omitted); Getty Initial Comments at 8 (stating that section 512(j) is "absolutely not" sufficient and noting that "[w]ithout the possibility of recovering damages, there is no meaningful deterrent to allowing infringing content to be posted, and thus a vicious cycle is created where more and more infringing content is posted."); UMG Initial Comments at 44 ("Injunctive relief is often rendered moot through the voluntary take-down of infringing content or termination of an offending user, and given the 'whack-a-mole' problem among others, is not a sufficient remedy to address the more fundamental problems afflicting Section 512.").

[906] Google states that "[t]he limited injunctive relief available under Section 512(j) strikes the appropriate balance among the policies Congress weighed in enacting Section 512" and stating that an expansion of section 512(j) to "[p]ermit[] more sweeping or burdensome injunctive relief would undermine the effectiveness of the safe harbor provisions." Google Initial Comments at 16. *See also* Facebook Initial Comments at 11 ("Section 512(j) appropriately restricts relief to blocking access to the infringing material and terminating [ir]responsible users while otherwise protecting the service provider from liability, in keeping with the purpose of the safe harbors."); Yahoo! Inc., Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015, Notice of Inquiry at 17 (Apr. 1, 2016) ("Yahoo Initial Comments") ("[T]he relief available expressly addresses the removal of infringing material posted by third parties. Importantly, this relief is balanced to consider the rights of all parties involved—particularly when the intermediary is not the infringer and is simultaneously hosting a wealth of non-infringing content that the public should continue to have access to.").

[907] *See* SoundCloud Initial Comments at 19 ("A well-functioning notice-and-takedown process is a more effective remedy against online infringement than injunctive relief. Notice-and-takedown is quick, cheap and effective, certainly when compared to the time and cost involved in applying for injunctive relief."); Yahoo Initial Comments at 17 ("As a rights holder, Yahoo has never had to utilize section 512(j), which speaks to the effectiveness and efficiencies of the notice and takedown system as a whole. Likewise, no court has subjected Yahoo to section 512(j) injunctive relief as a

Indeed, though few, most judicial opinions addressing an injunction sought under section 512(j) have found that the injunctive relief is mooted by intervening actions taken by the OSP in response to a takedown notice.[908] However, as noted above, there are three different kinds of relief available against a non-conduit OSP.[909] Even where relief is moot under sections 512(j)(1)(A)(i) and (ii), many courts generally do not undertaken an independent analysis to determine if some other form of relief is available under section 512(j)(1)(A)(iii).[910] In fact, the few cases that even cite section 512(j)(1)(A)(iii) decline to issue an injunction under that provision, either because the request lacks sufficient specificity[911] or because the requested relief is overly burdensome on the OSP.[912]

Section 512(j) cannot be separated from the larger fabric of section 512, in particular the general requirements and obligations placed upon OSPs seeking to avail themselves of a safe harbor, including notice-and-takedown provisions. The availability of injunctive relief that goes beyond what a rightsholder can obtain via the notice-and-takedown process is ultimately limited to a narrow category of cases, such as (i) seeking to prevent the reupload of content following a counter-notice, (ii) seeking termination of a particular user's account, (iii) seeking and order to compel the OSP to comply with a takedown notice, or (iv) seeking an order to block a foreign website under section 512(j)(1)(B)(ii).[913] Many of the court cases rejecting a subpoena request under section 512(j) never address these possibilities when holding that injunctive relief is moot.

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service provider"); Tr. at 261:14–262:2 (Apr. 8, 2019) (Joeseph Gratz, Durie Tangri LLP) ("[W]e don't see a lot of [section] 512(j) injunctions because the purpose of that injunction has already been achieved."). *But see* Tr. at 259:13–22 (Apr. 8, 2019) (Eric Goldman, Santa Clara University School of Law) ("The DMCA safe harbor says that [OSPs] can avoid financial damages and be subject to a limited injunction, which is spelled out in [section] 512(j). So for me, the idea is that [section] 512(j) is available to all of the copyright owners who are upset about infringement online. There's still the possibility of exercising the rights that are permitted under that, and I do not understand why that has not been more widely explored.").

[908] *Motherless*, 885 F.3d at 602 ("Ventura sought damages and an injunction but the injunction claim became moot when Lane deleted all the infringing clips."); *Io Grp.*, 586 F. Supp. 2d at 1154–55 (holding the request for a section 512(j) injunction is moot because the OSP independently removed the content, which is all that it would have been compelled to do if the injunction were granted); *Wolk v. Kodak Imaging Network, Inc.*, No. 10 Civ. 4135, 2011 WL 940056, at *7 (S.D.N.Y. Mar. 17, 2011). *But see Perfect 10, Inc. v. Google, Inc.*, No. CV 04-9484, 2010 WL 9479060, at *10 (C.D. Cal. July 30, 2010) (holding that injunctive relief in the form of disabling access to infringement was not moot, but denying relief as the plaintiff's request failed to provide the specificity required to obtain the limited injunctive relief under section 512(j)(1)(A)).

[909] These are: (1) disabling access to the infringing material; (2) terminating specific accounts that engage in infringement; and (3) enjoining the OSP from continuing to allow access to the infringing material by what the court deems the least burdensome effective remedy. 17 U.S.C. §§ 512(j)(1)(A)(i)–(iii).

[910] *See Io Grp.*, 586 F. Supp. 2d at 1554–55.

[911] *See Perfect 10, Inc. v. Google, Inc.*, No. CV 04-9484, 2010 WL 9479060, at *10 (C.D. Cal. July 30, 2010).

[912] *See Wolk v. Kodak Imaging Network, Inc.*, No. 10 Civ. 4135, 2011 WL 940056, at *8 (S.D.N.Y. Mar. 17, 2011).

[913] 17 U.S.C. § 512(j)(1). The Office was able to locate only one case in which a rightsholder sought an injunction pursuant to section 512(j)(1)(B)(ii). *See* Complaint, *Arista Records, Inc., et al. v. AT&T Broadband Corp., et al.*, No. 1:02-cv-06554 (Aug. 16, 2002) (S.D.N.Y. 2002), ECF No. 1. While the plaintiffs filed a complaint seeking injunctive relief under

Nonetheless, it is not clear to the Office that a significant number of rightsholders have, in fact, sought relief under section 512(j) in such situations. The cost and expense of seeking an injunction in federal court against an OSP, particularly one that has previously demonstrated a willingness to litigate subpoenas and other matters relating to claims of online infringement, likely has some deterrent effect on rightsholders' willingness to test the outer boundaries of section 512(j). Thus, while there may be some untapped "potential" in section 512(j) for combating online infringement, it is unlikely that changes to section 512(j) would play a significant role in restoring the balance under section 512. Nonetheless, the Office notes that, even in the absence of legislative change, courts have been overly narrow in their consideration of available injunctive relief under section 512(j). For this reason, Congress may wish to monitor court decisions interpreting this provision and consider whether a reformulation is warranted.

B. Non-Statutory Approaches to Mitigating Section 512 Limitations

While the Office has noted several instances in which Congressional action could assist with restoring the balance of rights and obligations between rightsholders and OSPs, this is not the only mechanism available for improving the functioning of the notice-and-takedown system. In particular, the Office notes that there is some degree of untapped potential in various non-statutory approaches to mitigating the limitations of section 512. There are hurdles to effectively implementing such measures, of course. And in many cases, a measure that relies upon voluntary cooperation between parties will primarily benefit those parties large enough to pose a credible litigation threat in the absence of such cooperation. Nonetheless, the Office believes that there may be value in further pursuing some of these options, as described below.

1. Education

Educational initiatives that promote legitimate digital commerce and creativity while reducing abuses of the notice and counter-notice processes may help to alleviate certain imbalances in the section 512 framework. A few of the empirical studies submitted in response to the Copyright Office's November 2016 Notice of Inquiry indicate a need for more educational resources that address a wide range of different levels of awareness and understanding of the fundamentals of copyright protection and the notice-and-takedown process, including scope of rights, enforcement, and available defenses and remedies.[914] Other commenters, likewise, address the effective use of education to improve the quality and accuracy of takedown notices, to reduce

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section 512(j)(1)(B)(ii) on August 16, 2002, the plaintiffs issued a notice of voluntary dismissal seven days later on August 23, 2002. No decision was ever rendered on the plaintiffs' request. For a discussion of the difficulties of utilizing section 512(j)(1)(B)(ii), see Todd Ryan Hambidge, Note, *Containing Online Copyright Infringement: Use of the Digital Millennium Copyright Act's Foreign Site Provision to Block U.S. Access to Infringing Foreign Websites*, 60 VAND. L. REV. 905, 931–36 (2007).

[914] *See* Copyright Alliance Empirical Study at 4 ("The results seem to indicate that, of those who do not monitor, a lack of education and understanding about the DMCA and how to find and report online infringements was the most significant cause for their not monitoring."); DMLA Empirical Study at 1 ("This data suggests that . . . more education is needed about the availability and purpose of the notice-and-takedown procedure.").

uploads of infringing content, and to encourage good faith counter-claims.[915] The Office finds that the creation of clear and balanced educational materials that explain the purpose and benefits of copyright protection, including the policy reasons supporting the mechanisms through which the DMCA operates, would be beneficial to support efforts to reduce the number of inappropriate notices and counter-claims that arise from a lack of awareness and understanding of the law.[916]

Such educational resources and programming should serve all participants in the digital creative economy, including users, rightsholders, OSPs, and other members of the public. Commenters and roundtable participants expressed broad support for more educational initiatives and materials about general copyright concepts, such as fair use.[917] One participant notes that "[m]ost users don't have a legal education and they don't know what fair use is, and they might not read the terms of service to find out what fair use may or may not be."[918] Several commenters emphasize the need for more materials to educate users about the section 512 notice-and-takedown process.[919] Other commenters even suggest that educational programming designed specifically for users who have inadvertently infringed content may reduce further instances of infringement.[920]

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[915] *See* Copyright Alliance Empirical Study at 7 ("ISPs and internet users could also benefit from educational resources."); ICC Initial Comments at 3 ("Notice and takedown processes, and other collaborative efforts between content owners and service providers in areas such as user education are the best way to combat the reappearance of infringing material due to vast differences in network and system architecture between different service providers."); Urban et al. Empirical Study at 110 ("[E]fforts to improve efficiency may be better focused on front-end educational efforts directed at senders rather than automated processing.").

[916] *See* Tr. at 398:17–22 (Apr. 8, 2019) (Keith Kupferschmid, Copyright Alliance) ("[W]e would encourage others to similarly do education programs to educate the individual creators, because to the extent there are sort of wrongful[,] or I think you called them wonky notices, wonky notices out there it largely comes from non-educated people.").

[917] *See* CDT/R St. Initial Comments at 12 ("[OSPs] can also educate notice-senders about their rights under the DMCA and their duty to consider fair use."); Janice Pilch, Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015, Notice of Inquiry at 7 (Apr. 1, 2016) ("There should be . . . [a] renewed national initiative on copyright education to re-introduce norms based on respect for the contributions of all stakeholders in society"); PK Initial Comments at 6 ("One other avenue of non-statutory reform that would help alleviate some of the erroneous take down notices is better education of the public as to the limits of copyright law, and the exceptions to the exclusive rights granted to authors, such as fair use, [and] de minimis copying.").

[918] Tr. at 183:20–184:2 (Apr. 8, 2019) (Sasha Moss, R Street Institute).

[919] *See e.g.*, Copyright Alliance Initial Comments at 21 ("A number of OSPs have developed educational material to make the counter notice process easier for their users to understand."); Tr. at 172:19–173:11 (May 13, 2016) (T. J. Stiles, author) ("The individual authors don't know…what the rules are . . . . So we need . . . education, both for authors, so that . . . we know what truly is a violation and what we should be aware of, and also users. There must be a much bigger role for education in terms of copyright for individual users as well who, again, can't be expected to know copyright law.").

[920] *See* Facebook Initial Comments at 10 ("[A] user who appears to have committed isolated inadvertent infringements . . . could respond well to user education."); Tr. at 52:6–10 (May 2, 2016) (Janice Pilch, Rutgers University Libraries) ("[O]ften I think students don't realize that what they're doing is wrong. And so, we do need more education, I would say an emphasis on more copyright education at universities would be a good thing.").

Creators as well as users may also benefit from educational resources about copyright and section 512. An independent filmmaker at the New York roundtable suggested that more education and outreach for creators such as herself would help her better navigate the notice-and-takedown process with the limited resources she has.[921] Another commenter has suggested that educational programs that simultaneously serve these different stakeholders groups could expand awareness of potential shared solutions.[922]

In an effort to begin to provide creators, users, OSPs, and the public with resources to navigate the notice-and-takedown process and its developments, the Office plans to release a dedicated webpage, copyright.gov/DMCA, to collect in one location educational materials for both users and creators, sample section 512 notices, and other relevant Office materials, such as a link to the DMCA agents' database and the fair use database. This location will also house links to any future Office communications regarding updates on the DMCA agent notification process or other aspects of the notice-and-takedown system. The Office hopes that this will form the basis for development of additional informative content that allows us to reach a variety of interested groups. The Office encourages OSPs to provide a link to the DMCA notification page on their website, and welcomes suggestions from interested parties relating to additional content that could be beneficial.

2. Voluntary Measures

In order to achieve and sustain the balance that Congress intended with section 512's notice-and-takedown process, stakeholders must continue to work together to develop reasonable, effective, and flexible solutions to the ever-present problem of online infringement.[923] Many commenters remarked that encouraging further voluntary efforts may indeed improve the notice-and-takedown process for the various stakeholders involved.[924] The Office acknowledges

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[921] Tr. at 73:23–74:5 (May 2, 2016) (Lisa Hammer, independent film director) ("As a small content provider, I would love to have more education and more outreach to people like me so we would know exactly how to go about doing this because I've had a lot of trouble even with just YouTube, trying to prove that it's my copyright. And I don't have the machine behind me that a lot of companies have with the lawyers, and you know, search engines.").

[922] FMC Initial Comments at 18 ("[A] goal . . . would be to arrive at best practices and action items to achieve/identify: Multilateral education efforts to expand awareness of existing detection technologies among those in the content and technology communities.").

[923] *See* Facebook Initial Comments at 8 ("The voluntary nature of the current regime allows for, and encourages, experimentation and cooperation with rights owners to continue to explore new solutions.").

[924] *See* ACT | The App Association, Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015, Notice of Inquiry at 5 (Apr. 1, 2016) ("[V]oluntary industry efforts between service providers and rights owners should be encouraged to improve the effectiveness of the notice-and-takedown process. Private industry agreements are more likely to result in flexible long-term solutions than legislative reform."); CCIA Initial Comments at 25 ("[V]oluntary, inter-industry efforts are producing progress toward more efficient and effective takedown administration."). *But see* EFF Initial Comments at 15 ("EFF remains concerned that these kinds of agreements effectively create a system of private law, without the checks and balances we expect from a real legal system.").

the inherent limitations of these measures due to their voluntary nature.[925] However, they do provide one approach, albeit not the only one, towards improving the notice-and-takedown process.

Stakeholders have suggested various best practices for developing additional, successful voluntary measures. The common theme highlighted in these proposed best practices is that any discussions and development of new initiatives should involve all stakeholder groups, including user advocacy groups, creators, OSPs, and the general public.[926] While one roundtable participant notes that working across different industries may impede reaching the consensus needed to create and implement any voluntary measures,[927] other stakeholders observe that the lack of involvement in the process by both creators and OSPs, large and small, can lead to inherent deficiencies in any resulting voluntary measures.[928]

Indeed, some commenters attribute the absence of any sustainable success of some voluntary measures to the exclusion of certain stakeholder groups during the development of those measures. The IFTA notes in its comments that "voluntary initiatives can create the potential for . . . disadvantaging those who are not involved in the relevant discussions or parties to the ultimate agreement, including the public, creators and providers of innovative new services."[929] The Authors Guild similarly explains that, because larger representatives of both OSPs and industry groups have primarily instigated the development of past best practices for voluntary measures, "individual creators [have not been] included in the negotiation process or the resulting agreements" and therefore, "[a]s a result, authors and other individual creators also have not obtained any of the benefits."[930] A key feature of any future voluntary measure should, therefore, involve cooperation among rightsholder organizations, all sizes of OSPs, individual

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[925] *See* Getty Initial Comments at 6 ("In general, voluntary measures are of limited effectiveness because most online service providers prefer the status quo."); Tr. at 147:8–11 (May 3, 2016) (Mary Rasenberger, Authors Guild) ("[V]oluntary measures cannot be the sole solution in large part because they don't address those who are not interested in voluntary solutions, namely, criminal pirate sites.").

[926] *See, e.g.*, Tr. at 177:22–178:2 (May 13, 2016) (Michael Masnick, The Copia Institute) ("The public has no way to weigh in and their interests are often not very well served by these [voluntary measures]."); Tr. at 114:7–10 (May 3, 2016) (Victoria Sheckler, RIAA) ("[V]oluntary initiatives can be helpful in deterring piracy when everybody has to get in the game to make those voluntary initiatives work.").

[927] Tr. at 93:14–17 (May 3, 2016) (Jonathan Band, LCA) ("[Payment processor voluntary measures were] responsive to what they needed. But they were also able to reach a degree of consensus because they were within their industry instead of trying to work across industries.").

[928] *See* Authors Guild Initial Comments at 18 ("We note only that, in practice, voluntary measures and best practices generally are developed between major OSPs and industry groups or corporations and that individual creators are not included in the negotiation process or the resulting agreements."); Tr. at 104:23–105:3 (May 3, 2016) (Jennifer Pariser, MPAA) ("All of the voluntary solutions that we have engaged in are partially effective in dealing with the piracy problem. But all of them are flawed in that they only deal—they only have some players involved in them, and they can only be somewhat effective in their approach to piracy.").

[929] IFTA Initial Comments at 11.

[930] Authors Guild Initial Comments at 18.

creators, and users, in order to sufficiently "address infringement without impacting legitimate conduct, the availability of non-infringing materials, or the rights of Internet users."[931]

Several other key criteria for developing and maintaining voluntary measures were highlighted by stakeholders across industries in their Study comments. Facebook emphasized the importance of flexibility in developing voluntary measures so that the protocols are consistent with the needs of its stakeholders as well as in align with Congress' dual purpose for the safe harbor framework.[932] FMC recommended in its comments that a "permanent or semi-permanent voluntary standards body" would provide consistent oversight and accountability to examine the results of voluntary agreements as well as "make[] recommendations in consultation with stakeholders."[933] Similarly, other commenters suggested consistent application[934] and comprehensive reporting of voluntary measures to assess and ensure their effectiveness.[935]

Many Study participants state that there may be some role for government to assist in this process.[936] The Office notes that there is an on-going Administration initiative, through the IPTF, to convene stakeholders to discuss some of the issues discussed in this Report.[937] The Copyright Office will continue to engage with stakeholders on these topics, and will consider whether there is a worthwhile role that the Office can play to convene different parties to discuss potential voluntary initiatives. The success of any such process and any voluntary initiative that develops from it will depend on the involvement and input of all relevant stakeholders of all sizes from the outset of the process, and the subsequent consistent and comprehensive oversight of these measures to ensure at least some accountability within the boundaries of "voluntary."

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[931] Microsoft Initial Comments at 10; *see also* Tr. at 95:5–12 (May 3, 2016) (Troy Dow, Disney) ("What are the principles and the basic fundamentals that help those things to be successes? . . . . This was a multilateral discussion between content creators as well as platform providers.").

[932] Facebook Initial Comments at 12.

[933] FMC Initial Comments at 18.

[934] *See* RIPG Initial Comments at 5 ("[T]he voluntary measures implemented by Online Stores are often inconsistently applied and demonstrate marginal efficacy in addressing pervasive and persistent piracy of copyrighted material.").

[935] *See* CDT/R St. Initial Comments at 15.

[936] *See* Tr. at 92:20–93:2 (May 3, 2016) (Jonathan Band, LCA) ("And so the payment processors have had voluntary measures in place for a long time. A lot of them did it independently. Then Victoria Espinel—she was the Intellectual Property Enforcement Coordinator—asked them to sort of get together, come up with best practices, which in essence sort of codified what they were already doing. And it came up with some standardization."); Tr. at 108:8–109:1 (May 3, 2016) (Jennifer Pariser, MPAA); Tr. at 103:3–5 (May 3, 2016) (Casey Rae, FMC) ("I believe that the government does have a role, at least, to create the environment where [voluntary measures] can happen."); Tr. at 116:24–117:3 (May 3, 2016) (Lui Simpson, AAP) ("[O]n the question on government involvement, we definitely think that there should be some push from the government to make these measures far more effective and, certainly, to push the parties to become engaged in the process.").

[937] *See Internet Policy Task Force*, U.S. PATENT AND TRADEMARK OFFICE, https://www.uspto.gov/ip-policy/copyright-policy/internet-policy-task-force.

3. Standard Technical Measures

Section 512(i)(2) defines "standard technical measures" ("STMs") as those "technical measures that are used by copyright owners to identify or protect copyrighted" that "have been developed pursuant to a broad consensus of copyright owners and service providers in an open, fair, voluntary, multi-industry standards process," are "available to any person on reasonable and nondiscriminatory terms," and "do not impose substantial costs on service providers or substantial burdens on their systems or networks."[938] Inherent in this provision is Congress' primary intent for the section 512 framework to encourage cooperation between creators and OSPs.[939]

In the Study comments, many stakeholders note that no measures currently qualify as STMs,[940] despite the availability of various technologies and the potential interest in consensus-building across industries.[941] Some commenters state that the statute requires a "consultative multi-industry process," which inherently impedes the development and implementation of STMs since those measures that are appropriate for one category of OSP may be a poor fit for OSPs that feature different kinds of content or perform different functions.[942] Google, in its Study comments, finds collaboration resulting in STMs to be unlikely "[g]iven the wide array of OSPs of different sizes, users, and service offered . . . [making] a one-size-fits all requirement imposed by

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[938] 17 U.S.C. § 512(i)(2). The Copyright Office also understands that the definition of "standard technical measures" as measures "used by copyright owners to identify or protect copyrighted works" may be interpreted to limit STMs to those deployed by copyright owners. *See id*.

[939] *See* Authors Guild Initial Comments at 27.

[940] *See, e.g.*, Authors Guild Initial Comments at 27; CCIA Initial Comments at 24 ("CCIA is unaware of any successful or emerging inter-industry technological effort that satisfies the requirements of Section 512(i)(2)."); Copyright Alliance Initial Comments at 26; Software & Information Industry Association ("SIIA"), Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015, Notice of Inquiry at 4 (Apr. 1, 2016) (noting that "the multi-stakeholder process that the statute envisioned never occurred, and is not likely to occur").

[941] *See* Tr. at 70:14–18 (May 13, 2016) (Jeffrey Sedlik, PLUS Coalition) ("[T]he technology is there and ready to use. And there is a voluntary initiative by all the stakeholders to get together and come together and create a solution that doesn't necessarily involve revising the statute."). Despite the interest expressed during the 2016 roundtables, the development of any STMs still had not occurred by 2019. *See* Tr. at 439:21–440:2 (April 8, 2019) (Nancy Wolff, DMLA) ("[T]he idea that it's a multi-industry standard process with everyone involved, I don't think that's the way that really has worked. I haven't seen any of that happening.").

[942] *See* CCIA Initial Comments at 24–25 ("In light of the fact that Section 512(i) amounts to a private sector technology mandate that would govern many thousands of diverse platforms, it should not be surprising that no one-size-fits-all system meeting the statute's high standards has evolved."); Tr. at 438:12–17 (April 8, 2019) (Nancy Wolff, DMLA) ("The way [STM's are] defined just doesn't work because technical measures aren't done by a broad consensus of users and technology companies. They really come out of different sectors that are familiar with their own type of content."); Tr. at 111:8–16 (May 13, 2016) (Dean Marks, MPAA) ("[I]n the kind of notice-and-takedown or anti-piracy copyright protection context online, [development of STMs] just hasn't worked that way, I think possibly because there is such a variety of platforms and players and different types of sites and technology. You know, when the DMCA was passed, there wasn't even peer-to-peer technology. So I think the context just changes so rapidly that it's made it more difficult.").

private stakeholders . . . unworkable for many OSPs, especially smaller ones."[943] Similarly, several participants at the New York roundtable identify several challenges with the initiatives led by the IPTF in seeking to identify one-size-fits-all measures via a process involving many different stakeholders.[944] While understanding that not every industry can agree upon or implement a single measure, the Copyright Office does not read the language of section 512(i) to require consensus from all stakeholders across every industry to meet the statutory requirements of a STM. Section 512(i) requires only "broad" consensus.[945] The Office recommends that both stakeholders and Congress may wish to consider either legislative, regulatory, or practical avenues to encourage the adoption and development of technologies as STMs in the spirit originally intended by Congress.[946]

a) Fingerprinting and Filtering Technologies

Stakeholders across industries already employ a wide variety of technological tools to facilitate operations within the section 512 framework for particular types of works, such as audio or audiovisual works.[947] These technological tools include a variety of fingerprinting technologies, which have been adopted and employed by OSPs and rightsowners within various industries.[948] Audio fingerprinting systems are used by various OSPs, including Facebook, SoundCloud, Twitch, Vimeo, and Verizon Wireless.[949] These technologies involve the creation of

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[943] Google Initial Comments at 16.

[944] Tr. at 40:20–24 (May 3, 2016) (Casey Rae, FMC) ("It wasn't particularly designed to elicit, I think, useful information, and there were just simply too many cooks in that kitchen and you know, which just leads to a lot of showboating."); Tr. at 87:7–15 (May 3, 2016) (Victoria Sheckler, RIAA).

[945] *See* 17 U.S.C. § 512(i)(2)(A); Tr. at 174:17–175:1 (May 13, 2016) (Sean O'Connor, University of Washington (Seattle)) ("I don't think anything in the definition of STM actually makes it so it has to be one across the digital media ecosystem. I think it's written in the plural. And so, you could have one as long as there's consensus among that subdivision, that then you can have an STM for that.").

[946] In particular, several Study participants note that some OSPs block standard technologies used to identify and locate infringing content on their sites, such as web crawlers. *See, e.g.*, Tr. at 70:9–12 (May 3, 2016) (Lisa Willmer, Getty Images) ("To my last point on that identification piece, there are some platforms that block crawlers and make it difficult to identify infringing content."); Tr. at 80:11–17 (May 2, 2016) (Steven Rosenthal, McGraw-Hill Education) ("Notwithstanding issues surrounding automation of notice sending, the process of searching for infringing content on many sites is becoming increasingly more difficult with sites taking offensive measures to prevent the automated scraping of their site by limiting metadata that would be used to identify content."). The Office notes that web crawling technology is widely used across industries, including by many OSPs to locate and index content on the internet. Thus, it is unclear what prevents such technology being designated an STM (other than lack of any group or forum for officially voting to recognize web crawlers as STMs).

[947] But as CCIA notes, these technologies do not qualify as STMs. CCIA Initial Comments at 24 ("The use of these various technologies is not affected by Section 512(i), which contemplates technological measures developed by an inter-industry standard-setting effort. CCIA is unaware of any successful or emerging inter-industry technological effort that satisfies the requirements of Section 512(i)(2).").

[948] *See* MPAA Initial Comments at 44.

[949] *See* Smithsonian Folkways Recordings, Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015, Notice of Inquiry at 7 (Mar. 30, 2016) ("Smithsonian Folkways Initial Comments").

metadata and fingerprint files for each copyrighted work to be included in databases that OSPs can automatically compare potential uploads to their sites against. The OSP and the rightsholder can negotiate a specific response to a match, such as blocking the upload or allowing the upload and monetizing the content, once an exact match to the fingerprint has been identified.[950]

The effectiveness and efficiency of this technology to address online infringement depend on improving the data that feeds into filtering/fingerprinting systems. The quality of the data, as well as the affordability of the technology, rests on creator involvement and cooperation throughout the process.[951] As content filtering technology inherently relies upon reference files and data provided by rightsholders, "the technology cannot meet its full potential" unless "copyright owners are prepared to deliver reference files and ownership data to service providers" and "are prepared to actively manage that data (e.g. by resolving conflicts in ownership data)."[952] SoundCloud, in its Study comments, recommended that content owners provide reference files to OSPs "on a timely basis, to keep this information accurate and up-to-date—and to resolve ownership conflicts with users and other copyright owners."[953]

Even with high quality data, the success of the technology requires effective and nuanced implementation.[954] Sony Music Entertainment has observed a "perverse incentive" regarding implementation: the more effective the filtering system is in removing infringing but "valuable" content, the "more friction with the service's user base will be created."[955] The Copyright Office, however, agrees that with improved data and implementation, fingerprinting technology "may become ubiquitous such that it would be a feasible option for all online service providers regardless of scale."[956]

b) Principles for Developing STMs

Both creators and OSPs commenting in the Study generally agree that technology should be used to reduce the burden and increase the efficiency and effectiveness of section 512 for all stakeholders. One shared observation across industries that underlies these principles is that any new measure should be "available to any person on reasonable and nondiscriminatory terms," as required by the statute.[957]

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[950] *See* IPO Initial Comments at 7.

[951] *See* Authors Guild Initial Comments at 27; SoundCloud Initial Comments at 13.

[952] SoundCloud Initial Comments at 13.

[953] SoundCloud Initial Comments at 13.

[954] *See* Sony Initial Comments at 13 ("Simply having a 'fingerprinting solution' in place to block infringing uploads is meaningless without effective implementation of such solutions.").

[955] Sony Initial Comments at 13.

[956] Smithsonian Folkways Initial Comments at 7.

[957] 17 U.S.C. § 512(i)(2)(B); Tr. at 93:8–12 (May 2, 2016) (Janice Pilch, Rutgers University Libraries).

Several commenters stressed the importance of flexibility in creating and applying any STM. Mozilla warned in its Study comments that STMs should not be legally mandated, as such a requirement would create "a barrier to market entry for newcomers, reducing innovation and competition with specific risks for small businesses."[958] Facebook similarly cautioned against "legislating a list of technical measures to be employed by either rights owners or service providers" as such provision "would be a mistake . . . [g]iven the importance of rights owners and service providers having the latitude to experiment and innovate with anti-infringement techniques."[959] Getty Images recommend that "Section 512(i)(2) should be amended to promote the use of available technologies—not to proscribe the manner in which those technologies are created."[960]

c) Recommendations for STMs

In light of these principles, the Copyright Office recommends different options Congress may wish to consider to encourage the development and implementation of STMs. If the language of section 512(i) has restricted or discouraged the use of STMs, then Congress may want to amend the provision to broaden the language so as to avoid any perceived requirement that measures must be achieved only by the consensus of every industry involved in the digital ecosystem. Congress may also wish to provide the Copyright Office with regulatory authority to oversee the development of STMs. Regulatory authority may provide for more flexibility to ensure that any consensus-building accounts for the needs of both large and small creators, who traditionally have not participated in the development of such measures.[961] The Office believes that one of the goals of section 512(i) and STMs is to develop big tools for small creators.

Regardless of any future congressional action on section 512(i), the development of STMs depends upon voluntary collaboration and consultation within and across industries. The Copyright Office encourages stakeholder collaboration to leverage their diverse expertise in order to find and adapt solutions as technology and piracy evolve. Despite the potential difficulty of finding measures that meet all of the needs of stakeholders across different industries, several commenters have suggested convening an STM summit to ensure collaboration and communication across industries at the begging of the STM development process. A summit would bring together various stakeholders involved in online copyright protection, "under the guidance and supervision of a government or quasi-government agency with sufficient technical expertise."[962] AAP suggested that the National Institute of Standards and Technologies (NIST), with its technical expertise, may take the leadership role in identifying a range of technically and

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[958] Mozilla Initial Comments at 6.

[959] Facebook Initial Comments at 11.

[960] Getty Initial Comments at 8.

[961] *See* FMC Initial Comments at 5 (STMs "must work for small-to-medium sized enterprise[s] (SME) in both the technology and creative sectors").

[962] IPO Initial Comments at 7.

economically feasible technical measures.[963] ITIF proposed that the Office "should launch a multi-stakeholder working group to identify additional practices that online service providers and content owners should adopt to reduce infringement and lower compliance costs for all parties."[964]

In order to encourage and facilitate voluntary collaboration, the Copyright Office is planning to hold a symposium on STMs to launch further discussion on how best to develop and widely adopt such technical measures. Discussion topics during this symposium would include the perspectives of both large and small creators and OSPs as well as individual users. The Office is cognizant of the current challenges of the COVID-19 situation, and will endeavor to find a future date for optimal participation by the public.

C. Alternative Stakeholder Proposals

As stated at the outset, the Copyright Office interpreted its charge in the Study as evaluating the working of and potential improvements to the existing section 512 framework, including potential non-legislative interventions to improve the functioning of that framework. To this end, the focus of the foregoing sections has been on maintaining (or reestablishing) the balance that Congress originally struck in 1998, while finding ways to improve the operation of the section 512 system or address some of the statutory interpretations that increasingly have limited the system's effectiveness. Nonetheless, the Office received input from numerous parties on additional statutory options outside of section 512 (at least as currently formulated) for addressing the challenge of online infringement and assessing the appropriate balance between OSP liability and the ability of rightsowners to effectively vindicate their rights. Unlike those non-statutory approaches to improving the efficiency of the section 512 system discussed above, the proposals discussed in this section would: (i) involve adoption of statutory measures that would live alongside either the existing section 512 framework or a new online-liability framework; (ii) require significant statutory changes to the section 512 framework; or (iii) involve adoption of an entirely new statutory framework for addressing online liability.

Because it is outside the scope of the current Study to provide an in-depth analysis of these proposals, and because the Office questions whether their real-world impacts can be accurately assessed at the current time, the Office has declined in all but one instance to make recommendations with respect to the proposals discussed in this section. Nonetheless, the Office presents a brief outline of these proposals. With the one noted exception, the Office recommends further fact-finding before considering adoption of any proposal discussed below. In particular, the Office finds it would be necessary to undertake an extensive evaluation of several of the non-copyright implications of these proposals, such as economic, antitrust, speech, and other potential impacts.

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[963] AAP Initial Comments at 25.

[964] ITIF Initial Comments at 5.

1. Creation of an Alternative Statutory Method for Adjudication of Online Infringement Claims

As noted earlier, Study participants raise concerns regarding the ten to fourteen day timeframe for restoration of content following a counter-notice, as provided by the current section 512(g)(2)(C).[965] Stakeholders on all sides take issue with this timeframe, arguing that it is either too short or too long.[966] To address these concerns, both sides would need a method for seeking an adjudication of their claims: allowing users to challenge a takedown notice upon receipt and allowing rightsholders to bring a claim in response to a counter-notice. While it is currently possible to do both in federal court, as the Office has noted on multiple occasions, federal litigation is both expensive, complex, and often slow.[967]

To address these shortcomings, Congress could consider adoption of an alternative method for adjudicating online infringement disputes within the overall notice-and-takedown framework. To be an improvement over the current system's reliance on federal court, any such alternative method should be less expensive, simple enough for both sides to participate in without an attorney, and efficient. Various models have been proposed for such a system. One practitioner has suggested developing an alternative dispute resolution process for takedown notices modeled on the Uniform Domain Name Dispute Resolution Policy.[968] Similarly, Facebook has announced that it will launch an independent body that can resolve appeals regarding

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[965] *See supra* section VI.A.2.f.

[966] *Compare* Neco Initial Comments at 9 ("[I]mportant, timely content may be removed and not replaced quickly enough, particularly in the context of elections and other instances where persons (e.g., voters, journalists) might benefit by having the content available during a certain time-frame and where it is not available. This amounts to and is akin to a form of censorship."); *with* Tr. at 243:8–19 (May 3, 2016) (Darius Van Arman, A2IM) ("[F]or small or medium-sized businesses, it's a real burden to take something to federal court . . . . Also, the 10-day window to act after a counter notification is provided also puts a great burden on small and medium-sized businesses.").

[967] *See, e.g.*, U.S. COPYRIGHT OFFICE, COPYRIGHT SMALL CLAIMS 24–26 (2013), https://www.copyright.gov/docs/smallclaims/usco-smallcopyrightclaims.pdf (noting that the burden and expensive of pursing federal litigation can be cost-prohibitive with the time to trial potentially taking a year and a half); Visual Works Letters at 19–21; *Oversight of the United States Copyright Office: Hearing Before the Subcomm. on Intellectual Prop. of the S. Comm. on the Judiciary*, 116th Cong. __ (2019) (written statement of Karyn A. Temple, Register of Copyrights), *reproduced at* Written Statement of Karyn A. Temple, Register of Copyrights, Before the Subcomm. on Intellectual Prop. of the S. Comm. on the Judiciary at 6–9 (July 30, 2019), https://www.copyright.gov/laws/hearings/testimony-of-karyn-temple-for-july-30-oversight-hearing.pdf; *Oversight of the U.S. Copyright Office: Hearing Before the H. Comm. on the Judiciary*, 116th Cong. __ (2019) (written statement of Karyn A. Temple, Register of Copyrights), *reproduced at* Written Statement of Karyn A. Temple, Register of Copyrights, Before the H. Comm. on the Judiciary at 13-14 (June 26, 2019), https://www.copyright.gov/laws/hearings/testimony-of-karyn-temple-for-june-26-oversight-hearing.pdf.

[968] LAWRENCE NODINE, THE UNIFORM DOMAIN NAME DISPUTE RESOLUTION POLICY (UDRP) AS A MODEL FOR THE RESOLUTION OF INTELLECTUAL PROPERTY RIGHTS DISPUTES, WIPO/ACE/10/8 at 11 (Aug. 31, 2015), https://www.wipo.int/edocs/mdocs/enforcement/en/wipo_ace_10/wipo_ace_10_8.pdf. The Uniform Domain Name Dispute Resolution Policy "provid[es] a low-cost alternative means of resolving disputes involving the bad-faith registration of trademarks as Internet domain names." *Id.* at 2.

Facebook content moderation decisions;[969] one could easily imagine such a process being extended to address takedown notices under section 512. The Office notes, however, that there is another alternative to designing a new adjudication method from scratch: such matters could be handled by a small claims tribunal set up within the Copyright Office. This proposal is the subject of an extensive report issued by the Office in 2013, and, therefore, it is unnecessary to restate all of the Office's recommendations for such a tribunal here.[970] The Office does note, however, that a bill modeled on its 2013 recommendations that would allow for both users and rightsowners to seek a determination regarding claims of online infringement is currently pending before the U.S. Senate, as of the date of this Report.[971]

2. Adoption of International Approaches

During the course of the Study, many rightsholders encouraged the Office to look to elements of international models—such as notice-and-staydown systems[972] or broader site-blocking injunctions[973]—to address the continued problem of online infringement despite the various provisions of section 512. Both of these approaches, as adopted in Europe and elsewhere, are seen as shifting more of the burden for addressing online infringement from rightsholders to OSPs. As a result, both of these proposals would necessitate either significant changes to the existing section 512 framework or adoption of a new statutory framework, and both would fundamentally reimagine the existing balance of rights and obligations between rightsholders, OSPs, and users.

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[969] *See Appealing Content Decisions on Facebook or Instagram*, OVERSIGHT BOARD, https://www.oversightboard.com/appeals-process/. Mark Zuckerberg first laid out his proposal for such a governance board in November, 2018. Mark Zuckerberg, *A Blueprint for Content Governance and Enforcement*, FACEBOOK (Nov. 15, 2018), https://www.facebook.com/notes/mark-zuckerberg/a-blueprint-for-content-governance-and-enforcement/10156443129621634/. *Cf.* Tr. at 367:12–368:15 (April 8, 2019) (Rachel Wolbers, Engine) (noting that several small platforms like Patreon have instituted forms of alternative dispute resolution for some copyright claims and that such systems are preferable to the legal system, "which for many small creators is prohibitively costly and is not an avenue that most small creators are going to pursue").

[970] *See generally* U.S. COPYRIGHT OFFICE, COPYRIGHT SMALL CLAIMS (2013), https://www.copyright.gov/docs/smallclaims/usco-smallcopyrightclaims.pdf.

[971] *See* Copyright Alternative in Small-Claims Enforcement Act of 2019, S. 1273, 116th Cong. (2019). The companion bill, H.R. 2426, passed the House of Representatives by a 410-6 vote in October, 2019.

[972] *See, e.g.*, SONA Initial Comments at 3–4; Tr. at 286:2–10 (Apr. 8, 2019) (Eric Cady, IFTA) ("[W]e are encouraged by the European Parliament's recent approval of the Copyright Directive, to the extent that it recognizes the serious need to rebalance the notice and takedown framework with respect to online content sharing service providers, which to date have had no incentive to discourage users from further uploading infringing content, because that content drives revenue to the platform.").

[973] *See, e.g.*, MPAA, Additional Comments at 22 ("These injunctions can be highly effective at combatting piracy by blocking access to websites devoted to copyright infringement."); Tr. at 302:1–19 (Apr. 8, 2019) (Lui Simpson, AAP) (noting that approximately forty countries have a website blocking statute or are considering adoption of one, and encouraging adoption of a similar provision in U.S. law).

Many rightsholders and academics argue that such a rebalancing is called for, noting that the internet is no longer the infant industry of 1998 and that, with maturity, the OSPs are now better positioned to accept some of the responsibility for the negative externalities of their services (particularly given the economic and cultural success of the internet services sector during the last twenty-plus years).[974] This argument largely relies on an implicit (and often explicit) comparison between the resources available to the large OSPs as opposed to those available to small authors and creatives, supporting a conclusion that the OSPs are better situated to shoulder the burden of policing infringement by their users. The comparisons on which the argument relies include the economic success of the internet services industry with the economic precariousness of many small authors and creatives,[975] as well as the technologies available to large OSPs versus the

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[974] *See, e.g.*, Tr. at 288:6–18 (Apr. 8, 2019) (Alec French, Thorsen French Advocacy) ("The Europeans clearly decided innovation by internet start-ups would not be impacted by requiring companies with $500 billion market caps and more than $100 billion in cash on hand to secure licenses from rightsholders and filter and keep down infringing material . . . . [L]imiting the availability of current section 512 to internet start-ups will not impair their ability to innovate, but may prevent section 512(c) in particular from continuing to operate as a legislative license for multi-billion dollar companies to ignore and profit from infringement with impunity."); Tr. at 419:12–420:1 (Apr. 8, 2019) (Ken Hatfield, Artists Rights Caucus of Local 802 of the American Federation of Musicians) (noting the value that content brings to OSPs, and stating "[w]e only ask for a fair and equitable percentage of the revenues our works generate" and that "[w]e ask that [OSPs] join us in contributing to the creation of a fair and sustainable digital ecosystem"); Tr. at 411:16–20 (Apr. 8, 2019) (Jennifer Pariser, MPAA) ("[I]nternet services are spending a tiny fraction of their revenue on takedown tools, on piracy, on response to notices and it obviously has not affected their bottom line to any great extent."); *cf.* Ronald J. Mann & Seth R. Belzley, *The Promise of Internet Intermediary Liability*, 47 WM. & MARY L. REV. 239, 240 (2005) (stating that OSPs can be the "least cost avoider" for addressing the problem of online infringement).

[975] Google's market cap passed $500 billion in November 2015, almost two years before Facebook's market cap reached the same milestone. *Alphabet Market Cap 2006-2020 | GOOG*, MACROTRENDS, https://www.macrotrends.net/stocks/charts/GOOG/alphabet/market-cap; *Facebook Market Cap 2009-2020 | FB*, MACROTRENDS, https://www.macrotrends.net/stocks/charts/FB/facebook/market-cap. Rightsholders compare this success against more gloomy creative industry figures: the Authors Guild 2018 Author Income Survey found that full-time authors earned a median income of $20,300 in 2017, down from $25,000 in 2009. *See Six Takeaways from the Authors Guild 2018 Author Income Survey*, AUTHORS GUILD (Jan. 5, 2019), https://www.authorsguild.org/industry-advocacy/six-takeaways-from-the-authors-guild-2018-authors-income-survey/. Similarly, the Pew Research Center's recent analysis of U.S. Bureau of Labor Statistics found that newsroom employment at newspapers has dropped by around 50% since 2008. Elizabeth Grieco, *U.S. Newspapers have Shed Half of Their Newsroom Employees Since 2008*, PEW RESEARCH CTR.: FACTTANK (Apr. 20, 2020), https://www.pewresearch.org/fact-tank/2020/04/20/u-s-newsroom-employment-has-dropped-by-a-quarter-since-2008/. *See also* Ben Sisario & Karl Russell, *In Shift to Streaming, Music Business Has Lost Billions*, N.Y. TIMES (Mar. 24, 2016), https://www.nytimes.com/2016/03/25/business/media/music-sales-remain-steady-but-lucrative-cd-sales-decline.html.

A report issued in 2019 by The Copia Institute and CCIA challenges the narrative that the creative sectors are suffering financially, or at least that such suffering is the result of the growth of the internet. The report, *The Sky is Rising 2019 Edition*, argues that there has been an increase in the amount of creative content published by the music, publishing, movie, and video game industries since 2009, and points to increasing global industry revenues. *See generally* Michael Masnick & Leigh Beadon, THE SKY IS RISING, 2019 EDITION: A DETAILED LOOK AT THE STATE OF THE ENTERTAINMENT INDUSTRY (2019), https://skyisrising.com/TheSkyIsRising2019.pdf. Of note, a number of the charts included in *The Sky is Rising 2019 Edition* place year zero somewhere between 2009 and 2015, the years during in which the economy once again began to grow in the immediate aftermath of the 2007–09 recession. *See Chart Book: The Legacy of the Great Recession*, CENTER ON BUDGET AND POLICY PRIORITIES (June 6, 2019), https://www.cbpp.org/research/economy/chart-book-the-legacy-of-the-great-recession. In contrast, creative industry analyses often compare current numbers with high-water marks in the late 1990s/early 2000s. *See* Paul Resnikoff, *What the Music Industry "Comeback" Really Looks Like*,

largely manual process used by small creators to search for and send notices regarding instances of infringement.[976] In one rightsholder's view, it is particularly unfair for large OSPs whose "business model is predicated on monetizing user-generated content (not vetted for copyright)," to place the burden of identifying infringements on the rightsholder, arguing instead that such "OSP[s] should be required, by law, to implement some form of digital fingerprinting to prevent infringing material from being uploaded in the first place."[977] Yet even those calling for a shift in the balance did not seek a redistribution of responsibility for addressing infringement in all cases—as many participants note, limiting reforms to certain classes of large, for-profit OSPs while retaining the current balance for small OSPs and startups may yet still be appropriate.[978]

In response, many OSPs and user advocacy groups argue that the current balance has secured for the United States a preeminent position in the internet services sector, and warn that significant changes to the section 512 framework would result in the loss of such position.[979] In addition, they argue that the burden of locating and identifying infringing content is properly

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DIGITAL MUSIC NEWS (Apr. 25, 2017), https://www.digitalmusicnews.com/2017/04/25/music-industry-comeback/ ("The music industry is nowhere near its 1999 heyday. But at least it isn't collapsing anymore.").

[976] *See, e.g.*, SONA Initial Comments at 4 ("Songwriters must currently submit their notices manually even though ISPs like Google have the resources to create systems which can efficiently respond to the increasing number of takedown notices they receive. Songwriters, on the other hand, lack access to the third-party services and resources, which could help them monitor for infringing uses."); Rachel Stilwell, Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015, Notice of Inquiry at 4 (Mar. 14, 2016) ("I know dozens of music and film creators who lament about the substantial burdens imposed upon them to draft and send multiple cumbersome DMCA take down notices, in futile attempts to protect their works."); *Section 512 of Title 17: Hearing Before the Subcomm. on Courts, Intellectual Prop. & the Internet of the H. Comm. on the Judiciary*, 113th Cong. 57 (2014) (written statement of Maria Schneider, Grammy Award Winning Composer/Conductor/Producer, Member of the Board of Governors, New York Chapter of the Recording Academy) ("[The current functioning of section 512 is] an upside down world in which people can illegally upload my music in a matter of seconds. But I, on the other hand, must spend countless hours trying to take it down, mostly unsuccessfully. It's a world where the burden is not on those *breaking* the law, but on those trying to *enforce* their rights.").

[977] Ellen Seidler, Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015, Notice of Inquiry at 4 (Apr. 1, 2016).

[978] *Cf.* FMC Initial Comments at 4–5 ("We recognize that a diminishing of limitations on liability may indeed impact investment in potentially useful digital services, which means that enforcement protocols must work for small-to-medium sized enterprise (SME) in both the technology and creative sectors. We need to make it easier for all parties to do the right thing."); Tr. at 378:21–379:3 (Apr. 8, 2019) (Alec French, Thorsen French Advocacy) ("The start-up point is one that I take as a real point. But again, once a provider has a $500 billion market cap and $100 billion in the bank, . . . you don't deserve that kind of protection anymore.").

[979] *See, e.g.*, BSA Initial Comments at 2 ("Importantly, the DMCA has also shielded responsible online intermediaries from the burden of implementing intrusive measures to monitor their users or filter their networks—obligations that would weaken incentives for innovation and threaten the dynamism and values that have made the Internet so valuable."); Engine et al. Initial Comments at 16–17 (stating that "[t]he economic value the Internet has created in a few short decades would have been impossible without the DMCA's limited liability regime," and asserting that "any change in OSP's monitoring obligations will inevitably make it more difficult for the next generation of OSPs to receive the funding they need to launch and grow").

placed upon copyright holders, since they are in a better place to determine whether a certain use is licensed or otherwise permissible.[980]

When considering the rebalancing of responsibilities between rightsholders and OSPs, both sides argue that the other should bear the greatest brunt of the responsibility. Rightsholders believe that OSPs should be grateful for the safe harbors that have enabled their success, and accordingly should shoulder more of the burden of addressing infringement on their services. In contrast, OSPs believe that rightsholders should be grateful for the mechanisms provided by section 512 for addressing online infringement without resort to costly civil litigation, making it appropriate that they shoulder most of the (financial and other) burden of policing their rights online. As with many things, the answer is likely somewhere in the middle.[981]

There are important reasons to proceed cautiously when considering any of the proposed international solutions. While the Office has received submissions from thousands of rightsholders, users, OSPs, academics, and others arguing for or against adoption of the international models below, much of the evidence is anecdotal or conflicting. The Office still has relatively little data on how well these international regimes are working in practice, or even how a notice-and-staydown requirement will ultimately be implemented in the European Union. To make the most informed decision possible, it will likely be necessary for Congress to consider many factors beyond simply the copyright law—questions of economics, competition policy, fairness, and free speech, to name but a few. It is thus the opinion of the Office that the international approaches discussed below should be adopted, if at all, only after significant additional study, including evaluation of the non-copyright implications they would raise.

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[980] *See, e.g.*, Engine et al. Initial Comments at 17 (asserting that "because OSPs are ill-equipped to know what is infringing and what is authorized, shifting the burden of policing infringements will lead to more incorrect deletions, as OSPs will have a strong incentive to err on the side of removing content"); Google Initial Comments at 10 ("OSPs cannot implement a staydown regime, because even when given notice that a particular user was unauthorized to upload a particular work, only the rightsholder knows whether subsequent uploaders may or may not be licensed to upload the content."). *Cf.* Institute for Intellectual Property & Social Justice, Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015, Notice of Inquiry at 3–4 (Mar. 31, 2016); Yahoo Initial Comments at 5 ("Section 512's notice-and-takedown process . . . [strikes] an appropriate balance in light of what information is known by the rights holder and what tools are controlled by the service provider . . . . In exchange for our compliance with this minimal burden [of filling out section 512 notification forms], we as a rights holder get a rapid, extrajudicial, ex parte means of protecting our rights in the vast majority of cases. Similarly, the smaller rights holder also gets the equivalent of an injunction without the necessity of going to court, or even hiring a lawyer.").

[981] Underlying this debate is the question of whether OSPs are properly secondarily liable for infringement committed by their users, or are they passive actors that cannot be expected to police their users. Passage of the DMCA largely short-circuited resolution of these legal questions by the courts, leading both sides to believe that the other would be in a worse position in the absence of section 512. For further discussion of this debate, see *supra* section VI.A.1.c.ii.

a) Notice-and-Staydown

The proposal that has attracted the most attention both from participants in the Study[982] and from outside commentators[983] is the adoption of a "staydown" requirement for OSPs.[984] One proponent describes such a requirement as follows:

> Once a webhost is on notice that a work is being infringed, it should not receive continued safe harbor protection unless it takes reasonable measures to remove any copies of the same work reposted by the same user and also takes down *all* infringing copies of the work that bear the same reasonable indicia provided by the rightsholder.[985]

Some form of staydown requirement was endorsed by rightsholders both big and small.[986] Rightsholders' primary argument in favor of adopting a staydown requirement is that such an approach is necessary to deal with the whack-a-mole problem: the reappearance on an online

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[982] Many rightsholders were in favor of the United States adopting a "staydown" provision. *See, e.g.*, A2IM Music Community Initial Comments at 22; Recording Academy Initial Comments at 6; Tr. at 229:13–21 (May 13, 2016) (Paul Doda, Elsevier); Tr. at 28:21–29:4 (May 12, 2016) (Jay Rosenthal, ESL Music/ESL Music Publishing). Many OSPs and user advocacy groups were strongly against the idea of adopting a "staydown" provision in the United States. *See, e.g.*, Amazon Initial Comments at 9–10; Tr. at 276:22–277:2 (May 13, 2016) (Joshua Lamel, Re:Create); Tr. at 76:10–21 (May 2, 2016) (Ellen Schrantz, Internet Association).

[983] *See, e.g.*, Martin Husovec, *The Promises of Algorithmic Copyright Enforcement: Takedown or Staydown? Which is Superior? And Why?*, 42 COLUM. J.L. & ARTS 53 (2018); ALDEN ABBOT ET AL., *Creativity and Innovation Unchained: Why Copyright Law Must be Updated for the Digital Age by Simplifying It*, REGULATORY TRANSPARENCY PROJECT 26 (2017), https://regproject.org/wp-content/uploads/RTP-Intellectual-Property-Working-Group-Paper-Copyright.pdf; Chris Sprigman & Mark Lemley, *Op-Ed: Why Notice-and-Takedown is a Bit of Copyright Law Worth Saving*, L.A. TIMES (June 21, 2016), https://www.latimes.com/opinion/op-ed/la-oe-sprigman-lemley-notice-and-takedown-dmca-20160621-snap-story.html.

[984] Most staydown proposals were based, at least in part, on the provision in Article 17(4) of the EU Directive on Copyright and Related Rights in the Digital Single Market that makes an online content-sharing service provider liable for infringement resulting from its users' uploads unless it makes "best efforts" to prevent future uploads of unauthorized copyright-protected works. Directive EU 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, art. 17(4), 2019 O.J. (L. 130/92).

[985] *See* Authors Guild Initial Comments at 12 (emphasis in original).

[986] *See, e.g.*, Don Henley, Additional Comments Submitted in Response to U.S. Copyright Office's Nov. 8, 2016, Notice of Inquiry at 2 (Feb. 21, 2017) ("I ask the Copyright Office and Congress to require that online providers prevent the reposting of content for which they have [] received a takedown notice as a condition of safe harbor protection–that is, to require not just 'notice and takedown,' but 'notice and *staydown*.'"); Tr. at 115:17–116:5 (May 12, 2016) (Eric Cady, IFTA) ("IFTA members are primarily small-to medium-size companies that produce and sell motion pictures and television programs around the world . . . . We advocate for a notice and staydown provision."); Tr. at 172:4–8 (May 3, 2016) (Alisa Coleman, ABKCO Music & Records); Tr. at 39:7–9 (May 2, 2016) (David Kaplan, Warner Brothers Entertainment Inc.); Tr. at 30:11–16 (May 2, 2016) (Deborah Robinson, Viacom).

service (often in short order) of content that was already the subject of a takedown notice.[987] In discussing the whack-a-mole problem, rightsholders sometimes conflate two separate phenomenon: (i) websites designed (in bad faith) with a "technological Pez dispenser" system that creates a list of unique URLs for a given piece of content, "dispensing" the next URL once the previous one has been removed due to a takedown notice;[988] and (ii) the repeated upload, often by multiple users, of the same content to a single website both before and after a takedown notice had been sent.[989] The former type of activity is likely to be outside the scope of what Congress originally intended section 512 to govern. Bad-faith OSPs that encourage infringement also tend to be rejected for safe harbor protections by most courts once litigation is brought.[990] Thus, this type of activity likely requires a solution beyond just changing section 512, such as one focused on coordinated enforcement activity. The latter activity is, to some degree, the inevitable result of millions of users uploading hours of content a day in the absence of some form of filtering technology or active monitoring by the OSP.[991] Many rightsholders argue that a staydown requirement is particularly necessary to address the burden on small creators of policing infringing content online.[992] As one Study commenter notes:

> While . . . [staydown] would still require rights holders to monitor many different OSP's and to send complaints to any or all of them whenever infringing material was discovered, this would be a heavy but *finite* and therefore reasonable burden. By contrast, in today's

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[987] *See* Tr. at 120:15–121:7 (May 12, 2016) (Deron Delgado, A2IM) (noting that staydown measures could help deal with whack-a-mole and repeat offenders); Tr. at 46:8–10 (May 2, 2016) (Kathy Garmezy, DGA) (emphasizing the importance of staydown to address "the problem of content reappearing right away").

[988] *See* A2IM Music Community Initial Comments at 10–11 (describing the design of "Grooveshark and other rogue actors" as an attempted DMCA work-around).

[989] *See, e.g.*, Tr. at 120:1–18 (May 12, 2016) (Deron Delgado, A2IM); Tr. at 86:11–22 (May 2, 2016) (Alisa Coleman, ABKCO Music & Records); Tr. at 22:1–4 (May 2, 2016) (Maria Schneider, musician).

[990] *See, e.g.*, *Grokster*, 545 U.S. at 919. Some rightsholders dispute that those OSPs that have qualified for the safe harbors are, in fact, good faith actors. *See* Tr. at 54:22–55:6 (May 2, 2016) (Victoria Sheckler, RIAA) ("I even had one . . . considered legitimate service provider tell me that they did have several URLs . . . [that] are going to the same piece of content[,] and if we sent a notice for one of those URLs, they would not take down the others because those others might have authorization. And from our perspective, we don't know who the user is that put that content up. We just know that we did not authorize that content to be up on that site.").

[991] As of May 2019, more than 500 hours of video are uploaded to YouTube every minute. J. Clement, *Hours of Video Uploaded to YouTube Every Minute 2007–2019*, STATISTA (Aug. 9, 2019), https://www.statista.com/statistics/259477/hours-of-video-uploaded-to-youtube-every-minute/.

[992] *See, e.g.*, Anonymous, Anonymous, Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015, Notice of Inquiry (Apr. 1, 2016) ("The only people who have the power to continually issue take down notices are corporate entertainment industries. [Staydown] would help the small artists actually be able to make some kind of living, or get some benefit for the work that they make."); Robert Hansmann, Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015, Notice of Inquiry (Apr. 1, 2016) ("Given the enormous number of sites making use of copyrighted materials, there is no reasonable way in which a content owner can effectively track all incidences of copyright infringement.").

> world and under current copyright law as practiced, that burden is effectively *infinite* and therefore not reasonable.[993]

The assumption of most commentators during the Study was that an OSP could address the second whack-a-mole concern and comply with a staydown requirement through technological means,[994] either via a *sui generis* content filtering system developed by that OSP, such as YouTube's Content ID system,[995] or off-the-shelf filtering technologies, such as that offered by Audible Magic.[996] As one panelist states,

> [S]o many problems of infringement are driven by technology, so technology-based solutions are definitely the way to go. We have seen that filtering mechanisms, fingerprinting, and watermarking are available, are possible, and[,] even if they are not perfect, they are a great way to start. And they actually would provide more effectiveness rather than more efficiency to the DMCA notice-and-takedown.[997]

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[993] Paul Vixie, Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015, Notice of Inquiry at 2 (Mar. 31, 2016).

[994] But as several Study participants note, while there are already commercially available filtering systems for audio-visual works, the picture is more complicated with respect to other types of works and smaller platforms. *See, e.g.*, Internet Association Initial Comments at 17 (technologies used for "staydown," such as Content ID are not "feasible options for many platforms and users."); OTW Additional Comments at 3; Tr. at 10:22–11:4 (May 13, 2016) (Joseph Gratz, Dure Tangri, LLP) ("Technology, for example, is better suited to video hosting sites to identify full-length audiovisual works and it's suited very poorly to personal blogs and use of text or images on personal blogs."); Tr. at 60:2–6 (May 13, 2016) (Charles Roslof, Wikimedia Foundation) ("We host a wide variety of content, including text, video, audio and images in a wide variety of file formats. And I don't think there's any existing solution that could handle all of that.").

[995] For a brief description of how Content ID works, see Google Additional Comments at 2–4. *See also How Content ID Works*, YOUTUBE HELP, https://support.google.com/youtube/answer/2797370. It is worth noting, however, that Content ID was not without its detractors during the course of the Study, despite the significant resources that went into building it. While some rightsholders seemed to be primarily concerned with the fact that smaller entities were not given access to Content ID or that access required agreeing to license your work for use by YouTube, several small creators and representatives of users' interest groups complained about a high anecdotal incidence of improperly flagged content. *See, e.g.*, OTW Initial Comments at 13 ("[T]here are numerous reports of misidentification and abuse of Content ID by claimants who don't even have legitimate claims to components of user-uploaded videos."); Tr. at 174:10–19 (May 12, 2016) (Daphne Keller, Stanford Law School Center for Internet and Society); Tr. at 259:13–22 (May 2, 2016) (Rebecca Prince, Becky Boop) ("Using YouTube as an example . . . they have Content ID which automatically scans your content to see if there's a match . . . . [J]ust because it is copyrighted doesn't mean it might not be able to be used. So even though I might be speaking over that clip, even though I am critiquing that clip . . . it is [automatically] being blocked worldwide.").

[996] For a description of how Audible Magic music fingerprinting works, see Audible Magic Initial Comments at 3–5. Audible Magic's system was used by Google for audio content fingerprinting before the development of Content ID, and is still in use by Facebook and other platforms. *See id*. at 4, 7; Tr. at 297:10–12 (Apr. 8, 2019) (Christopher Randle, Facebook).

[997] Tr. at 15:6–14 (May 3, 2016) (Sofia Castillo, AAP).

Opponents of a staydown system, including OSPs and user advocacy groups, note several concerns with such a system. First among these is concern about the impact such filtering technologies would have on free expression and speech interests.[998] Many opponents note that technology cannot determine whether use of rightsholders' material included in uploaded content is done pursuant to a license or constitutes fair use.[999] Even after the potential advent of such technological capabilities, some commenters fear a staydown requirement would turn OSPs into "gatekeepers" of online speech.[1000] Some users and online content creators argue that OSPs had already become such gatekeepers as a result of section 512 and DMCA+ systems like Content ID, which they maintain regularly sweeps up content they believe makes fair use of third-party materials along with infringing content, and should be scaled back even from current standards.[1001] Additionally, some OSPs voice concern that takedowns resulting from filtering technologies would impact non-profit resources like open source repositories and Wikipedia in a particularly negative way.[1002] In response to these concerns, some rightsholders sought to narrow the focus to content that is identical to the noticed content, or to full-length content.[1003] OSPs, however, resist the idea that filtering for full-length content is an appropriate application of a

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[998] Tr. at 293:15–19 (Apr. 8, 2019) (Corynne McSherry, EFF) ("[W]e expect we're going to see the adoption [by OSPs] of upload filters across Europe in order to avoid liability, [and] those filters are inevitably going to flag lawful as well as potentially infringing content."). *See also* Bridy & Keller Initial Comments at 17 ("Whatever one thinks of this drastic shift in burden between intermediaries and copyright owners [as a result of a staydown requirement] . . . the impact on Internet users could only be bad. Their expressive rights would be predictably compromised by both 'human' and 'automated' monitoring.").

[999] *See, e.g.*, Yahoo Initial Comments at 10–11 ("[There are] enormous technical and philosophical challenges with permanently suppressing material across an entire online ecosystem [through staydown] . . . . [I]nevitably there are contexts in which use of the material in question is NOT infringing, either because it is authorized . . . or because a given use falls within an exception to copyright such as fair use.").

[1000] CDT/R St. Initial Comments at 3.

[1001] *See, e.g.*, Andrea Austin, Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015, Notice of Inquiry (Apr. 1, 2016); Rajan Awasthi, Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015, Notice of Inquiry (Apr. 1, 2016); Steven Berliner, Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015, Notice of Inquiry (Apr. 1, 2016); Orion Burk-Poole, Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015, Notice of Inquiry (Apr. 1, 2016); James Church, Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015, Notice of Inquiry (Apr. 1, 2016); Chad Wild Clay, Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015, Notice of Inquiry (Apr. 1, 2016); Ashley Zugnoni, Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015, Notice of Inquiry (Apr. 1, 2016).

[1002] *See, e.g.*, Wikimedia Additional Comments at 11–12; Tr. at 312:20–313:7 (Apr. 8, 2019) (Abby Vollmer, GitHub) (noting the potential effect of improper filtering on open source software projects, and that the result would be "a broken software project").

[1003] *See, e.g.*, Tr. at 116:12–18 (May 12, 2016) (Eric Cady, IFTA) ("IFTA's position is that we advocate for staydown after the ISP is notified of [full-length] content, particularly in the pre-release stage when a pirated film is made available online without authorization in that pre-release period, which can devastate the member company's business."); Tr. at 92:6–9 (May 2, 2016) (Kathy Garmezy, DGA); Tr. at 91:18–22 (May 2, 2016) (David Kaplan, Warner Brothers Entertainment Inc.). *Cf.* Urban et al. Empirical Study at 60 (describing the views of a rightsholder respondent, who "favors systems that put up barriers to reposting content identical—i.e., identified through traditional hash matching rather than looser fingerprinting algorithms—to what has already been taken down").

staydown requirement, maintaining that rightsholders should continue to address each appearance of the same content on an individual basis.[1004]

Another oft-expressed concern is that requiring filtering technology could serve as an anti-competitive barrier to entry that has the effect of entrenching the market dominance of current platforms that have already invested significant time and money to develop *sui generis* filtering technology like Content ID.[1005] As one participant puts it, such a requirement "does not lend itself to small startups who are trying to innovate in a very crowded space with deeply entrenched players."[1006] While the DSM Copyright Directive does contain exemptions for smaller and new entrants,[1007] several participants question the advisability or workability of such exemptions, with one commenter noting that they create "perverse incentives to try to stay under those numbers[] and not grow your company in a more organic way."[1008] Finally, some OSPs note technological and legal difficulties with implementing a true notice-and-staydown system.[1009]

The likelihood that filters will become an anti-competitive barrier to entry depends in part upon the market availability of third-party filtering technologies offered at a reasonable price on non-discriminatory terms. While Audible Magic and Pex describe their offerings as being up to the task, a potential anti-competitive concern remains to the extent that either of these technologies are available only from a single source and do not have competitors offering equally effective technology in the marketplace. The Copyright Office did not attempt a full-scale investigation of marketplace availability and terms for such third-party filtering technologies, but notes that that such an examination would be recommended before adopting any requirement that would impose the use—either explicitly or implicitly—of filtering technologies.

[1004] *See, e.g.*, Tr. at 84:4–7 (May 3, 2016) (Matthew Schruers, CCIA) (arguing that the use of full-length content can sometimes be fair use, and thus is not an appropriate proxy for infringement to be used in filtering decisions); Tr. at 78:2–4 (May 2, 2016) (Andrew Deutsch, DLA Piper) (declining to agree that filtering is appropriate addressing the question of unlicensed, full length content, stating "[t]hat's the job of direct copyright action by copyright owners against the website").

[1005] *See, e.g.*, Tr. at 329:6–330:2 (Apr. 8, 2019) (Corynne McSherry, EFF); Tr. at 330:18–331:20 (Apr. 8, 2019) (Rachel Wolbers, Engine) (describing the EU DSM Copyright Directive's carve-outs for GitHub and Wikimedia as "essentially writing in companies that will now have an advantage and a leg up in their business model," and noting that mandating filtering technology would likewise serve to entrench companies like Google and Facebook, since "they now have legislation that's written in a way that helps protect their business models from potential new incumbents or new entrants into the marketplace.").

[1006] Tr. at 23:21–24:1 (May 13, 2016) (Jeff Lyon, Fight for the Future).

[1007] *See* Directive EU 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, art. 17(6), 2019 O.J. (L. 130/92).

[1008] Tr. at 331:1–7 (Apr. 8, 2019) (Rachel Wolbers, Engine).

[1009] *See, e.g.*, Google Initial Comments at 9–10 (enumerating concerns with implementation of a staydown requirement and concluding that "it is both legally and technically difficult to imagine that a 'staydown' obligation could feasibly be imposed on all OSPs that are covered by the DMCA safe harbors").

There are reasons to be cautious regarding the adoption of a general staydown requirement for OSPs. As noted above, adoption of a staydown requirement, with or without an affirmative filtering requirement for all (or even most) OSPs, would represent a fundamental shift of intermediary liability policy in the United States.[1010] The Office does not currently have empirical evidence from countries that have adopted a widely-applicable staydown requirement along the lines of what many rightsholders support, making it difficult to gauge the efficacy of such a system, or to measure the potential speech and competition externalities that may result from a widely-applicable filtering requirement. While a number of decisions by the Court of Justice of the European Union (CJEU) have supported some version of a staydown requirement when the requirement meets the proportionality test,[1011] the CJEU has explicitly rejected a broadly-applicable filtering requirement for OSPs.[1012] Similarly, although lower courts in France initially adopted a staydown requirement for infringing content, the high court rejected such a requirement in 2012.[1013] Although many interpret Article 17 of the DSM Copyright Directive as adopting a staydown requirement that requires the use of filtering technologies, most countries in the European Union are still in the process of implementing the Directive into their national law, a process that does not have to be complete until June 2021.[1014]

[1010] One Study comment referred to such a change as "no mere adjustment to the DMCA's balance of burdens; it would be closer to a demolition of the DMCA's existing structure." Bridy & Keller Initial Comments at 17. It is likely true that universal notice-and-staydown requirement is outside the purview of what Congress envisioned in 1998. On the other hand, as discussed in section VI.A.2 above, it is unlikely that Congress would have understood themselves to be creating a regime that required a separate notice for every individual URL on which an instance of infringing content appears, even when such infringing content already co-existed on the service alongside the instance that was the subject of a takedown notice.

[1011] *See, e.g.*, Case C-324/09, *L'Oréal SA et al. v. eBay International AG et al.*, [2011] ECR, I-06011, para. 127, 134, http://curia.europa.eu/juris/document/document.jsf?text=&docid=107261&pageIndex=0&doclang=en&mode=lst&dir=&occ=first&part=1&cid=197042 (OSPs can be required to use word filtering to "not only to bringing to an end infringements of those rights by users of that market-place, but also to preventing further infringements of that kind.").

[1012] *See* Case C-360/10, *Belgische Vereniging van Auteurs, Componisten en Uitgevers CVBA (SABAM) v. Netlog NV*, [2012] 2 CMLR 18, para. 38, http://curia.europa.eu/juris/document/document.jsf?text=&docid=119512&pageIndex=0&doclang=en&mode=lst&dir=&occ=first&part=1&cid=196613 (injunction requiring a hosting provider to install a filtering system is incompatible with Art. 15 of the EU E-Commerce Directive); Case C-70/10, *Scarlet Extended SA v. Société belge des auteurs, compositeurs et éditeurs SCRL (SABAM)*, [2011] ECR, I-1959, para. 40, http://curia.europa.eu/juris/document/document.jsf?text=&docid=115202&pageIndex=0&doclang=en&mode=lst&dir=&occ=first&part=1&cid=198461 (restating the principles in favor of access providers).

[1013] *See* Bac Films v. Google Inc. Civ. 1ère, 12 juillet 2012, Bull. civ. 1, nº 11-13666, https://www.legifrance.gouv.fr/affichJuriJudi.do?idTexte=JURITEXT000026181926 (Fr.); André Rau vs. Google & Aufeminin.com Civ. 1ère, 12 juillet 2012, Bull civ. 1, nº 11-15165 11-15188, http://www.dalloz-actualite.fr/document/civ-1re-12-juill-2012-fs-pbi-n-11-15165 (Fr.).

[1014] Note, however, that Germany has expressed its desire to implement Article 17 in a manner that avoids the use of "'upload filters' wherever possible." Council of the European Union, Statement by Germany, 15 Apr. 2019, 7986/19 ADD 1 REV 2 (Interinstitutional File: 2016/0280(COD)), at ¶ 2, https://data.consilium.europa.eu/doc/document/ST-7986-2019-ADD-1-REV-2/en/pdf. Two German professors have now put forth a legislative proposal that would implement Article 17 in German law without requiring the widespread use of upload filters, instead relying upon a form of extended collective licensing for uploaded content. *See* Rolf Schwartmann & Christian-Henner Hentsch, *Stufenkonzept*

A number of Study participants point to Germany's *Störerhaftung*[1015] principle as an example of a staydown regime that is already working in practice, but that doctrine appears to be significantly more cabined than the type of staydown system advocated during the Study.[1016] In a 2013 opinion elaborating upon the doctrine, the German Federal Supreme Court found that RapidShare had a heightened obligation to search for and remove additional copies of infringing content as a result of the *characteristics of the platform* and associated marketing. The court cited the following facts to support such a heightened obligation:

> [I]ts structure bears the risk of massive copyright infringements, to an extent which permits making the Defendant subject to significantly increased examination and action obligations in order to prevent copyright infringements; [] the Defendant had gone beyond the position of a neutral intermediary; [] at the time the infringements were committed . . . Defendant had significantly targeted its service . . . at the massive committing of copyright infringements; [] private users were encouraged to distribute the uploaded files as widespread and extensively as possible; [] it is obvious that a download frequency of more than 100,000 acts [as advertised by Defendants] cannot be reached within the framework of confidential commercial or private communications, but only with highly attractive, and therefore usually unlawful, content; [and] the Defendant furthermore significantly enhanced unlawful activities via its service through the awarding of Premium Points which was linked to the frequency of file download.[1017]

To date, German courts have not interpreted *Störerhaftung* to require adoption of a universal notice-and-staydown system, nor have they applied it to service providers dedicated to hosting general user generated content, some of which may contain infringing material.[1018] In fact,

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zur Umsetzung von Art. 17 der DSM-Richtlinie: Stufenkonzept gegen Overblocking durch Uploadfilter, KÖLNER FORSCHUNGSSTELLE FÜR MEDIENRECHT DER TH KÖLN (Mar. 27, 2020), https://www.medienrecht.th-koeln.de/relaunch/wp-content/uploads/2020/03/2020-03-03-Umsetzungsvorschlag-Art.-17.pdf (Gr.). For a discussion of the proposal in English, see Paul Keller, *A Better Way to Implement Article 17? New German Proposal to Avoid Overblocking*, COMMUNIA (Apr. 15, 2020), https://www.communia-association.org/2020/04/15/better-way-implement-article-17-new-german-proposal-avoid-overblocking/.

[1015] Translated generally as "breach of duty of care."

[1016] For an overview of German case law applying the Störerhaftung doctrine, see generally Jan Bernd Nordemann, *Liability for Copyright Infringements on the Internet: Host Providers (Content Providers)—The German Approach*, 2 J. INTELL. PROP., INFO. TECH. & ELECTRONIC COM. L. 37 (2011), https://www.jipitec.eu/issues/jipitec-2-1-2011/2962/JIPITEC_Nordemann.pdf.

[1017] Rapidshare AG v. Walther de Gruyter GmbH & Co. KG, Bundesgerichtshof [BGH] [Federal Court of Justice] Case No. I ZR 79/12 (Aug. 15, 2013), NJW 2013, 3245 ¶ 13. An English translation of the case is available at https://stichtingbrein.nl/public/2013-08-15%20BGH_RapidShare_EN.pdf.

[1018] In fact the German high court rejected application of filtering requirements for UGC websites. OLG München, Urteil v. 28.01.2016 (29 U 2798/15) ZUM 2016, https://www.gesetze-bayern.de/Content/Document/Y-300-Z-BECKRS-B-2016-N-03388 (Ger.) (ruling against GEMA, a performers' rights organization in Germany, in holding that YouTube could not be held liable for damages for hosting copyrighted content without the copyright holder's permission). The German high court, however, has found that search providers can be required to use general word filters.

German courts have stated that *Störerhaftung* only applies after the content owner has taken reasonable actions against either the user that originally committed the infringement or the service provider.[1019]

For these reasons, it is the opinion of the Office that a general staydown requirement and/or mandatory OSP filtering should be adopted, if at all, only after significant additional study, including of the non-copyright implications they would raise.[1020] In particular, the Office believes that it would be advisable to wait until the DSM Copyright Directive has been implemented in many of the EU member states in order to study the real-world impacts of such a requirement.

b) Website Blocking

Some rightsholders also advocated for a more extensive system of no-fault injunctions to address websites primarily dedicated to piracy.[1021] As Professor Urban noted in her study, many of these websites are located abroad, beyond U.S. jurisdiction, which insulates them from any likelihood of being forced to pay millions of dollars in statutory damages.[1022] Rightsholders supporting the proposal of expanded injunctive relief report that such systems have been largely effective in addressing the most egregious cases of infringement.[1023]

There are different technologies and mechanisms available for blocking and filtering websites primarily dedicated to copyright infringement. Most website blocking techniques block websites either by preventing the users' computer from resolving or accessing the domain name (such as "copyright.gov"), or by denying access to the Internet Protocol address ("IP") (such as 140.147.239.123) address at which the website is located.[1024] The three most widely used

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Bundesgerichtshof [BGH] [Federal Court of Justice], Urteil v. 21.09.2017 (ZR 11/16) NJW 2018, 772, ¶¶ 69–70, https://perma.cc/9R2V-HKV5.

[1019] *See* LG München, Urteil v. 1.2.2018 (7 O 17752/17) BeckRS 2018, 2857 at 6 (English translation) http://copyrightblog.kluweriplaw.com/wp-content/uploads/sites/49/2018/05/Translation-of-Decision-of-District-Court-Munich.pdf).

[1020] The Office agrees with those rightsholders that argue there is already adequate real-world evidence to support the adoption of such requirements for a small subsection of OSPs, in particular file sharing services and other websites primarily geared towards facilitating infringement. The Office believes, however, that most of these services properly fall outside of the section 512 safe harbors, arguing in favor of liability for such services even in the absence of filtering requirements. *See supra* section VI.A.1.c. Thus, the adoption of filtering requirements for such websites, in addition to being unlikely to result in compliance, may further result in sowing confusion regarding whether such websites are entitled to claim the protections of a safe harbor.

[1021] *See, e.g.*, AAP Additional Comments at 22; MPAA Additional Comments at 22–23. Prof. Urban notes a split among rightsholders regarding support for additional website blocking authority. Urban et al. Empirical Study at 62–63.

[1022] Urban et al. Empirical Study at 62.

[1023] *See, e.g.*, MPAA Additional Comments at 22; Tr. at 302:1–6 (Apr. 8, 2019) (Lui Simpson, AAP).

[1024] At a very high level, in order to access a website, a user typically inputs the domain name/URL of the website they wish to visit. The Domain Name Service (DNS) (which can be hosted by either the ISP or a third party service) then

techniques for website blocking are: (i) an ISP (or other provider) can remove the listing for that domain name from the Domain Name System ("DNS"), resulting in the user's computer being unable to locate the website's IP address and thus unable to access the website (this is known generally as "DNS blocking" or "DNS filtering"); (ii) the ISP can apply a filter that inspects all outgoing web traffic and either blocks access to particular listed websites (a "black list") or allows access only to particular listed websites (a "white list") (this technique is usually known as "URL blocking" or "URL filtering"; or (iii) the ISP can block traffic to the website's IP address directly, without changing the DNS registry (this is known generally as "IP blocking" or "IP filtering").[1025] While there are various arguments as to why one method is more effective (and thus "better"),[1026] the end result is often the same: non-determined users either receive an error message or are redirected to an alternative location.

During the Study, OSPs and user advocacy groups argue against expanded website blocking relief on both technical[1027] and policy grounds.[1028] EFF echoes a number of website blocking opponents when it asserts that website blocking systems "introduce dangerous mechanisms for Internet censorship, interfere with users' fundamental rights, and, often, prove ineffective in solving the problem of online copyright infringement."[1029] On the technical front, several commenters point to the ineffectiveness of certain types of blocking.[1030] In response to these draw backs, proponents note the importance of a system that allows rightsholders to efficiently update any injunctions to address technological attempts to evade blocks.[1031]

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resolves the domain name by matching it to the corresponding Internet Protocol (IP) address, which is the numerical location code for the server hosting the website. *See How the Domain Name System (DNS) Works*, VERISIGN, https://www.verisign.com/en_US/website-presence/online/how-dns-works/index.xhtml.

[1025] INTERNET SOC'Y, PERSPECTIVES ON INTERNET CONTENT BLOCKING: AN OVERVIEW 8–9 (Mar. 2017), https://www.internetsociety.org/wp-content/uploads/2017/03/ContentBlockingOverview.pdf.

[1026] CORY, HOW WEBSITE BLOCKING IS CURBING DIGITAL PIRACY 8–11 (discussing the advantages of different forms of blocking mechanisms).

[1027] *See* ICC Initial Comments at 2 (stating that "[t]he open nature of the Internet makes eradication of infringement impossible and website blocking ineffective"); *see also* INST. FOR INFO. LAW, FILESHARING 2©12: DOWNLOADING FROM ILLEGAL SOURCES IN THE NETHERLANDS 37 (2012), https://www.ivir.nl/publicaties/download/174.pdf.

[1028] *See, e.g.*, EFF, Additional Comments Submitted in Response to U.S. Copyright Office's Nov. 8, 2016, Notice of Inquiry at 19–20 (Feb. 21, 2017) ("EFF Additional Comments").

[1029] *See, e.g.*, EFF Additional Comments at 19.

[1030] *See, e.g.*, EFF Additional Comments at 19; Tr. at 364:18–365:6 (Apr. 8, 2019) (Stan Adams, CDT) (noting that the increasing use of private DNS operators poses a challenge for ISPs to enact DNS-based website blocking).

[1031] *See, e.g.*, Tr. at 353:2–15 (Apr. 8, 2019) (Lui Simpson, AAP) ("I will note that[,] because it is of limited jurisdiction, there are limits to the effectiveness of this particular remedy [website blocking]. Obviously, a site when it is blocked on a particular or within a particular jurisdiction, sometimes the operator of that website will simply try and move to a different server . . . . [I]n Europe . . . . [t]he orders themselves can be amended, so that the new sites . . . can then be included in the previous orders.").

According to opponents, free speech concerns are particularly implicated by any website blocking mechanism targeted at the domain name or IP address level, because the block applies to the an entire website (or group of websites), not just the page(s) that contain infringing content.[1032] These concerns are not alleviated by assertions by rightsholders that the use of such injunctive remedies could be limited to websites primarily intended to facilitate piracy, as they point to incidences where website blocking orders, particularly those based on IP blocking, have been improperly implemented, such as one incidence in Australia where almost 250,000 websites that shared an IP address with the target website were inadvertently blocked.[1033] As many of the user advocacy groups and OSPs note, free speech concerns are particularly impacted by IP blocking—because a single IP address is often shared by multiple sites, it can lead to over-blocking by restricting access to unrelated, otherwise legal sites.

Unlike universal staydown requirements, there is some (limited) empirical evidence from a number of countries regarding the use injunctive relief, most often in the form of website blocking orders. As noted earlier, more than 40 countries have adopted or have an obligation to adopt some form of no-fault injunctive relief against pirate websites, although only about two dozen actually issued such website blocking orders between 2006 and 2018.[1034] While some of these jurisdictions have fewer protections for free speech (as compared to the familiar First Amendment principles here in the United States), proponents point to the European Union, in particular Article 8(3) of the InfoSoc Directive, as a model for updating U.S. intermediary liability law.[1035] Nonetheless, the data regarding the efficacy of website blocking versus the impact on free

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[1032] *See Domain Name System (DNS)*, ELECTRONIC FRONTIER FOUNDATION, https://www.eff.org/free-speech-weak-link/dns ("[DNS blocking] can prevent users from accessing lawful as well as unlawful speech, in part because it is often easier for ISPs and governments to *prevent access to entire domain names, including lawful speech* on rather than precisely block access to specific objectionable content."); CDT, THE PERILS OF USING THE DOMAIN NAME SYSTEM TO ADDRESS UNLAWFUL INTERNET CONTENT 2-3 (2011), https://cdt.org/wp-content/uploads/pdfs/Perils-DNS-blocking.pdf.

[1033] *See* Ben Grubb, *How ASIC's Attempt to Block One Website Took Down 250,000*, THE AGE (June 5, 2013, 10:29 AM), https://www.theage.com.au/technology/how-asics-attempt-to-block-one-website-took-down-250000-20130605-2np6v.html.

[1034] *See In the Matter of an Application Pursuant to Sections 24, 24.1, 36, and 701(a) of the* Telecommunications Act, *1993 to Disable On-line Access to Piracy Sites*, Application Before the Canadian Radio-television and Telecommunications Commission 4–6 (Mar. 29, 2018) (written intervention of the Motion Picture Association–Canada), *reposted at* https://torrentfreak.com/images/mpa-can.pdf; Nigel Cory, *The Normalization of Website Blocking around the World in the Fight against Piracy Online*, ITIF (June 12, 2018), https://itif.org/publications/2018/06/12/normalization-website-blocking-around-world-fight-against-piracy-online.

[1035] *See, e.g.*, Tr. at 350:6–13 (Apr. 8, 2019) (Stan McCoy, Motion Picture Association EMEA) ("[A]rticle 8(3) [of the InfoSoc Directive] has been in place now for 18 years. It's functioning well. None of the dire consequences that have sometimes been forecasted around injunctive relief measures like this have come to pass. And I want to emphasize, for this audience in particular, the complementarity of an injunctive relief regime to the goals of a notice-and-takedown regime."). Member countries of the EU have taken different approaches to implementing such injunctive systems. While many countries have made injunctive relief a judicial remedy, some countries like Italy, have implemented website blocking through an administrative agency subject to judicial oversight. *See, e.g.*, Ali Amirmahani, *Digital Apples and Oranges: A Comparative Analysis of Intermediary Copyright Liability in the United States and European Union*, 30 BERKELEY TECH. L.J. 865, 883–894 (2015) (generally discussing blocking measures in the EU); Gianluca Campus, *Italian Public Enforcement of Online Copyright Infringement: New Powers and Procedures for AGCOM*, KLUWER COPYRIGHT BLOG,

speech is limited and largely anecdotal—only a handful of countries in the EU have actually issued website blocking orders, and most empirical studies have focused almost exclusively on whether such blocking orders have impacted piracy rates. While some of these studies report statistically significant reductions in piracy,[1036] other studies have shown smaller or no reductions.[1037] Thus, it is difficult to weigh the benefit of such orders against the potential speech impacts, arguing in favor of additional, dedicated study before adopting such a proposal.

3. Legislation Targeting Third-Party Providers

Another possible method for addressing online infringement that has been discussed both during the Study and outside of it is legislation targeting third-party OSPs that facilitate the business operations of piracy websites.[1038] Such legislation would formalize the "follow-the-money" approach currently undertaken voluntarily by a number of the larger payment processors and advertising networks.[1039]

As noted in the above discussion of the applicability of the four section 512 safe harbors, the question of liability for payment processors has arisen in a few section 512 cases, but the only court to address the question on the merits found the facilitation of infringement by payment processors too attenuated to support vicarious liability.[1040] The Office is of the opinion that such

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(Dec. 14, 2018), http://copyrightblog.kluweriplaw.com/2018/12/14/italian-public-enforcement-of-online-copyright-infringement-new-powers-and-procedures-for-agcom/.

[1036] *See* Brett Danaher et al., *Website Blocking Revisited: The Effect of the UK November 2014 Blocks on Consumer Behavior* at 16 (Apr. 18, 2016) (unpublished article), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2766795; *see also* RETTIGHEDSALLIANCEN, ANNUAL REPORT 2017 5 (2018), https://rettighedsalliancen.dk/wp-content/uploads/2018/08/ENGB_RettighedsAlliancen2018.pdf (noting average 75% decrease in Danish IP traffic to piracy sites in the wake of DNS blocking orders); CORY, HOW WEBSITE BLOCKING IS CURBING DIGITAL PIRACY 12–17.

[1037] *See* Michael Geist, *The Case against the Bell Coalition's Website Blocking Plan, Part 8: The Ineffectiveness of Website Blocking*, MICHAEL GEIST (Feb. 22, 2018), http://www.michaelgeist.ca/2018/02/case-bell-coalitions-website-blocking-plan-part-8-ineffectiveness-website-blocking/ (and studies cited therein).

[1038] *See, e.g.*, Tr. at 129:8–12 (May 13, 2016) (Fred von Lohmann, Google) ("Frankly, we have said since SOPA that we support legislation that would have addressed the payments and the ads, the follow-the-money issue. We've been a consistent supporter of a follow-the-money approach because we think it's effective."); DEP'T OF COMMERCE INTERNET POLICY TASK FORCE, COPYRIGHT POLICY, CREATIVITY, AND INNOVATION IN THE DIGITAL ECONOMY 67–70 (2013), http://www.uspto.gov/sites/default/files/news/publications/copyrightgreenpaper.pdf.

[1039] A TAG benchmarking study from 2017 found that revenue from premium ad placements on pirate websites had been reduce to less than 20%. Ernst & Young, *Measuring Digital Advertising Revenue to Infringing Sites: TAG US Benchmarking Study* (Sept. 2017), https://cdn2.hubspot.net/hubfs/2848641/Measuring%20digital%20advertising%20revenue%20to%20infringing%20sites-1.pdf. WIPO has recently launched an online database to collect a list of pirate websites in one location, with access available to member countries. *See Building Respect for Intellectual Property*, WIPO, https://www.wipo.int/wipo-alert/en/. For more information on various follow-the-money programs, see *supra* section IV.B.2.

[1040] *Perfect 10, Inc. v. Visa Int'l Serv. Ass'n*, 494 F.3d 788, 806 (9th Cir. 2007). *But see id.*, 494 F.3d at 810–11 (Kozinski, J., dissenting) ("[Payment processors] knowingly provide a financial bridge between buyers and sellers of pirated works, enabling them to consummate infringing transactions, while making a profit on every sale. If such active participation in infringing conduct does not amount to indirect infringement, it's hard to imagine what would. By straining to

issues are properly outside the scope of this Report, and notes that the parties likely to be affected by such legislation were not participants in the Study process. Further, adoption of any such proposals would necessarily include an evaluation of considerations beyond the copyright laws, and are thus properly outside the scope of the current Study. Accordingly, the Office declines to make a recommendation regarding such approaches.

VII. CONCLUSION

In this Report, the Copyright Office has comprehensively considered the question Congress asked us to study: is the balance that Congress devised in section 512 more than twenty years ago working for all concerned parties? In the DMCA, Congress intended to support the continued development and growth of the then-nascent internet and e-commerce sectors. To achieve that, Congress wanted to give OSPs greater certainty about their legal exposure, while providing rightsowners with reasonable assurance that they would be protected from massive online infringement. Section 512 and its safe harbors were designed to achieve those goals by providing "strong incentives for service providers and copyright owners to cooperate to detect and deal with copyright infringements that take place in the online networked environment."[1041]

The Copyright Office concludes that the balance Congress intended when it established the section 512 safe harbor system is askew. The Office reviewed more than 92,000 written comments, hosted five roundtables, and analyzed decades of case law. While OSPs, supported in many aspects by user advocacy groups, report satisfaction with the current operation of the safe harbors, that view is not shared by the other intended beneficiaries of the section 512 system, including authors, creators, and rightsholders of all sorts and sizes. There is no doubt that the internet, in all its various component parts, has grown successfully and exponentially over the past two decades. However, despite the advances in legitimate content options and delivery systems, and despite the millions of takedown notices submitted on a daily basis, the scale of online copyright infringement and the lack of effectiveness of section 512 notices to address that situation remain significant problems. While the Office is mindful of those creators who have been able to leverage new technologies to their benefit, their economic success does not provide comfort to the many other creators who have seen their livelihoods impacted drastically by ongoing infringement of their works online and for which they can achieve no relief. Additionally, even with some important cooperative efforts at the margins, the degree and breath of cooperation between OSPs and rightsholders that was anticipated in 1998 has not come to full fruition.

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absolve defendants of liability, the majority leaves our law in disarray."). *See also CCBill*, 488 F.3d at 1116 (rejecting the plaintiff's argument that a payment processor "is not eligible for immunity under § 512(a) because it does not itself transmit the infringing material" and remanding to the district court for a determination of whether the payment processor qualified as a section 512(a) mere conduit service provider).

[1041] H.R. REP. NO. 105-796, at 72 (1998) (Conf. Rep.).

In our examination of the balance established in the congressional construction of section 512, the Office has outlined five principles that guided its review, identified its findings, and made numerous recommendations to Congress for its consideration. These recommendations cover areas of how OSPs qualify for the four safe harbors, how the various knowledge requirements work in practice, and how the notice-and-takedown system operates. The Office is not recommending any wholesale changes to section 512, instead electing to point out the numerous areas where Congress may wish to fine-tune section 512's current operation in order to better balance the rights and responsibilities of OSPs and rightsholders, in alignment with its objectives when it passed the DMCA. The Office also recommends several non-statutory areas of untapped potential to increase the efficacy of the section 512 system and recommends additional stakeholder and government focus in the areas of education, voluntary cooperation, and the use of standard technical measures. The Office will be rolling out a new website—copyright.gov/DMCA—that includes several educational and practical elements, including model takedown notices and counter-notices.

Should Congress choose to continue to support the balance it devised in section 512 and move forward on the legislative issues identified in this Report, then the Office harbors some optimism that a path toward rebuilding the section 512 balance could be found. The Copyright Office is also mindful that the opportunities and challenges faced by everyone in the online environment—creators (large, medium, and small), OSPs (large, medium, and small), and users (of all sizes and in many sectors)—are very different today than 1998. Congress could choose to reevaluate how it perceives any balancing factors in the current environment, as well as consider other new measures that would go beyond the current constructs of section 512. To that end, this Report includes illustrative information on developments involving online intermediary liability in other countries. It also identifies several proposals submitted by commenters on new approaches that the Office sees as going beyond the original construct of section 512. For those issues—specifically notice-and-staydown and website blocking—the Office believes that additional study, including of potential non-copyright impacts with public input, would be needed in order to explore the potential contours of any such future proposals. Those kinds of legislative decisions, such as defining any new or revised balances in the section 512 system, are in the hands of Congress, and the Office makes no recommendations with respect to those decisions. The Copyright Office stands ready to continue our work to provide additional advice to Congress.

APPENDIX A FEDERAL REGISTER NOTICES

[FR Doc. 2015–32908 Filed 12–30–15; 8:45 am]
BILLING CODE 4410–15–C

LIBRARY OF CONGRESS

U.S. Copyright Office

[Docket No. 2015–7]

Section 512 Study: Notice and Request for Public Comment

AGENCY: U.S. Copyright Office, Library of Congress.

ACTION: Notice of inquiry.

SUMMARY: The United States Copyright Office is undertaking a public study to evaluate the impact and effectiveness of the DMCA safe harbor provisions contained in 17 U.S.C. 512. Among other issues, the Office will consider the costs and burdens of the notice-and-takedown process on large- and small-scale copyright owners, online service providers, and the general public. The Office will also review how successfully section 512 addresses online infringement and protects against improper takedown notices. To aid in this effort, and to provide thorough assistance to Congress, the Office is seeking public input on a number of key questions.

DATES: Written comments must be received no later than 11:59 p.m. Eastern Time on March 21, 2016. The Office will be announcing one or more public meetings to discuss issues related to this study, to take place after initial written comments are received, by separate notice in the future.

ADDRESSES: All comments should be submitted electronically. Specific instructions for the submission of comments will be posted on the Copyright Office Web site at *http://www.copyright.gov/policy/section512* on or before February 1, 2016. To meet accessibility standards, all comments must be provided in a single file not to exceed six megabytes (MB) in one of the following formats: Portable Document File (PDF) format containing searchable, accessible text (not an image); Microsoft Word; WordPerfect; Rich Text Format (RTF); or ASCII text file format (not a scanned document). The form and face of the comments must include the name of the submitter and any organization the submitter represents. The Office will post all comments publicly in the form that they are received. If electronic submission of comments is not feasible, please contact the Office using the contact information below for special instructions.

FOR FURTHER INFORMATION CONTACT: Jacqueline C. Charlesworth, General Counsel and Associate Register of Copyrights, by email at *jcharlesworth@loc.gov* or by telephone at 202–707–8350; or Karyn Temple Claggett, Director of the Office of Policy and International Affairs and Associate Register of Copyrights, by email at *kacl@loc.gov* or by telephone at 202–707–8350.

SUPPLEMENTARY INFORMATION:

I. Background

Congress enacted section 512 in 1998 as part of the Digital Millennium Copyright Act (''DMCA'').[1] At that time, less than 5% of the world's population used the internet,[2] and bulletin board services were the popular online platforms.[3] Even then, however, Congress recognized that ''the [i]nternet . . . made it possible for information—including valuable American copyrighted works—to flow around the globe in a matter of hours,'' and, as a consequence, copyright law needed to be ''set . . . up to meet the promise and the challenge of the digital world.''[4]

In enacting section 512, Congress created a system for copyright owners and online entities to address online infringement, including limitations on liability for compliant service providers to help foster the growth of internet-based services.[5] The system reflected Congress' recognition that the same innovative advances in technology that would expand opportunities to reproduce and disseminate content could also facilitate exponential growth in copyright infringement. Accordingly, section 512 was intended by Congress to provide 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,'' as well as to offer ''greater certainty to service providers concerning their legal exposure for infringements that may occur in the course of their activities.''[6]

Congress was especially concerned about the liability of online service providers for infringing activities of third parties occurring on or through their services. To address this issue, Congress created a set of ''safe harbors''—*i.e.,* limitations on copyright infringement liability—''for certain common activities of service providers.''[7] But the safe harbors are not automatic. To qualify for protection from infringement liability, a service provider must fulfill certain requirements, generally consisting of implementing measures to expeditiously address online copyright infringement.

Recent research suggests that the volume of infringing material accessed via the internet more than doubled from 2010 to 2012, and that nearly one-quarter of all internet bandwidth in North America, Europe, and Asia is devoted to hosting, sharing, and acquiring infringing material.[8] While Congress clearly understood that it would be essential to address online infringement as the internet continued to grow, it was likely difficult to anticipate the online world as we now know it—where, each day, users post hundreds of millions of photos, videos and other items, and service providers receive over a million notices of alleged infringement.

As observed by the House Judiciary Committee's Ranking Member in the course of the Committee's ongoing multi-year review of the Copyright Act, and consistent with the testimony of the Register of Copyrights in that hearing, the operation of section 512 poses policy issues that warrant study and analysis.[9] Section 512 has also been a focus of the U.S. Department of Commerce in recent years, which has noted ambiguities in the application of

[1] Pub. L. 105–304, 112 Stat. 2860 (1998).

[2] *See Internet Users,* Internet Live Stats (Dec. 1, 2015), *http://www.internetlivestats.com/internet-users/#trend* (In 1998, there were only 188 million internet users; today, there are over 3.25 billion.).

[3] *See The History of Social Networking,* Digital Trends (Aug. 5, 2014), *http://www.digitaltrends.com/features/the-history-of-social-networking/* (providing a timeline for the development of social networks).

[4] 144 Cong. Rec. S11,889 (daily ed. Oct. 8, 1998) (statement of Sen. Orrin Hatch).

[5] *See* H.R. Rep. No. 105–551, pt. 2, at 21 (1998) (noting that the DMCA, including section 512 of title 17, ''balance[s] the interests of content owners, on-line and other service providers, and information users in a way that will foster the continued development of electronic commerce and the growth of the [i]nternet'').

[6] *Id.* at 49–50.

[7] S. Rep. No. 105–190, at 19 (1998).

[8] *See* David Price, Sizing the Piracy Universe 3 (2013), *http://www.netnames.com/digital-piracy-sizing-piracy-universe* (infringing bandwidth use increased by 159% between 2010 to 2012 in North America, Europe, and [the] Asia-Pacific, which account for more than 95% of global bandwidth use).

[9] *Register's Perspective on Copyright Review: Hearing Before the H. Comm. on the Judiciary,* 114th Cong. 6 (2015) (statement of Maria A. Pallante, Register of Copyrights and Director, U.S. Copyright Office) (''We are . . . recommending appropriate study of section 512 of the DMCA . . . . [T]here are challenges now that warrant a granular review.''); *id.* at 49 (statement of Rep. John Conyers, Jr., Ranking Member, H. Comm. on the Judiciary) (''[T]here are policy issues that warrant studies and analysis, including section 512, section 1201, mass digitization, and moral rights. I would like the Copyright Office to conduct and complete reports on those policy issues . . . .'').

the safe harbor and encouraged service providers and rightsholders to discuss and pursue voluntary improvements.[10]

The present study will review the statutory requirements of section 512 and evaluate its current effectiveness and impact on those who rely upon it. The key aspects of section 512 that are the subject of this review, including notable legal and practical developments, are summarized below.

A. Overview of Section 512 Safe Harbors

Section 512 provides safe harbors from infringement liability for online service providers that are engaged in qualifying activities and that also meet certain eligibility requirements. There are four distinct safe harbors, detailed in sections 512(a), (b), (c), and (d), respectively. These safe harbors are available when a service provider engages in one or more of the following corresponding activities: (a) Serving as a conduit for the automatic online transmission of material as directed by third parties; (b) caching (*i.e.,* temporarily storing) material that is being transmitted automatically over the internet from one third party to another; (c) storing (*i.e.,* hosting) material at the direction of a user on a service provider's system or network; or (d) referring or linking users to online sites using information location tools (*e.g.,* a search engine).

A service provider that meets the relevant eligibility requirements for one or more of the safe harbors is not liable for monetary relief and is subject only to limited injunctive relief for infringing activities conducted on or through its system or network.[11] In the case of a service provider that qualifies for a safe harbor under 512(b), (c), or (d), this injunctive relief is limited to: (1) Disabling access to infringing material; (2) terminating the infringer's account(s); and (3) providing such other relief as may be necessary to address infringement at a particular online location; provided, however, that the relief is ''the least burdensome [form of relief] to the service provider.'' [12] For a service provider that qualifies for the 512(a) safe harbor, the court may order only termination of an infringer's account(s) or blocking of access to a ''specific, identified, online location outside the United States.'' [13]

In order to qualify for the limitation on liability provided under section 512(a), (b), (c), or (d), the service provider must comply with certain threshold requirements. Two of these requirements apply to all four safe harbors: (1) The adoption and reasonable implementation of a policy to terminate ''repeat infringers''; [14] and (2) the accommodation of ''standard technical measures'' that identify or protect copyrighted works and have been developed according to broad consensus between copyright owners and service providers, to the extent any such measures exist.[15] A service provider that acts as a mere conduit for online transmissions qualifies for the limitation on liability provided by section 512(a) if the provider satisfies these two threshold requirements.

Service providers seeking protection under the safe harbors in section 512(b), (c), or (d), however, must, in addition, maintain a compliant notice-and-takedown process by responding expeditiously to remove or disable access to material claimed to be infringing upon receipt of proper notice from a copyright owner or the owner's authorized agent.[16] A service provider seeking to avail itself of the section 512(c) safe harbor for user-posted content is further required to designate an agent to receive notifications of claimed infringement and provide contact information for the agent on its Web site and to the Copyright Office, which, in turn, is to maintain a public directory of such agents.[17]

The statute prescribes that a copyright owner's takedown notice must include ''substantially the following'': (i) The signature of the copyright owner or an authorized agent (*i.e.,* the complaining party); (ii) identification of the copyrighted work claimed to have been infringed, or, if multiple works are on a single site, ''a representative list of such works''; (iii) identification of the infringing material or activity (or the reference or link to such material) and ''information reasonably sufficient'' to permit the service provider to locate the material (or the reference or link); (iv) contact information for the complaining party; (v) a statement that the complaining party has ''a good faith belief that use of the material in the manner complained of is not authorized by the copyright owner, its agent, or the law''; and (vi) a statement that the information is accurate and, under penalty of perjury, that the complaining party is authorized to act on behalf of the copyright owner.[18] A copyright owner's communication that does not substantially comply with these criteria will not serve as effective notice for purposes of the statutory process.[19] Further, under section 512(f), as discussed more fully below, ''[a]ny person who knowingly materially misrepresents . . . that material or activity is infringing'' can be held liable for any damages, including costs and attorneys' fees, incurred by an alleged infringer who is injured by the misrepresentation.

In addition to responding to takedown notices, service providers that seek protection under the section 512(c) and (d) safe harbors must also act expeditiously to remove or disable access to material when they have ''actual knowledge'' of infringement or, in the absence of such actual knowledge, when they have ''aware[ness] of facts or circumstances from which infringing activity is apparent''—the ''awareness'' standard often referred to as ''red flag'' knowledge.[20] But, while service providers are not free to ignore infringement of which they have actual or red flag knowledge, section 512 at the same time provides that an online entity has no duty to ''monitor[ ] its service or affirmatively seek[ ] facts indicating

[10] U.S. Dep't of Commerce Internet Policy Task Force, Copyright Policy, Creativity, and Innovation in the Digital Economy 54, 56 (Jul. 2013), *http://www.uspto.gov/sites/default/files/news/publications/copyrightgreenpaper.pdf* (''Copyright Policy, Creativity, and Innovation in the Digital Economy''); Dep't of Commerce Internet Policy Task Force, DMCA Multistakeholder Forum, DMCA Notice-and-Takedown Processes: List of Good, Bad, and Situational Practices 3 (2015), *http://www.uspto.gov/sites/default/files/documents/DMCA_Good_Bad_and_Situational_Practices_Document-FINAL.pdf* (''Dep't of Commerce Multistakeholder Forum Recommended Practices'').

[11] 17 U.S.C. 512(a)–(d).

[12] *Id.* at 512(j)(1)(A).

[13] *Id.* at 512(j)(1)(B).

[14] A service provider must adopt, ''reasonably implement[ ],'' and inform subscribers and account holders of a policy ''that provides for the termination in appropriate circumstances of . . . repeat infringers.'' *Id.* at 512(i)(1)(A).

[15] *Id.* at 512(i)(1)(B), (i)(2).

[16] *Id.* at 512(b)(2)(E), (c)(1)(C), (d)(3). The process for notification under the 512(c) and (d) safe harbors is set out in 512(c)(3); the process differs somewhat under the 512(b) safe harbor in that, in addition to following the requirements of 512(c)(3), the complaining party must also confirm that the content or link has been removed or disabled by the originating site or that a court has ordered that it be removed or disabled.

[17] *Id.* at 512(c)(2). Although section 512(d) does not itself expressly require service providers to designate an agent to receive notifications of infringement, it incorporates the notice provisions of section 512(c)(3), which require that notices be sent to ''the designated agent of the service provider.'' The statutory scheme thus indicates that service providers operating under section 512(d) would also designate agents to receive takedown notices. *See id.* at 512(c)(3).

[18] *Id.* at 512(c)(3)(A)(i)–(vi).

[19] *See id.* at 512(c)(3)(B)(i) (''[A] notification . . . that fails to comply substantially . . . shall not be considered . . . in determining whether a service provider has actual knowledge or is aware of facts or circumstances from which infringing activity is apparent.''); *see also Perfect 10, Inc.* v. *CCBill LLC,* 488 F.3d 1102, 1112–14 (9th Cir. 2007) (''*CCBill LLC*'') (''[A] service provider will not be deemed to have notice of infringement when 'the notification . . . fails to comply substantially with all the provisions of [17 U.S.C. 512(c)(3)(A)].' '').

[20] *See* 17 U.S.C. 512(c), (d).

infringing activity, except to the extent consistent with a standard technical measure.'' [21]

Finally, to qualify for the section 512(c) and (d) safe harbors, a service provider must not ''receive a financial benefit directly attributable to the infringing activity, in a case in which the service provider has the right and ability to control such activity.'' [22] The statutory financial benefit/right to control test does not incorporate a knowledge element.[23]

In addition to the general limitations on infringement liability, the statute provides specific protections for service providers that remove material in response to takedown notices, as well as for users who post material that is claimed to be infringing. Under section 512, a service provider is not liable for the good-faith removal or disabling of access to material ''claimed to be infringing or based on facts or circumstances from which infringing activity is apparent''—even material not ultimately found to be infringing—so long as the provider takes reasonable steps to promptly notify the user who posted the material that it has been removed and also complies, as applicable, with a statutory counter-notification process.[24]

Section 512(g) allows a user whose content has been removed in response to a takedown notice to submit a counter notification to a service provider's designated agent requesting that the content be reposted. The counter notification must include: (i) The signature of the subscriber (*i.e.,* the counter-notifying party); (ii) identification of the material that was removed or to which access was disabled, as well as the location where it previously appeared; (iii) a statement under penalty of perjury that the subscriber has a ''good faith belief'' that the material ''was removed or disabled as a result of mistake or misidentification of the material to be removed or disabled''; and (iv) the subscriber's contact information, as well as a statement that the subscriber consents to the jurisdiction of the federal district court for the relevant judicial district and agrees to accept service of process from the party who provided the takedown notice (or that party's agent).[25] To preserve its safe harbor immunity, the service provider must repost the content within 10 to 14 business days of receiving the counter notification unless the service provider first receives notice from the party who provided the takedown notice that a judicial action has been filed ''seeking . . . to restrain the subscriber from engaging in infringing activity relating to the material on the service provider's system or network.'' [26] As in the case of misrepresentations in takedown notices, under section 512(f), any person who knowingly materially misrepresents that ''material or activity was removed or disabled by mistake or misidentification'' may be held liable for monetary damages, including costs and attorneys' fees.[27]

B. Key Developments

Since the enactment of section 512, stakeholders have adopted practices and systems to implement it, and courts have been called upon to interpret its provisions—from eligibility for safe harbors to the requirements for valid takedown notices to the standards that govern misrepresentations in the notification process. Some stakeholders have created best practices, entered into voluntary agreements to streamline enforcement procedures, and/or pursued other non-judicial approaches. Notwithstanding these developments, many on both sides of the equation express significant frustration with the process. A brief overview of the most salient issues follows.

Notice-and-Takedown Process

Today, copyright owners send takedown notices requesting service providers to remove and disable access to hundreds of millions of instances of alleged infringement each year.[28] The number of removal requests sent to service providers has increased dramatically since the enactment of section 512. For example, one search engine now ''receive[s] removal requests for more URLs every week than [it] did . . . from 1998 to 2010 combined.'' [29] Technology has come to play a significant role in the notice-and-takedown process, as automated processes that use fingerprinting, hash values, and keyword/metadata searches can identify movies, sound recordings, and other types of content that is being posted and disseminated.[30] But regardless of increasing technological capabilities, stakeholders frequently voice concerns about the efficiency and efficacy—not to mention the overall sustainability—of the system.[31]

Many smaller copyright owners, for example, lack access to third-party services and sophisticated tools to monitor for infringing uses, which can be costly, and must instead rely on manual search and notification processes [32]—an effort that has been likened to ''trying to empty the ocean with a teaspoon.'' [33] In addition to the burden of policing infringement across the internet, copyright owners complain that material they succeed in having taken down is often promptly reposted on the same site—the so-called ''whack-a-mole'' problem.[34] Under section 512 as it has been interpreted, providers are not required to filter out or prevent the reposting of copyrighted content

[21] *Id.* at 512(m)(1).

[22] *Id.* at 512(c)(1)(B), (d)(2).

[23] *See id.* at 512(c)(1)(B), (d)(2).

[24] *Id.* at 512(g)(1).

[25] *Id.* at 512(g)(3).

[26] *Id.* at 512(g)(2)(C).

[27] *Id.* at 512(f).

[28] *See Section 512 of Title 17: Hearing Before the Subcomm. on Courts, Intellectual Prop., & the Internet of the H. Comm. on the Judiciary,* 113th Cong. 3 (2014) (''*Section 512 Hearing*'') (written statement of Rep. Jerrold Nadler) (noting that in 2013, Google received notices requesting removal of approximately 230 million items); Joe Mullin, *Google Handled 345 Million Copyright Takedowns in 2014,* Ars Technica (Jan. 6, 2015), *http://arstechnica.com/tech-policy/2015/01/google-handled-345-million-copyright-takedowns-in-2014.*

[29] Google, How Google Fights Piracy 15 (2013), *https://docs.google.com/file/d/0BwxyRPFduTN2dVFqYml5UENUeUE/edit?pli=1#!.*

[30] *See, e.g.,* TheFlo, *White Paper: Audio Fingerprinting,* Maximum PC (Apr. 3, 2009), *http://www.maximumpc.com/white-paper-audio-fingerprinting/* (explaining the use of algorithms to create unique ''audio fingerprints'' to identify sound recordings); *What is a Hash Value?,* Pinpoint Labs (Dec. 10, 2010), *http://pinpointlabs.com/2010/12/what-is-a-hash-value/* (explaining use of hash values for text, audio, and video); Dep't of Commerce Multistakeholder Forum Recommended Practices (discussing use of automated tools to identify infringing material).

[31] *See, e.g., Section 512 Hearing* at 9 (written statement of Sean M. O'Connor, Entrepreneurial Law Clinic, University of Washington (Seattle)) (''[T]here are takedown notices now filed on millions of posts every month. That is clearly unsustainable.''); Copyright Policy, Creativity, and Innovation in the Digital Economy 56 (''[R]ight holders and ISPs alike have identified respects in which [the notice-and-takedown system's] operation can become unwieldy or burdensome.'').

[32] *See Section 512 Hearing* at 100 (statement of Rep. Doug Collins) (''[I]ndividual songwriters and the independent filmmakers . . . often have limited or no technical expertise or software at their disposal . . . .''); *id.* at 88–89 (2014) (written statement of Sandra Aistars, Copyright Alliance) (Independent authors and creators ''lack the resources of corporate copyright owners'' and instead issue ''takedown notices themselves, taking time away from their creative pursuits.'').

[33] Trevor Little, *Google and Microsoft Outline the Challenges Facing Online Intermediaries,* World Trademark Rev. (Mar. 1, 2013), *http://www.worldtrademarkreview.com/blog/detail.aspx?g=DFF24612-D6F7-4ED2-BFDB-383724E93D57* (quoting symposium comments by a vice president at Fox Group Legal).

[34] *Section 512 Hearing* at 35 (written statement of Paul Doda, Elsevier) (The ''*same books* are repeatedly re-uploaded on the same sites hundreds of times after being taken down . . . .''); *id.* at 57 (written statement of Maria Schneider, musician) (''As fast as I take my music down, it reappears again on the same site—an endless whac-a-mole game.'').

through the use of content identification technologies or other means.[35]

Accordingly, some have proposed that the notice-and-takedown procedure be revised to become a ''notice-and-stay-down'' procedure—that is, once a service provider receives an effective and uncontested takedown notice for a particular work, the provider should be required to make commercially reasonable efforts to keep that work from reappearing on its site.[36] Others, however, pointing to the very substantial efforts—especially of larger service providers—to respond promptly to takedown notices, are of the view that the existing system has ''scaled well'' over time to address the large volume of takedown notices, and does not need to be changed.[37]

Of course, the burdens of the notice-and-takedown process do not fall on copyright owners alone. Service providers must devote the time and resources necessary to respond to the increasing number of takedown notices sent each day. Smaller providers, in particular, may find the task to be a daunting one.[38] In addition, service providers complain that some notices do not meet the statutory requirements or, as discussed below, concern materials and activities that are not in fact infringing.

Since the passage of the DMCA, courts have been called upon to address the elements required for an ''effective''—*i.e.,* valid—takedown notice. Looking to section 512's requirement to provide ''information reasonably sufficient to permit the service provider to locate the material,'' courts have generally required a high degree of specificity, such as the particular link, or uniform resource locator (''URL''), where the infringing material is found.[39] Likewise, service providers often request that the specific URL for each allegedly infringing use be included in a notice.[40] Such a requirement can be burdensome in the case of a notice that references a large number of infringements at multiple locations throughout the same site. Additionally, copyright owners question whether this level of specificity is in conflict with the statute's express language allowing complaining parties to submit a ''representative list'' of works alleged to be infringed ''at a single online site.'' [41]

In addition, there is debate about whether search engine services must disable access to (*e.g.,* ''de-list'') entire sites that copyright owners report as consisting largely of infringing material.[42] While the legislative history of section 512(d) observes that ''safe harbor status for a provider that views [a pirate] site and then establishes a link to it would not be appropriate,'' [43] service providers assert that de-listing could lead to censorship, and yet still not effectively address infringement, because the site would remain online.[44]

Knowledge Standards

A good deal of litigation relating to section 512 to date has focused on the legal standards for determining when a service provider has sufficient knowledge or awareness to require it to remove or disable infringing material in order to remain eligible for the safe harbor protections of section 512(c) or (d). Courts have held ''actual knowledge'' to require evidence that the service provider subjectively knew that specific material on its site infringed copyright.[45] Alternatively, actual knowledge can be demonstrated with evidence that a service provider received information about specific infringing material through a statutorily effective takedown notice, *i.e.,* a notice that includes ''substantially'' all of the information required under section 512(c)(3).[46]

Courts have also recognized the common law doctrine of willful blindness in addressing whether a service provider has actual knowledge of infringement.[47] A service provider is considered to have engaged in willful blindness when it is ''aware of a high probability'' of infringement and has ''consciously avoided confirming that fact.'' [48] Accordingly, courts have held that a service provider's willful blindness to infringement on its site and failure to remove or disable access to infringing material can disqualify it

[35] 17 U.S.C. 512(m); *see UMG Recordings, Inc.* v. *Shelter Capital Partners LLC,* 718 F.3d 1006, 1024 (9th Cir. 2013) (rejecting plaintiffs' argument that service provider should have ''taken the initiative to use search and indexing tools to locate and remove from its Web site any other content by the artists identified in . . . notices''); *Capitol Records, LLC* v. *Vimeo, LLC,* 972 F. Supp. 2d 500, 525 (S.D.N.Y. 2013) (''512(m) and attendant case law make clear that service providers are under no affirmative duty to seek out infringement . . . [and t]his remains the case even when a service provider has developed technology permitting it to do so.'').

[36] *See Section 512 Hearing* at 14–15, 39, 58 (written statements of Sean M. O'Connor, Entrepreneurial Law Clinic, University of Washington (Seattle); Paul Doda, Elsevier; and Maria Schneider, musician).

[37] *Id.* at 16 (statement of Annemarie Birdy, University of Idaho College of Law) (''The notice and takedown regime in [s]ection 512(c) has scaled well for enforcing copyrights in the voluminous content hosted by online service providers.'').

[38] *See* U.S. Dep't of Commerce, *Multistakeholder Forum: Improving the Operation of the DMCA Notice and Takedown Policy: Second Public Meeting,* Tr. 63:03–05 (May 8, 2014), *http://www.uspto.gov/sites/default/files/ip/global/copyrights/2nd_forum_transcript.pdf* (Fred von Lohmann, Google) (''[W]hat large service providers are capable of doing is very different from what smaller service providers are doing.''); U.S. Dep't of Commerce, *Multistakeholder Forum: Improving the Operation of the DMCA Notice and Takedown Policy: First Public Meeting,* Tr. 34:16–38:06 (Mar. 20, 2014), *http://www.uspto.gov/ip/global/copyrights/First_Public_Meeting-Improving_Operation_of_DMCA_Notice_and_Takedown_Policy.pdf* (Ron Yokubaitis, Giganews) (describing burden of processing non-standardized notices for a ''small company [of] fifty-something people'').

[39] *See, e.g., Wolk* v. *Kodak Imaging Network, Inc.,* 840 F. Supp. 2d 724, 747 (S.D.N.Y. 2012), *aff'd sub nom., Wolk* v. *Photobucket.com, Inc.,* 569 F. App'x 51 (2d Cir. 2014) (noting that an example of sufficient information in a notice allowing a service provider to locate the infringing material ''would be a copy or description of the allegedly infringing material and the so-called 'uniform resource locator' (URL) (*i.e.,* Web site address)'') (citing *Viacom Int'l, Inc.* v. *YouTube, Inc.,* 718 F. Supp. 2d 514, 521 (S.D.N.Y. 2010), *vacated in part on other grounds,* 676 F.3d 19 (2d Cir. 2012)).

[40] *See, e.g., Digital Millennium Copyright Act (DMCA) Notice,* Automattic, *https://automattic.com/dmca-notice* (last visited Dec. 17, 2015); *DMCA Copyright Notifications, Tumblr, https://www.tumblr.com/*dmca (last visited Dec. 17, 2015); *Copyright Infringement Notification,* YouTube, *https://www.youtube.com/copyright_complaint_form* (last visited Dec. 17, 2015).

[41] 17 U.S.C. 512(c)(3)(A)(ii).

[42] *Compare* MPAA, Comments on Office of Intellectual Property Enforcement Coordinator Development of the Joint Strategic Plan on Intellectual Property Enforcement 17 (Oct. 16, 2015), *http://www.regulations.gov/#!documentDetail;D=OMB-2015-0003-0058* (''Search engines should delist sites based on court orders or other comparable judicial determinations of infringement . . . [meaning that] no results from a particular site would appear in any search results.'') *with* Google, Comments on Office of Intellectual Property Enforcement Coordinator Development of the Joint Strategic Plan on Intellectual Property Enforcement 7–8 (Oct. 16, 2015), *http://www.regulations.gov/#!documentDetail;D=OMB-2015-0003-0061* (''Google, IPEC Comments'') (''[W]hole-site removal is ineffective and can easily result in censorship of lawful material . . . [and] would jeopardize free speech principles, emerging services, and the free flow of information online globally and in contexts far removed from copyright.'').

[43] S. Rep. No. 105–190, at 48 (1998).

[44] Google, IPEC Comments, at 7–8.

[45] *See, e.g., UMG Recordings,* 718 F.3d at 1025 (quoting *Viacom Int'l, Inc.* v. *YouTube, Inc.,* 676 F.3d 19, 31 (2d Cir. 2012) (''*Viacom*'')).

[46] *See UMG Recordings,* 718 F.3d at 1020 (''[T]he DMCA notice protocol . . . [is] the most powerful evidence of a service provider's knowledge.'') (internal quotations omitted); *cf.* 17 U.S.C. 512(c)(3)(B)(i) (stating that a notice ''that fails to comply substantially'' with the 512(c) notice requirements ''shall not be considered . . . in determining whether a service provider has actual knowledge.'').

[47] *See, e.g., Viacom,* 676 F.3d at 35 (''[W]illful blindness doctrine may be applied, in appropriate circumstances, to demonstrate knowledge or awareness of specific instances of infringement under the DMCA.'').

[48] *Id.* at 35 (quoting *United States* v. *Aina-Marshall,* 336 F.3d 167, 170 (2d Cir. 2003)). For example, a service provider was found to have ''blinded itself'' where it encouraged users to encrypt files so that the service provider could not know the contents of particular files. *In re Aimster Copyright Litig.,* 334 F.3d 643, 653 (7th Cir. 2003) (''*In re Aimster*'').

from the protections of a section 512 safe harbor.[49]

As also noted above, sections 512(c) and (d) require a service provider to disable access to material or activity if it has ''red flag'' knowledge, *i.e.,* is aware of ''facts or circumstances from which infringing activity is apparent.'' [50] In enacting the statute, Congress explained that ''a service provider [has] no obligation to seek out copyright infringement, but it [does] not qualify for the safe harbor if it . . . turn[s] a blind eye to 'red flags' of obvious infringement.'' [51] The legislative history of section 512 also suggests Congress' view that the red flag test ''has both a subjective and an objective element . . . the subjective awareness of the service provider of the facts or circumstances in question . . . [and the objective assessment of] whether infringing activity would have been apparent to a reasonable person operating under the same or similar circumstances.'' [52] With regard to information location tools, for example, Congress observed that if ''an [i]nternet site is obviously pirate, then seeing it may be all that is needed for the service provider to encounter a 'red flag.' '' [53]

Copyright owners have argued that Congress' intent in creating the red flag test was to ''require[ ] less specificity than the actual knowledge'' standard and to prevent service providers from qualifying for safe harbor protection when they are aware of widespread infringement.[54] Courts, however, have largely rejected the notion that a general awareness of infringement is sufficient to establish red flag knowledge.[55] Instead, courts have held that red flag knowledge requires ''knowledge of specific and identifiable infringements'' because, in order to retain the protection of the safe harbor, the service provider is required to expeditiously ''remove or disable 'the [infringing] material.' '' [56]

In assessing these knowledge requirements, courts have also looked to the language of section 512(m), which states that ''[n]othing'' in section 512 conditions the availability of safe harbor protection on ''a service provider monitoring its service or affirmatively seeking facts indicating infringing activity, except to the extent consistent with a standard technical measure.'' [57] Based on this language, courts have concluded that ''the DMCA . . . place[s] the burden of policing copyright infringement . . . squarely on the owners of the copyright.'' [58]

Financial Benefit/Right To Control

Litigation regarding the Section 512(c) and (d) safe harbors has also addressed what it means for a service provider to receive a ''financial benefit directly attributable'' to infringing activity where it has the ''right and ability to control'' such activity.

Like the traditional standard for vicarious liability under common law, the financial benefit/right to control test has been held not to turn on a service provider's knowledge of infringement.[59] But courts have also indicated that ''right and ability to control'' in the context of section 512 means that the service provider '' 'exert[s] substantial influence on the activities of users,' '' *i.e.,* '' 'something more than' '' the basic ability to remove or block access to infringing materials.[60] Such control may include, for example, taking an active role in the listing of infringing material on a Web site, assisting users in locating infringing files, or encouraging the uploading or downloading of particular copyrighted works.[61] These courts have reasoned that because the takedown process itself requires the ability to remove or block access, Congress must have intended a greater degree of control than just this, or it would undermine the availability of the safe harbors.[62]

Sections 512(c) and (d) also exclude service providers from safe harbor protection when they ''receive a financial benefit directly attributable to the infringing activity.'' [63] While the legislative history suggests that merely requiring a periodic payment for service does not constitute a direct financial benefit,[64] courts have found such a benefit when the service provider charges a subscription fee to its users and the ''infringing activity constitutes a draw for subscribers, not just an added benefit.'' [65] Financial benefit has also been found when a service provider's ''ability to attract advertisers'' and the ''amount of revenue'' received from advertising are ''tied directly to the infringing activity.'' [66]

Repeat Infringers

Under section 512(i), a service provider seeking to avail itself of any of the safe harbors is required to ''adopt[ ] and reasonably implement[ ]'' a policy to terminate ''repeat infringers'' in ''appropriate circumstances.'' [67] Congress, however, did not define these terms in the statute, so it has been left to courts to determine whether a service provider's repeat infringer policy is sufficient to qualify the provider for safe harbor protection. In interpreting this aspect of the statute, courts have held that a repeat infringer is a user ''who repeatedly or blatantly infringe[s] copyright,'' and that such a determination may be based upon information from valid takedown notices and does not require a court determination.[68] Courts have further

[49] *See, e.g., Viacom,* 676 F.3d at 30, 35; *see also In re Aimster,* 334 F.3d at 653, 655.

[50] 17 U.S.C. 512(c)(1)(A)(ii), (d)(1)(B).

[51] H.R. Rep. No. 105–551, pt. 2, at 57 (1998).

[52] *Id.* at 53; S. Rep No. 105–190, at 44 (1998); *accord Viacom,* 676 F.3d at 31.

[53] H.R. Rep. No. 105–551, pt. 2, at 58 (1998); *see also Columbia Pictures Indus., Inc.* v. *Fung,* 710 F.3d 1020, 1043 (9th Cir. 2013) (''*Fung*'') (finding that a service provider had red flag knowledge where ''material in question was sufficiently current and well-known that it would have been objectively obvious to a reasonable person that the material . . . was both copyrighted and not licensed to random members of the public'').

[54] *See, e.g., Viacom,* 676 F.3d at 31–32 (internal quotations omitted).

[55] *See, e.g., UMG Recordings,* 718 F.3d at 1022–23; *Viacom,* 676 F.3d at 32.

[56] *Viacom,* 676 F.3d at 30–31 (emphasis omitted) (''[E]xpeditious removal is possible only if the service provider knows with particularity which items to remove.'').

[57] 17 U.S.C. 512(m).

[58] *UMG Recordings,* 718 F.3d at 1022 (quoting *CCBill LLC,* 488 F.3d at 1113).

[59] *See Viacom,* 676 F.3d at 36–38 (2d Cir. 2012) (''[17 U.S.C.] 512(c)(1)(B) does not include a specific knowledge requirement'' because to ''import[ ] a specific knowledge requirement into [17 U.S.C.] 512(c)(1)(B) renders the control provision duplicative of [17 U.S.C.] 512(c)(1)(A).''); H.R. Rep. No. 105–551, pt. 1, at 25–26 (1998) (''The financial benefit standard in subparagraph (B) is intended to codify and clarify the direct financial benefit element of vicarious liability. . . . The 'right and ability to control' language in Subparagraph (B) codifies the second element of vicarious liability.''); 3 Melville Nimmer & David Nimmer, Nimmer on Copyright 12.04[A][2] (Matthew Bender rev. ed.) (''Notably lacking from the foregoing two elements [of vicarious liability] is knowledge.'').

[60] *UMG Recordings,* 718 F.3d at 1029–31 (quoting *Viacom,* 676 F.3d at 38); *Perfect 10, Inc.* v. *Cybernet Ventures, Inc.,* 213 F. Supp. 2d 1146, 1173, 1181–82 (C.D. Cal. 2002) (''*Cybernet Ventures*'').

[61] *Fung,* 710 F.3d at 1043, 1046; *see also Viacom,* 676 F.3d at 38 & n.13 (''[C]ontrol may exist where the service provider is 'actively involved in the listing, bidding, sale and delivery' of items.'') (quoting *Hendrickson* v. *eBay, Inc.,* 165 F. Supp. 2d 1082, 1094 (C.D. Cal. 2001)); *Cybernet Ventures,* 213 F. Supp. 2d at 1173 (finding that service provider had control where it required user Web sites to comply with ''detailed instructions regard[ing] issues of layout, appearance, and content'').

[62] *See, e.g., Viacom,* 676 F.3d at 37.

[63] 17 U.S.C. 512(c)(1)(B), (d)(2).

[64] H.R. Rep. No. 105–551, pt. 2, at 54 (1998) (noting that financial benefit is not established through a ''one-time set-up fee [or] flat, periodic payments for service from a person engaging in infringing activities'').

[65] *CCBill LLC,* 488 F.3d at 1117; *Ellison* v. *Robertson,* 357 F.3d 1072, 1079 (9th Cir. 2004)).

[66] *Fung,* 710 F.3d at 1045–46.

[67] 17 U.S.C. 512(i)(1)(A); *BMG Rights Mgmt. (US) LLC* v. *Cox Commc'ns, Inc.,* No. 1:14–cv–1611, 2015 WL 7756130, at *14 (E.D. Va. Dec. 1, 2015) (''*BMG Rights Mgmt.*'') (denying 512(a) safe harbor protection to service provider because it did not reasonably implement a repeat infringer policy).

[68] *CCBill LLC,* 488 F.3d at 1109; *Disney Enters., Inc.* v. *Hotfile Corp.,* No. 11–20427–CIV, 2013 WL 6336286, at *20 (S.D. Fla. Sept. 20, 2013) (''*Hotfile*''); *see also BMG Rights Mgmt.,* No. 1:14–cv–1611, 2015 WL 7756130, at *13.

held that a reasonable policy, at a minimum, must provide a mechanism to identify and keep a record of users responsible for files referenced in takedown notices and, ''under 'appropriate circumstances,' '' result in termination of ''users who repeatedly or blatantly infringe copyright.'' [69]

Misuse of Takedown Process

Service providers and advocacy groups have raised concerns about fraudulent and abusive section 512 notices that may restrain fair use, free speech, or otherwise misuse the notice-and-takedown process.[70] Some of the concerns arise from takedown notices for content that appears to constitute an obvious fair use of a copyright work.[71] Others relate to efforts to remove criticism or commentary—such as negative reviews—under the guise of copyright.[72] While the posting party can invoke the counter-notification procedure of section 512(g) to have the material reinstated, some believe that posters may not be aware of this, or may be too intimidated to pursue a counter notification.[73] A related concern is that the improper takedown of legitimate material, even if for a limited time, may harm important speech interests—for example, if a political advertisement is wrongly removed at a critical time in a campaign.[74]

As noted above, a takedown notice must include a statement that the complaining party has a ''good faith belief'' that the use is not authorized.[75] Similarly, a counter notification must include a statement that the sender has a ''good faith belief'' that the material in question was removed as a result of ''mistake or misidentification.'' [76] Section 512(f) provides for a cause of action and damages if a sender ''knowingly materially misrepresents'' in a takedown notice that material is infringing, or, in a counter notification, was wrongfully removed.[77]

In a number of cases challenging the validity of takedown notices, courts have fleshed out the meaning and application of section 512(f). For example, courts have held that the ''good faith belief'' requirement of section 512(c)(3)(A)(v) ''encompasses a subjective, rather than objective standard''; that is, the sender is not responsible for an ''unknowing mistake,'' even if the sender's assessment of infringement was objectively unreasonable.[78] But it has also been held that before sending a takedown notice, the complaining party must ''consider the existence of fair use'' in forming the subjective good faith belief that the use is not authorized by the law.[79] The need to consider fair use may present challenges in the context of automated takedown processes relied upon by copyright owners to address large-volume infringements, including how such processes might be calibrated to accommodate this requirement and the necessity, if any, for human review.[80]

Voluntary Measures

While interested parties continue to test and clarify aspects of section 512 in the courts, some stakeholders have chosen to work together to develop voluntary protocols and best practices to avoid litigation, improve online enforcement, and protect free speech and innovation. Several of these initiatives have been undertaken with the support of the U.S. government, including the Copyright Alert System, an effort supported by the U.S. Intellectual Property Enforcement Coordinator (''IPEC''),[81] and the DMCA Notice-and-Takedown Processes: List of Good, Bad, and Situational Practices, stemming from the efforts of the Internet Policy Task Force,[82] both of which seek to improve the efficiency and effectiveness of notice-and-takedown procedures, as well as the IPEC-led Payment Processor Best Practices, which seeks to cut off revenue to sites that promote infringement.[83] Other multistakeholder initiatives include the Trustworthy Accountability Group certification process, aimed at curbing ad revenue supporting piracy Web sites,[84] and the Principles for User Generated Content Services, which sets forth agreed principles for screening and addressing infringing content.[85]

II. Subjects of Inquiry

The Copyright Office seeks public input, including, where available, empirical data on the efficiency and effectiveness of section 512 for owners and users of copyrighted works and the overall sustainability of the system if, as appears likely, the volume of takedown notices continues to increase. The Office invites written comments in particular on the subjects below. A party choosing to respond to this Notice of Inquiry need not address every subject, but the Office requests that responding parties clearly identify and separately address each

[69] *CCBill LLC,* 488 F.3d at 1109 (internal citation omitted); *see also Hotfile,* No. 11–20427–CIV, 2013 WL 6336286, at *21.

[70] *See, e.g., Section 512 Hearing* at 48, 63–67, 246–47 (written statements of Katherine Oyama, Google Inc.; Paul Sieminski, Automattic Inc.; and Library Copyright Alliance) (discussing misuse of takedown process).

[71] *See, e.g., id.* at 65 (written statement of Paul Sieminski, Automattic Inc.) (noting concern for ''companies who issue DMCA notices specifically against content that makes use of their copyrighted material as part of a criticism or negative review—which is classic fair use'').

[72] *See, e.g., Automattic Inc.* v. *Steiner,* 82 F. Supp. 3d 1011, 1016 (N.D. Cal. 2015) (entering default judgment against the submitter of takedown notices for knowingly materially misrepresenting that a blog infringed its press release); *Online Policy Grp.* v. *Diebold, Inc.,* 337 F. Supp. 2d 1195, 1204 (N.D. Cal. 2004) (finding voting machine manufacturer liable under section 512(f) for ''knowingly materially misrepresent[ing]'' that publication of email archive discussing technical problems with voting machines was infringing).

[73] *See, e.g.,* Brief for Org. for Transformative Works *et al.* as Amici Curiae Supporting Appellee and Cross-Appellant at 16, *Lenz* v. *Universal Music Corp.,* 801 F.3d 1126 (9th Cir. 2015) (Nos. 13–16106, 13–16107) (noting that creators worry about sending a counter notice because they may have to provide their real names and addresses or become subject to a lawsuit they cannot afford).

[74] *See, e.g.,* Ctr. for Democracy & Tech., Campaign Takedown Troubles: How Meritless Copyright Claims Threaten Online Political Speech 1 (2010), *https://cdt.org/files/pdfs/copyright_takedowns.pdf.*

[75] 17 U.S.C. 512(c)(3)(A)(v).

[76] *Id.* at 512(g)(3)(C).

[77] *Id.* at 512(f).

[78] *Rossi* v. *Motion Picture Ass'n of Am. Inc.,* 391 F.3d 1000, 1004–05 (9th Cir. 2004); *accord Lenz* v. *Universal Music Corp.,* 801 F.3d 1126, 1134 (9th Cir. 2015). The *Rossi* and *Lenz* courts reasoned that to hold otherwise would conflict with Congress' intent that a copyright owner only be penalized for ''knowing'' misrepresentations. *Rossi,* 391 F3d at 1004–05; *accord Lenz,* 801 F.3d at 1134.

[79] *Lenz,* 801 F.3d at 1133.

[80] *See id.* at 1135–36. In *Lenz,* the Ninth Circuit was ''mindful of the pressing crush of voluminous infringing content that copyright holders face,'' and noted, ''without passing judgment, that the implementation of computer algorithms appears to be a valid and good faith middle ground for processing a plethora of content while still meeting the DMCA's requirements to somehow consider fair use.'' *Id.* at 1135. The court further addressed how an algorithm might accommodate fair use, observing that it was ''unaware of any [court] decision to date that actually addressed the need for human review.'' *Id.*

[81] *See generally* Ctr. For Copyright Info., The Copyright Alert System: Phase One and Beyond (May 28, 2014), *http://www.copyrightinformation.org/wp-content/uploads/2014/05/Phase-One-And_Beyond.pdf.*

[82] *See generally* Dep't of Commerce Multistakeholder Forum Recommended Practices (list of recommended practices developed by a diverse group of copyright owners, service providers, and public interest representatives).

[83] *See* Intellectual Prop. Enforcement Coordinator, 2011 U.S. Intellectual Property Enforcement Coordinator Annual Report on Intellectual Property Enforcement 46 (2012), *https://www.whitehouse.gov/sites/default/files/omb/IPEC/ipec_annual_report_mar2012.pdf* (describing a June 2011 agreement among American Express, Discover, MasterCard, PayPal, and Visa to abide by best practices to ''stop sites distributing counterfeit and pirated goods from conducting financial transactions through payment processors'').

[84] *See* Press Release, Trustworthy Accountability Group, Advertising Industry Launches Initiative to Protect Brands Against Piracy Web sites (Feb. 10, 2015), *https://www.tagtoday.net/advertising-industry-launches-initiative-to-protect-brands-against-piracy-Web sites.*

[85] *See Principles for User Generated Content Services, http://www.ugcprinciples.com* (last visited Dec. 16, 2015).

numbered subject for which a response is submitted.

General Effectiveness of Safe Harbors

1. Are the section 512 safe harbors working as Congress intended?
2. Have courts properly construed the entities and activities covered by the section 512 safe harbors?
3. How have section 512's limitations on liability for online service providers impacted the growth and development of online services?
4. How have section 512's limitations on liability for online service providers impacted the protection and value of copyrighted works, including licensing markets for such works?
5. Do the section 512 safe harbors strike the correct balance between copyright owners and online service providers?

Notice-and-Takedown Process

6. How effective is section 512's notice-and-takedown process for addressing online infringement?
7. How efficient or burdensome is section 512's notice-and-takedown process for addressing online infringement? Is it a workable solution over the long run?
8. In what ways does the process work differently for individuals, small-scale entities, and/or large-scale entities that are sending and/or receiving takedown notices?
9. Please address the role of both ''human'' and automated notice-and-takedown processes under section 512, including their respective feasibility, benefits, and limitations.
10. Does the notice-and-takedown process sufficiently address the reappearance of infringing material previously removed by a service provider in response to a notice? If not, what should be done to address this concern?
11. Are there technologies or processes that would improve the efficiency and/or effectiveness of the notice-and-takedown process?
12. Does the notice-and-takedown process sufficiently protect against fraudulent, abusive or unfounded notices? If not, what should be done to address this concern?
13. Has section 512(d), which addresses ''information location tools,'' been a useful mechanism to address infringement that occurs as a result of a service provider's referring or linking to infringing content? If not, what should be done to address this concern?
14. Have courts properly interpreted the meaning of ''representative list'' under section 512(c)(3)(A)(ii)? If not, what should be done to address this concern?
15. Please describe, and assess the effectiveness or ineffectiveness of, voluntary measures and best practices—including financial measures, content ''filtering'' and takedown procedures—that have been undertaken by interested parties to supplement or improve the efficacy of section 512's notice-and-takedown process.

Counter Notifications

16. How effective is the counter-notification process for addressing false and mistaken assertions of infringement?
17. How efficient or burdensome is the counter-notification process for users and service providers? Is it a workable solution over the long run?
18. In what ways does the process work differently for individuals, small-scale entities, and/or large-scale entities that are sending and/or receiving counter notifications?

Legal Standards

19. Assess courts' interpretations of the ''actual'' and ''red flag'' knowledge standards under the section 512 safe harbors, including the role of ''willful blindness'' and section 512(m)(1) (limiting the duty of a service provider to monitor for infringing activity) in such analyses. How are judicial interpretations impacting the effectiveness of section 512?
20. Assess courts' interpretations of the ''financial benefit'' and ''right and ability to control'' standards under the section 512 safe harbors. How are judicial interpretations impacting the effectiveness of section 512?
21. Describe any other judicial interpretations of section 512 that impact its effectiveness, and why.

Repeat Infringers

22. Describe and address the effectiveness of repeat infringer policies as referenced in section 512(i)(A).
23. Is there sufficient clarity in the law as to what constitutes a repeat infringer policy for purposes of section 512's safe harbors? If not, what should be done to address this concern?

Standard Technical Measures

24. Does section 512(i) concerning service providers' accommodation of ''standard technical measures'' (including the definition of such measures set forth in section 512(i)(2)) encourage or discourage the use of technologies to address online infringement?
25. Are there any existing or emerging ''standard technical measures'' that could or should apply to obtain the benefits of section 512's safe harbors?

Remedies

26. Is section 512(g)(2)(C), which requires a copyright owner to bring a federal lawsuit within ten business days to keep allegedly infringing content offline—and a counter-notifying party to defend any such lawsuit—a reasonable and effective provision? If not, how might it be improved?
27. Is the limited injunctive relief available under section 512(j) a sufficient and effective remedy to address the posting of infringing material?
28. Are the remedies for misrepresentation set forth in section 512(f) sufficient to deter and address fraudulent or abusive notices and counter notifications?

Other Issues

29. Please provide any statistical or economic reports or studies that demonstrate the effectiveness, ineffectiveness, and/or impact of section 512's safe harbors.
30. Please identify and describe any pertinent issues not referenced above that the Copyright Office should consider in conducting its study.

Dated: December 28, 2015.

Maria A. Pallante,

Register of Copyrights, U.S. Copyright Office.

[FR Doc. 2015–32973 Filed 12–30–15; 8:45 am]

BILLING CODE 1410–30–P

MILLENNIUM CHALLENGE CORPORATION

[MCC FR 15–06]

Report on the Selection of Eligible Countries for Fiscal Year 2016

AGENCY: Millennium Challenge Corporation.

ACTION: Notice.

SUMMARY: This report is provided in accordance with section 608(d)(1) of the Millennium Challenge Act of 2003, Pub. L. 108–199, Division D, (the ''Act''), 22 U.S.C. 7708(d)(1).

Dated: December 18, 2015.

Maame Ewusi-Mensah Frimpong,

Vice President and General Counsel, Millennium Challenge Corporation.

Report on the Selection of Eligible Countries for Fiscal Year 2016

Summary

This report is provided in accordance with section 608(d)(1) of the Millennium Challenge Act of 2003, as amended, Public Law 108–199, Division D, (the ''Act'') (22 U.S.C. 7707(d)(1)).

The Act authorizes the provision of Millennium Challenge Account

requirements are computed by the Federal government annually. While precise costs cannot be identified, at the present time and based on past experience, the annual related costs for contractor staff are estimated to be $1,524,376, which represents an average cost of $28.00 per hour.

Comments submitted in response to this comment request will be summarized and/or included in the request for Office of Management and Budget approval of the information collection request; they will also become a matter of public record.

Portia Wu,

Assistant Secretary for Employment and Training, Labor.

[FR Doc. 2016–04631 Filed 3–2–16; 8:45 am]

BILLING CODE 4510–FT–P

LIBRARY OF CONGRESS

Copyright Office

[Docket No. 2015–7]

Section 512 Study: Extension of Comment Period

AGENCY: U.S. Copyright Office, Library of Congress.

ACTION: Extension of comment period.

SUMMARY: The United States Copyright Office is extending the deadline for the submission of written comments in response to its December 31, 2015 Notice of Inquiry regarding the operation of section 512 of Title 17.

DATES: Initial written comments are now due no later than 11:59 p.m. Eastern Time on April 1, 2016.

ADDRESSES: The Copyright Office is using the regulations.gov system for the submission and posting of public comments in this proceeding. All comments are therefore to be submitted electronically through regulations.gov. Specific instructions for submitting comments are available on the Copyright Office Web site at *http://copyright.gov/policy/section512/comment-submission/*. If electronic submission of comments is not feasible, please contact the Office using the contact information below for special instructions.

FOR FURTHER INFORMATION CONTACT: Jacqueline C. Charlesworth, General Counsel and Associate Register of Copyrights, *jcharlesworth@loc.gov;* or Karyn Temple Claggett, Director of the Office of Policy and International Affairs and Associate Register of Copyrights, *kacl@loc.gov*. Each can be reached by telephone at (202) 707–8350.

SUPPLEMENTARY INFORMATION: The United States Copyright Office is undertaking a public study to evaluate the impact and effectiveness of the DMCA safe harbor provisions contained in section 512 of Title 17. On December 31, 2015, the Office issued a Notice of Inquiry seeking public input on several questions relating to that topic. *See* 80 FR 81862 (Dec. 31, 2015). To ensure that commenters have sufficient time to respond, the Office is extending the deadline for the submission of initial comments in response to the Notice to April 1, 2016, at 11:59 p.m. Eastern Time. Please note that in light of the expected time frame for this study, the Office is unlikely to grant further extensions for these comments.

Dated: February 25, 2016.

Maria A. Pallante,

Register of Copyrights, U.S. Copyright Office.

[FR Doc. 2016–04641 Filed 3–2–16; 8:45 am]

BILLING CODE 1410–30–P

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

[Notice: (16–019)]

NASA Advisory Council; Technology, Innovation and Engineering Committee; Meeting

AGENCY: National Aeronautics and Space Administration

ACTION: Notice of meeting.

SUMMARY: In accordance with the Federal Advisory Committee Act, Public Law 92–463, as amended, the National Aeronautics and Space Administration (NASA) announces a meeting of the Technology, Innovation and Engineering (TI&E) Committee of the NASA Advisory Council (NAC).

DATES: Tuesday, March 29, 2016, 8:00 a.m. to 5:00 p.m., Local Time.

ADDRESSES: NASA Headquarters, Room MIC 6A, 300 E Street SW., Washington, DC 20546.

FOR FURTHER INFORMATION CONTACT: Mr. Mike Green, Space Technology Mission Directorate, NASA Headquarters, Washington, DC 20546, (202) 358–4710, or *g.m.green@nasa.gov.*

SUPPLEMENTARY INFORMATION: The meeting will be open to the public up to the capacity of the room. This meeting is also available telephonically and online via WebEx. Any interested person may call the USA toll-free conference number 1–844–467–6272, passcode 102421, to participate in this meeting by telephone. The WebEx link is *https://nasa.webex.com/,* the meeting number is 992 399 346, and the password is ''Technology16^''.

The agenda for the meeting includes the following topics:

—Space Technology Mission Directorate FY 2017 Budget and Update
—FY 2016–2017 Technology Plans for the Human Exploration and Operations Mission Directorate and the Science Mission Directorate and Discussion
—Office of the Chief Technologist Update
—Technology Demonstration Missions Program Update
—Restore-L Mission Overview and Discussion

Attendees will be requested to sign a register and to comply with NASA security requirements, including the presentation of a valid picture ID, before receiving access to NASA Headquarters. Due to the Real ID Act, Public Law 109–13, any attendees with drivers licenses issued from non-compliant states/territories must present a second form of ID. [Federal employee badge; passport; active military identification card; enhanced driver's license; U.S. Coast Guard Merchant Mariner card; Native American tribal document; school identification accompanied by an item from LIST C (documents that establish employment authorization) from the ''List of the Acceptable Documents'' on Form I–9]. Non-compliant states/territories are: American Samoa, Illinois, Minnesota, Missouri, New Mexico, and Washington, Foreign nationals attending this meeting will be required to provide a copy of their passport and visa in addition to providing the following information no less than 10 working days prior to the meeting: Full name; gender; date/place of birth; citizenship; visa information (number, type, expiration date); passport information (number, country, expiration date); employer/affiliation information (name of institution, address, country, telephone); title/position of attendee; and home address to Ms. Anyah Dembling via email at *anyah.dembling@nasa.gov* or by telephone at (202) 358–5195. U.S. citizens and Permanent Residents (green card holders) are requested to submit their name and affiliation no less than 3 working days prior to the meeting to Ms. Anyah Dembling. It is imperative that this meeting be held on this date to accommodate the scheduling priorities of the key participants.

Patricia D. Rausch,

Advisory Committee Management Officer, National Aeronautics and Space Administration.

[FR Doc. 2016–04766 Filed 3–2–16; 8:45 am]

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supporting this information collection request.

Type of Review: Extension, without change, of a currently approved collection.

Agency: Mine Safety and Health Administration.

OMB Number: 1219–0147.

Affected Public: Business or other for-profit.

Number of Respondents: 1.

Frequency: On occasion.

Number of Responses: 1.

Annual Burden Hours: 41 hours.

Annual Respondent or Recordkeeper Cost: $296,455.

Comments submitted in response to this notice will be summarized and included in the request for Office of Management and Budget approval of the information collection request; they will also become a matter of public record.

Sheila McConnell,

Certifying Officer.

[FR Doc. 2016–06134 Filed 3–17–16; 8:45 am]

BILLING CODE 4510–43–P

LIBRARY OF CONGRESS

U.S. Copyright Office

[Docket No. 2015–7]

Section 512 Study: Announcement of Public Roundtables

AGENCY: U.S. Copyright Office, Library of Congress.

ACTION: Notice of public roundtables.

SUMMARY: The United States Copyright Office has undertaken a study to evaluate the impact and effectiveness of the DMCA safe harbor provisions contained in 17 U.S.C. 512. On December 31, 2015, the Office issued a Notice of Inquiry (''NOI'') soliciting written comments in response to a number of topics relating to section 512. *See* 80 FR 81862. The due date for initial written comments in response to the NOI is April 1, 2016. *See* 81 FR 11294. At this time, the Office is announcing it will hold two two-day public roundtables on DMCA safe harbor issues in New York, New York and Stanford, California in May 2016.

Dates and Addresses

The New York roundtable will take place on May 2 and 3, 2016, from 9:00 a.m. to 5:00 p.m. on both days, and will be held in the Lester Pollack Colloquium Room of Furman Hall at the New York University School of Law, 245 Sullivan Street, New York, New York 10012.

The Stanford roundtable will take place on May 12 and 13, 2016, from 9:00 a.m. to 5:00 p.m. on both days, and will be held in the Manning Faculty Lounge of the Stanford Law School, 559 Nathan Abbott Way, Stanford, California 94305.

FOR FURTHER INFORMATION CONTACT: Jacqueline C. Charlesworth, General Counsel and Associate Register of Copyrights, *jcharlesworth@loc.gov;* or Karyn Temple Claggett, Director of the Office of Policy and International Affairs and Associate Register of Copyrights, *kacl@loc.gov.* Both can be reached by telephone at 202–707–8350.

SUPPLEMENTARY INFORMATION: Section 512 of Title 17 codifies provisions of the Digital Millennium Copyright Act (''DMCA''), enacted in 1998, that created a system for copyright owners and internet service providers to address online infringement. This system includes ''safe harbor'' limitations on infringement liability for service providers who comply with statutory requirements to facilitate good-faith, expeditious removal of allegedly infringing content. In light of the exponential growth of content distribution over the internet since the DMCA was enacted, the Copyright Office has undertaken a comprehensive study of the DMCA's notice-and-takedown system. On December 31, 2015, the Office issued an NOI seeking public comment on thirty topics concerning the efficiency and effectiveness of section 512. *See* 80 FR 81862.

At this time, the Copyright Office is providing notice of its intention to seek further input for its study through two two-day public roundtables to be held in New York, New York and Stanford, California. The roundtables will offer an opportunity for interested parties to comment further on the pertinent issues, including topics such as the scope and legal requirements of the DMCA safe harbors; the notice-and-takedown and counter-notification processes, including relevant technological developments; voluntary measures to address online infringement; and the overall effectiveness of section 512. Additional information about the specific topics to be covered at the roundtables is available at *http://copyright.gov/policy/section512/public-roundtable/particpate-request.html.*

The roundtable hearing rooms will have a limited number of seats for participants and observers. Those who seek to participate should complete and submit the form available through the Copyright Office's Web site at *http://copyright.gov/policy/section512/public-roundtable/particpate-request.html* so it is received no later than April 4, 2016. For individuals who wish to observe a roundtable, the Office will provide public seating on a first-come, first-served basis on the days of the roundtables.

Dated: March 15, 2016.

Maria A. Pallante,

Register of Copyrights, U.S. Copyright Office.

[FR Doc. 2016–06200 Filed 3–17–16; 8:45 am]

BILLING CODE 1410–30–P

NATIONAL SCIENCE FOUNDATION

Proposal Review Panel for Physics; Notice of Meeting

In accordance with the Federal Advisory Committee Act (Pub. L. 92–463, as amended), the National Science Foundation announces the following meeting:

Name: Proposal Review Panel for the Division of Physics (1208) (V161279)—Site Visit.

Date And Time: April 11, 2016; 8:30 a.m.–7:00 p.m.; April 12, 2016; 8:30 a.m.–3:00 p.m.

Place: University of Illinois, Urbana-Champaign, IL 61801 (CPLC)

Type of Meeting: Part—Open.

Contact Person: Jean Cottam-Allen, Program Director for Physics Frontier Centers, Division of Physics, National Science Foundation, 4201 Wilson Blvd., Room 1015, Arlington, VA 22230; Telephone: (703) 292–8783.

Purpose of Meeting: Site visit to provide an evaluation of the progress of the projects at the host site for the Division of Physics at the National Science Foundation.

Agenda

April 11, 2016; 8:30 a.m.–7:00 p.m.

08:30 Panel Session: Presentations on Center Overview, Management and Science
12:00 p.m. Lunch with Graduate Students and Postdocs
13:30 Panel Session: Continued Science Presentations, Education and Outreach
16:00 Executive Session—Closed Session
17:00 Poster Session
19:00 Executive Session—Closed Session

April 12, 2016; 8:30 a.m.–3:00 p.m.

08:30 Meeting with University Administrators
To 11:00 Discussion with Center Directors
11:00 Executive Session—Closed Session
15:00 Closeout Session with Center Directors

1. Increasing the estimate of total agricultural workers from 80,549 to 87,870; and

2. Increasing the percentage of dependents who are eligible from 31% to 60%. MAP provides analysis supporting these proposals in its comments.

III. Request for Comments

LSC seeks comment solely on the specific MAP proposals enumerated above. Comments should specifically address the rationale provided by MAP in its comments.

Dated: March 29, 2016.

Stefanie K. Davis,

Assistant General Counsel.

[FR Doc. 2016–07526 Filed 4–1–16; 8:45 am]

BILLING CODE 7050–01–P

LIBRARY OF CONGRESS

Copyright Office

[Docket No. 2015–7]

Section 512 Study: Extension of Time To Submit Requests To Participate in Roundtable

AGENCY: U.S. Copyright Office, Library of Congress.

ACTION: Extension of time to submit requests to participate in roundtable.

SUMMARY: The United States Copyright Office is extending the deadline for the submission of requests to participate in the section 512 roundtables in New York and California, which were announced in its March 18, 2016 Notice of Inquiry. *See* 81 FR 14896.

DATES: Requests to participate in the section 512 roundtables are now due no later than 11:59 p.m. Eastern Time on April 11, 2016.

ADDRESSES: Those who seek to participate in the section 512 roundtables should complete and submit the form available through the Copyright Office's Web site at *http://www.copyright.gov/policy/section512/public-roundtable/participate-request.html.* If electronic submission of such a request is not feasible, please contact the Office using the contact information below for special instructions.

FOR FURTHER INFORMATION CONTACT: Jacqueline C. Charlesworth, General Counsel and Associate Register of Copyrights, *jcharlesworth@loc.gov;* or Karyn Temple Claggett, Director of the Office of Policy and International Affairs and Associate Register of Copyrights, *kacl@loc.gov.* Each can be reached by telephone at (202) 707–8350.

SUPPLEMENTARY INFORMATION: The United States Copyright Office is undertaking a public study to evaluate the impact and effectiveness of the DMCA safe harbor provisions contained in section 512 of Title 17. On March 18, 2016, the Office issued a Notice of Inquiry announcing two two-day public roundtables in New York, New York on May 2 and 3, 2016, and Stanford, California on May 12 and 13, 2016.

The roundtables will offer an opportunity for interested parties to comment further on the issues raised in the Office's December 31, 2015 Notice of Inquiry regarding section 512. *See* 80 FR 81862. Additional information about the specific topics to be covered at the roundtables is available at *http://www.copyright.gov/policy/section512/public-roundtable/participate-request.html.* To ensure that those interested in participating in the section 512 roundtables have sufficient time to submit a request, the Office is extending the deadline for such requests to April 11, 2016, at 11:59 p.m. Eastern Time.

Dated: March 29, 2016.

Maria A. Pallante,

Register of Copyrights, U.S. Copyright Office.

[FR Doc. 2016–07550 Filed 4–1–16; 8:45 am]

BILLING CODE 1410–30–P

NEIGHBORHOOD REINVESTMENT CORPORATION

Regular Board of Directors Meeting; Sunshine Act

TIME AND DATE: 10:00 a.m., Tuesday, April 12, 2016.

PLACE: NeighborWorks America—Gramlich Boardroom, 999 North Capitol Street NE., Washington DC 20002.

STATUS: Open (with the exception of Executive Session).

CONTACT PERSON: Jeffrey Bryson, EVP & General Counsel/Secretary, (202) 760–4101; *jbryson@nw.org.*

AGENDA:

I. CALL TO ORDER
II. Approval of Minutes
III. Executive Session: Audit Committee Report
IV. Executive Session: Report from CEO
V. Executive Session: Officer Performance Reviews
VI. Business Intelligence
VII. CypherWorx
VIII. Northern Trust
IX. Audit Update
X. Strategic Plan Perspectives
XI. Management Program Background & Updates
XII. Adjournment

The General Counsel of the Corporation has certified that in his opinion, one or more of the exemptions set forth in 5 U.S.C. 552b(c)(2), (4) and (6) permit closure of the following portions of this meeting:

- Audit Committee Report
- Report from CEO
- Officer Performance Reviews

Jeffrey T. Bryson,

EVP & General Counsel/Corporate Secretary.

[FR Doc. 2016–07785 Filed 3–31–16; 4:15 pm]

BILLING CODE 7570–02–P

NUCLEAR REGULATORY COMMISSION

[Docket No. 50–333; NRC–2016–0071]

Entergy Nuclear Operations, Inc.; James A. FitzPatrick Nuclear Power Plant

AGENCY: Nuclear Regulatory Commission.

ACTION: License amendment application; withdrawal by applicant.

SUMMARY: The U.S. Nuclear Regulatory Commission (NRC) has granted the request of Entergy Nuclear Operations, Inc. (Entergy, the licensee), to withdraw its application dated August 20, 2015, for a proposed amendment to Renewed Facility Operating License No. DPR–59, for the James A. FitzPatrick Nuclear Power Plant (JAF), located in Oswego County, New York. The proposed amendment would have revised the JAF Technical Specification (TS) to extend primary containment Type A and Type C leak rate test frequencies.

ADDRESSES: Please refer to Docket ID NRC–2016–0071 when contacting the NRC about the availability of information regarding this document. You may obtain publicly-available information related to this document using any of the following methods:

- *Federal Rulemaking Web site:* Go to *http://www.regulations.gov* and search for Docket ID NRC–2016–0071. Address questions about NRC dockets to Carol Gallagher; telephone: 301–415–3463; email: *Carol.Gallagher@nrc.gov.* For technical questions, contact the individual listed in the **FOR FURTHER INFORMATION CONTACT** section of this document.
- *NRC's Agencywide Documents Access and Management System (ADAMS):* You may obtain publicly-available documents online in the ADAMS Public Documents collection at *http://www.nrc.gov/reading-rm/adams.html.* To begin the search, select ''*ADAMS Public Documents*'' and then select ''*Begin Web-based ADAMS Search.*'' For problems with ADAMS,

testimony in connection with their presentation at the hearing, as provided in section 207.24 of the Commission's rules, and posthearing briefs, which must conform with the provisions of section 207.67 of the Commission's rules. The deadline for filing posthearing briefs is September 22, 2016. In addition, any person who has not entered an appearance as a party to the reviews may submit a written statement of information pertinent to the subject of the reviews on or before September 22, 2016. On October 17, 2016, the Commission will make available to parties all information on which they have not had an opportunity to comment. Parties may submit final comments on this information on or before October 19, 2016, but such final comments must not contain new factual information and must otherwise comply with section 207.68 of the Commission's rules. All written submissions must conform with the provisions of section 201.8 of the Commission's rules; any submissions that contain BPI must also conform with the requirements of sections 201.6, 207.3, and 207.7 of the Commission's rules. The Commission's Handbook on E-Filing, available on the Commission's Web site at *http://edis.usitc.gov*, elaborates upon the Commission's rules with respect to electronic filing.

Additional written submissions to the Commission, including requests pursuant to section 201.12 of the Commission's rules, shall not be accepted unless good cause is shown for accepting such submissions, or unless the submission is pursuant to a specific request by a Commissioner or Commission staff.

In accordance with sections 201.16(c) and 207.3 of the Commission's rules, each document filed by a party to the reviews must be served on all other parties to the reviews (as identified by either the public or BPI service list), and a certificate of service must be timely filed. The Secretary will not accept a document for filing without a certificate of service.

The Commission has determined that these reviews are extraordinarily complicated and therefore has determined to exercise its authority to extend the review period by up to 90 days pursuant to 19 U.S.C. 1675(c)(5)(B).

Authority: These reviews are being conducted under authority of title VII of the Tariff Act of 1930; this notice is published pursuant to section 207.62 of the Commission's rules.

By order of the Commission.

Issued: April 14, 2016.

Lisa R. Barton,

Secretary to the Commission.

[FR Doc. 2016–09080 Filed 4–19–16; 8:45 am]

BILLING CODE 7020–02–P

INTERNATIONAL TRADE COMMISSION

Public Availability of the U.S. International Trade Commission's FY 2015 Service Contract Inventory

AGENCY: U.S. International Trade Commission.

ACTION: Notice of public availability of FY 2015 Service Contract Inventory.

SUMMARY: In accordance with Section 743 of Division C of the Consolidated Appropriations Act of 2010 (Pub. L. 111–117), the U.S. International Trade Commission is publishing this notice to advise the public of the availability of the FY 2015 Service Contract Inventory. The USITC has posted its inventory and a summary of the inventory on USITC's Web site at the following link: *http://www.usitc.gov/procurement.htm.*

This inventory provides information on service contract actions over $25,000 that were awarded in FY 2015. The information is organized by function to show how contracted resources are distributed throughout the agency. The inventory has been developed in accordance with guidance issued on November 5, 2010, and December 19, 2011, by the Office of Management and Budget's Office of Federal Procurement Policy.

Questions regarding the service contract inventory should be directed to Debra Bridge, Office of Procurement, U.S. International Trade Commission, at 202–205–2004 or *debra.bridge@usitc.gov.*

By order of the Commission.

Issued: April 14, 2016.

Lisa R. Barton,

Secretary to the Commission.

[FR Doc. 2016–09072 Filed 4–19–16; 8:45 am]

BILLING CODE 7020–02–P

INTERNATIONAL TRADE COMMISSION

[USITC SE–16–014]

Government in the Sunshine Act Meeting Notice

TIME AND DATE: April 26, 2016 at 11 a.m.

PLACE: Room 101, 500 E Street SW., Washington, DC 20436, Telephone: (202) 205–2000.

STATUS: Open to the public.

MATTERS TO BE CONSIDERED:

1. Agendas for future meetings: None.
2. Minutes.
3. Ratification List.
4. Vote in Inv. No. 731–TA–282 (Fourth Review) (Petroleum Wax Candles from China). The Commission is currently scheduled to complete and file its determination and views of the Commission on May 10, 2016.
5. Outstanding action jackets: None.

In accordance with Commission policy, subject matter listed above, not disposed of at the scheduled meeting, may be carried over to the agenda of the following meeting.

Issued: April 15, 2016.

By order of the Commission.

William R. Bishop,

Supervisory Hearings and Information Officer.

[FR Doc. 2016–09232 Filed 4–18–16; 11:15 am]

BILLING CODE 7020–02–P

LIBRARY OF CONGRESS

U.S. Copyright Office

[Docket No. 2015–7]

Section 512 Study: Notice of Location Change for New York Public Roundtables

AGENCY: U.S. Copyright Office, Library of Congress.

ACTION: Notice of location change for New York public roundtables.

SUMMARY: The United States Copyright Office has changed the location of the May 2 and 3, 2016 public roundtables on the section 512 study. The public roundtables in New York and California were originally announced in the Office's Notice of Inquiry on March 18, 2016. *See* 81 FR 14896. The May 2 and 3, 2016 public roundtables in New York will now be held in Room 506 of the Thurgood Marshall United States Courthouse, 40 Centre Street, New York, New York, 10007.

DATES AND ADDRESSES: The New York roundtable will take place on May 2 and 3, 2016, from 9:00 a.m. to 5:00 p.m. on both days, and will be held in Room 506 of the Thurgood Marshall United States Courthouse, 40 Centre Street, New York, New York, 10007.

FOR FURTHER INFORMATION CONTACT: Jacqueline C. Charlesworth, General Counsel and Associate Register of Copyrights, *jcharlesworth@loc.gov;* or Karyn Temple Claggett, Director of the Office of Policy and International Affairs and Associate Register of Copyrights, *kacl@loc.gov.* Both can be reached by telephone at 202–707–8350.

SUPPLEMENTARY INFORMATION: On December 31, 2015, the Copyright Office issued a Notice of Inquiry seeking public comment on thirty topics concerning the efficiency and effectiveness of section 512 of Title 17. *See* 80 FR 81862. The Office then issued an NOI on March 18, 2016 announcing two two-day public roundtables on section 512 to be held in New York, New York on May 2 and 3, 2016, and Stanford, California on May 12 and 13, 2016. *See* 81 FR 14896. Interested members of the public were directed to submit participation requests through forms posted on the Office's Web site no later than April 11, 2016.

Due to the significant level of interest in the proceeding, the Office has decided to move the location of the New York roundtable to Room 506 of the Thurgood Marshall United States Courthouse, 40 Centre Street, New York, New York 10007.

Please note that the roundtable hearing rooms, in New York and California, will have a limited number of seats for participants and observers. For individuals who wish to observe a roundtable, the Office will provide public seating on a first-come, first-served basis on the days of the roundtables.

Individuals selected for participation in one or more of the roundtable sessions will be notified directly by the Office. For additional information about the specific topics to be covered at the roundtables, please see *http://copyright.gov/policy/section512/public-roundtable/participate-request.html.*

Dated: April 15, 2016.

Maria A. Pallante,

Register of Copyrights, U.S. Copyright Office.

[FR Doc. 2016–09175 Filed 4–19–16; 8:45 am]

BILLING CODE 1410–30–P

NATIONAL SCIENCE FOUNDATION

Advisory Committee for Social, Behavioral and Economic Sciences; Notice of Meeting

In accordance with Federal Advisory Committee Act (Pub. L. 92–463, as amended), the National Science Foundation announces the following meeting:

Name: Advisory Committee for Social, Behavioral and Economic Sciences (#1171).

Date/Time: May 23, 2016; 9:00 a.m. to 5:00 p.m. May 24, 2016; 8:30 a.m. to 12:30 p.m.

Place: National Science Foundation, 4201 Wilson Boulevard, Stafford I Room 1235, Arlington, VA 22230.

Type Of Meeting: Open.

Contact Person: Dr. Deborah Olster, Office of the Assistant Director, Directorate for Social, Behavioral and Economic Sciences, National Science Foundation, 4201 Wilson Boulevard, Room 905, Arlington, Virginia 22230, 703–292–8700.

Summary Of Minutes: May be obtained from contact person listed above.

Purpose Of Meeting: To provide advice and recommendations to the National Science Foundation on major goals and policies pertaining to Social, Behavioral and Economic Sciences Directorate (SBE) programs and activities.

Agenda

Monday, May 23, 2016

SBE Directorate and Division Updates
Grand Challenges in the SBE Sciences
Graduate Education in the SBE Sciences
Science of Science Communications

Tuesday, May 24, 2016

Public Access to SBE Data
Cyberinfrastructure: Collaborations between SBE and the Directorate for Computer & Information Science & Engineering
NSF Broader Impacts Strategic Review
Meeting with NSF Leadership
Future Meetings, Assignments and Concluding Remarks

Dated: April 14, 2016.

Crystal Robinson,

Committee Management Officer.

[FR Doc. 2016–09049 Filed 4–19–16; 8:45 am]

BILLING CODE 7555–01–P

NUCLEAR REGULATORY COMMISSION

[Docket Nos. 50–275 and 50–323; NRC–2016–0080]

Diablo Canyon Power Plant, Units 1 and 2

AGENCY: Nuclear Regulatory Commission.

ACTION: Request for action; receipt.

SUMMARY: The U.S. Nuclear Regulatory Commission (NRC) is giving notice that Friends of the Earth (FOE or petitioner) filed a Petition to Intervene and Request for Hearing concerning Diablo Canyon Power Plant (DCPP) on August 26, 2014, asserting, in part, its concerns about DCPP's operational safety and ability to safely shut down in the event of a nearby earthquake. The Commission referred those concerns to the NRC's Executive Director for Operations (EDO) for consideration. The petitioner's requests are included in the **SUPPLEMENTARY INFORMATION** section of this document.

ADDRESSES: Please refer to Docket ID NRC–2016–0080 when contacting the NRC about the availability of information regarding this document. You may obtain publicly-available information related to this document using any of the following methods:

- *Federal Rulemaking Web site:* Go to *http://www.regulations.gov* and search for Docket ID NRC–2016–0080. Address questions about NRC dockets to Carol Gallagher; telephone: 301–415–3463; email: *Carol.Gallagher@nrc.gov.* For technical questions, contact the individual listed in the **FOR FURTHER INFORMATION CONTACT** section of this document.
- *NRC's Agencywide Documents Access and Management System (ADAMS):* You may obtain publicly-available documents online in the ADAMS Public Documents collection at *http://www.nrc.gov/reading-rm/adams.html.* To begin the search, select ''*ADAMS Public Documents*'' and then select ''*Begin Web-based ADAMS Search.*'' For problems with ADAMS, please contact the NRC's Public Document Room (PDR) reference staff at 1–800–397–4209, 301–415–4737, or by email to *pdr.resource@nrc.gov.* The ADAMS accession number for each document referenced (if that document is available in ADAMS) is provided the first time that a document is referenced.
- *NRC's PDR:* You may examine and purchase copies of public documents at the NRC's PDR, Room O1–F21, One White Flint North, 11555 Rockville Pike, Rockville, Maryland 20852.

FOR FURTHER INFORMATION CONTACT: Lisa M. Regner, Office of Nuclear Reactor Regulation, U.S. Nuclear Regulatory Commission, Washington DC 20555–0001; telephone: 301–415–1906, email: *Lisa.Regner@nrc.gov.*

SUPPLEMENTARY INFORMATION:

On August 26, 2014, FOE filed a Petition to Intervene and Request for Hearing (Petition) concerning DCPP (ADAMS Package Accession No. ML15226A316). Within this Petition, FOE asserted concerns about DCPP's operational safety and ability to safely shut down. The Commission referred those concerns to the NRC's EDO [1] for consideration under the regulations in section 2.206 of title 10 of the *Code of Federal Regulations* (10 CFR), ''Requests for Action Under this Subpart.'' The EDO then referred these concerns to the NRC's Office of Nuclear Reactor Regulation for consideration under 10 CFR 2.206.

On two occasions, the NRC offered the petitioner opportunities to address the Petition Review Board (PRB), which was established to review the concerns referred to the EDO from the Commission, as discussed above. In response, on September 30, 2015, and February 8, 2016, FOE's attorney provided written submissions on behalf

[1] Memorandum and Order CLI–15–14, dated May 21, 2015 (ADAMS Accession No. ML15141A084).

other mine if the Secretary of Labor determines that:

1. An alternative method of achieving the result of such standard exists which will at all times guarantee no less than the same measure of protection afforded the miners of such mine by such standard; or

2. That the application of such standard to such mine will result in a diminution of safety to the miners in such mine.

In addition, the regulations at 30 CFR 44.10 and 44.11 establish the requirements and procedures for filing petitions for modification.

II. Petitions for Modification

Docket Number: M–2016–010–C.

Petitioner: Buckingham Coal Company, P.O. Box 400, Corning, Ohio 43730–0400.

Mine: Buckingham Mine #6, MSHA I.D. No. 33–04526, located in Perry County, Ohio.

Regulation Affected: 30 CFR 75.1101–1(b) (Deluge-type water spray systems).

Modification Request: The petitioner requests a modification of the existing standard to allow the mine not to provide blow-off dust covers on deluge-type system nozzles under existing 30 CFR 75.1101–1(b). The functional tests required of the deluge system each year will instead be done weekly. The petitioner states that the #6 Mine maintains more than adequate pressure and flow rates for the deluge system, and in some tests, the dust covers do not come off all sprays. The petitioner further states that:

(1) By doing the functional test weekly, all sprays can be inspected and maintained on a weekly basis.

(2) The dust covers provide protection for sprays which are tested yearly and by testing weekly the covers are not necessary.

The petitioner asserts that the proposed alternative method will at all times guarantee no less than the same measure or protection afforded by the existing standard.

Sheila McConnell,

Director, Office of Standards, Regulations, and Variances.

[FR Doc. 2016–09798 Filed 4–26–16; 8:45 am]

BILLING CODE 4520–43–P

LIBRARY OF CONGRESS

U.S. Copyright Office

[Docket No. 2015–7]

Section 512 Study: Notice of Location Change for California Public Roundtables

AGENCY: U.S. Copyright Office, Library of Congress.

ACTION: Notice of location change for California public roundtables.

SUMMARY: The United States Copyright Office has changed the location of the May 12 and 13, 2016 public roundtables on the section 512 study. The Office announced the public roundtables in New York and California by notice in the **Federal Register** on March 18, 2016. *See* 81 FR 14896. The May 12 and 13, 2016 public roundtables in California will now be held in Courtroom 4 of the Ninth Circuit James R. Browning Courthouse, 95 Seventh Street, San Francisco, California 94103.

Dates and Addresses

The California roundtable will take place on May 12 and 13, 2016, from 9:00 a.m. to 5:00 p.m. on both days, and will be held in Courtroom 4 of the Ninth Circuit James R. Browning Courthouse, 95 Seventh Street, San Francisco, California 94103.

FOR FURTHER INFORMATION CONTACT: Jacqueline C. Charlesworth, General Counsel and Associate Register of Copyrights, *jcharlesworth@loc.gov;* or Karyn Temple Claggett, Director of the Office of Policy and International Affairs and Associate Register of Copyrights, *kacl@loc.gov.* Both can be reached by telephone at 202–707–8350.

SUPPLEMENTARY INFORMATION: On December 31, 2015, the Copyright Office issued a Notice of Inquiry seeking public comment on thirty topics concerning the efficiency and effectiveness of section 512 of Title 17. *See* 80 FR 81862. The Office then issued a notice of public roundtables on March 18, 2016 announcing two two-day public roundtables on section 512 to be held in New York, New York on May 2 and 3, 2016, and Stanford, California on May 12 and 13, 2016. *See* 81 FR 14896. Interested members of the public were directed to submit participation requests through forms posted on the Office's Web site no later than April 11, 2016.

Due to the significant level of interest in the proceeding, the Office has decided to move the location of the California roundtable to Courtroom 4 of the Ninth Circuit James R. Browning Courthouse, 95 Seventh Street, San Francisco, California 94103.

Please note that the roundtable hearing rooms, in New York and California, will have a limited number of seats for participants and observers. For individuals who wish to observe a roundtable, the Office will provide public seating on a first-come, first-served basis on the days of the roundtables.

Individuals selected for participation in one or more of the roundtable sessions have been notified directly by the Office. For additional information about the specific topics to be covered at the roundtables, please see *http://copyright.gov/policy/section512/public-roundtable/participate-request.html.*

Dated: April 22, 2016.

Jacqueline C. Charlesworth,

General Counsel and Associate Register of Copyrights, U.S. Copyright Office.

[FR Doc. 2016–09869 Filed 4–26–16; 8:45 am]

BILLING CODE 1410–30–P

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

[Notice: 16–030]

Aerospace Safety Advisory Panel; Meeting

AGENCY: National Aeronautics and Space Administration (NASA).

ACTION: Notice of meeting.

SUMMARY: In accordance with the Federal Advisory Committee Act, Public Law 92–463, as amended, the National Aeronautics and Space Administration announces a forthcoming meeting of the Aerospace Safety Advisory Panel.

DATES: Thursday, May 12, 2016, 10:30 a.m. to 11:45 a.m., Central Time.

ADDRESSES: NASA Marshall Space Flight Center, Building 4200, Room 600, Huntsville, Alabama 35812.

FOR FURTHER INFORMATION CONTACT: Ms. Marian Norris, Aerospace Safety Advisory Panel Administrative Officer, NASA Headquarters, Washington, DC 20546, (202) 358–4452 or *mnorris@nasa.gov.*

SUPPLEMENTARY INFORMATION: The Aerospace Safety Advisory Panel (ASAP) will hold its Second Quarterly Meeting for 2016. This discussion is pursuant to carrying out its statutory duties for which the Panel reviews, identifies, evaluates, and advises on those program activities, systems, procedures, and management activities that can contribute to program risk. Priority is given to those programs that involve the safety of human flight. The agenda will include:

and domestic violence is often cited as the primary cause of homelessness. There is a significant need for housing programs that offer supportive services and resources to victims of domestic violence and their children in ways that are trauma-informed and culturally relevant. The Administration for Children and Families (ACF), Family and Youth Services Bureau, Division of Family Violence Prevention and Services (DFVPS), the US Department of Justice Office of Justice Programs Office for Victims of Crime (OJP/OVC), Office on Violence Against Women (OVW), and the Department of Housing and Urban Development (HUD) have established a federal technical assistance consortium that will provide national domestic violence and housing training, technical assistance, and resource development. The Domestic Violence and Housing Technical Assistance Consortium will implement a federally coordinated approach to providing resources, program guidance, training, and technical assistance to domestic violence, homeless, and housing service providers.

The Safe Housing Needs Assessment will be used to determine the training and technical assistance needs of organizations providing safe housing for domestic violence victims and their families.

The Safe Housing Needs Assessment will gather input from community service providers, coalitions and continuums of care. This assessment is the first of its kind aimed at simultaneously reaching the domestic and sexual violence field, as well as the homeless and housing field. The assessment seeks to gather information on topics ranging from the extent to which both fields coordinate to provide safety and access to services for domestic and sexual violence survivors within the homeless system, to ways in which programs are implementing innovative models to promote long-term housing stability for survivors and their families. Additionally, this assessment seeks to identify specific barriers preventing collaboration across these fields, as well as promising practices. The results will help the Consortium provide organizations and communities with the tools, strategies and support necessary to improve coordination between domestic violence/sexual assault service providers and homeless and housing service providers, so that survivors and their children can ultimately avoid homelessness and live free from abuse.

(5) *An estimate of the total number of respondents and the amount of time estimated for an average respondent to respond/reply:* It is estimated that it will take the approximately 78,660 respondents approximately fifteen minutes to complete an online assessment tool.

(6) *An estimate of the total public burden (in hours) associated with the collection:* The total annual hour burden to complete the data collection forms is 19,665 hours, that is 78,660 organizations completing an assessment tool one time with an estimated completion time being fifteen minutes.

If additional information is required contact: Jerri Murray, Department Clearance Officer, United States Department of Justice, Justice Management Division, Policy and Planning Staff, Two Constitution Square, 145 N Street NE., 3E.405B, Washington, DC 20530.

Dated: November 3, 2016.

Jerri Murray,

Department Clearance Officer for PRA, U.S. Department of Justice.

[FR Doc. 2016–26920 Filed 11–7–16; 8:45 am]

BILLING CODE 4410–FX–P

LIBRARY OF CONGRESS

Copyright Office

[Docket No. 2015–7]

Section 512 Study: Request for Additional Comments

AGENCY: U.S. Copyright Office, Library of Congress.

ACTION: Notice of inquiry.

SUMMARY: The U.S. Copyright Office seeks further comments on the impact and effectiveness of the Digital Millennium Copyright Act (''DMCA'') safe harbor provisions. This request provides an opportunity for interested parties to reply or expand upon issues raised in written comments submitted on or before April 1, 2016, and during the public roundtables held May 2–3, 2016 in New York, and May 12–13, 2016 in San Francisco. The Copyright Office also invites parties to submit empirical research studies assessing issues related to the operation of the safe harbor provisions on a quantitative or qualitative basis.

DATES: Written responses to the questions outlined below must be received no later than 11:59 p.m. Eastern Time on February 6, 2017. Empirical research studies providing quantitative or qualitative data relevant to the subject matter of this study must be received no later than 11:59 p.m. Eastern Time on March 8, 2017.

ADDRESSES: For reasons of government efficiency, the Copyright Office is using the *regulations.gov* system for the submission and posting of public comments in this proceeding. All comments are therefore to be submitted electronically through *regulations.gov.* Specific instructions for submitting comments are available on the Copyright Office Web site at *http://copyright.gov/policy/section512/comment-submission/.* To meet accessibility standards, all comments must be provided in a single file not to exceed six megabytes (MB) in one of the following formats: Portable Document File (PDF) format containing searchable, accessible text (not an image); Microsoft Word; WordPerfect; Rich Text Format (RTF); or ASCII text file format (not a scanned document). The form and face of the comments must include the name of the submitter and any organization the submitter represents. The Office will post all comments publicly in the form that they are received. If electronic submission of comments is not feasible due to lack of access to a computer and/or the Internet, please contact the Office, using the contact information below, for special instructions.

FOR FURTHER INFORMATION CONTACT: Cindy Abramson, Assistant General Counsel, by email at *ciab@loc.gov* or by telephone at 202–707–8350; Kevin Amer, Senior Counsel for Policy and International Affairs, by email at *kamer@loc.gov* or by telephone at 202–707–8350; or Kimberley Isbell, Senior Counsel for Policy and International Affairs, by email at *kisb@loc.gov* or by telephone at 202–707–8350.

SUPPLEMENTARY INFORMATION:

I. Background

In order to evaluate key parts of the copyright law as it pertains to the digital copyright marketplace, the U.S. Copyright Office is conducting a study to evaluate the impact and effectiveness of the DMCA safe harbor provisions contained in 17 U.S.C. 512. To aid its work in this area, the Office published an initial Notice of Inquiry on December 31, 2015 (''First Notice''), seeking written comments to 30 questions covering eight categories of topics. These included questions about the general efficacy of the DMCA provisions enacted in 1998, as well as the practical costs, and burdens, of the current DMCA environment.[1] The Office received a combination of more than 92,000 written submissions and form replies in response to the First Notice,

[1] *See* Section 512 Study: Notice and Request for Public Comment, 80 FR 81862, 81868 (Dec. 31, 2015).

which can be found on the *regulations.gov* Web site at *https://www.regulations.gov/docket?D=COLC-2015-0013.*

In May 2016, the Copyright Office convened roundtables in New York and San Francisco, each for a two day period. The roundtables provided participants with the opportunity to share their views on the topics identified in the First Notice, as well as any other issues relating to the operation of the DMCA safe harbors.[2] Transcripts of the proceedings at each of the roundtables are available on the Copyright Office Web site at *http://copyright.gov/policy/section512/* under ''Public Roundtables.''[3]

Based on the initial round of written submissions and the results of the roundtable discussions, the Copyright Office believes a number of themes merit additional consideration. Many of these relate to questions of balance, *i.e.,* how to weigh the diverse interests and needs of affected stakeholders, including individual authors and their small businesses, publishers and producers of all sizes, Internet service providers (''ISPs'') of all sizes, and members of the public who may seek to access the Internet on any given day for any number of reasons. The Office is also interested in feedback regarding how to continue to propel the DMCA's underlying public interest objectives, that is, its twin goals of fostering a robust and innovative online environment while protecting the rights of content creators. Within these broad categories, the specific topics participants raised can be further grouped in the following general areas: (1) Characteristics of the current Internet ecosystem; (2) operation of the current DMCA safe harbor system; (3) potential future evolution of the DMCA safe harbor system, including possible legislative improvements; and (4) other developments.

A. Characteristics of the Current Internet Ecosystem

One of the key themes that emerged from the first round of public comments and the roundtable discussions was the diversity of the current Internet ecosystem and the importance of factoring such diversity into any policymaking in the online space. Participants noted that there is a wide variety of experiences and views even within particular stakeholder groups.

For example, study participants pointed out that differences in the characteristics of content creators result in different experiences with the operation of the DMCA safe harbors.[4] They noted that the burden of addressing online infringement without an in-house piracy team is especially great for smaller content creators and businesses, and that some of the tools available to larger content owners are unavailable to smaller creators as a result of cost or other considerations.[5] Similarly, some expressed the view that the quality of takedown notices often varies depending on the identity and size of the content creator, with notices from individuals and smaller entities often being less sophisticated and/or accurate than notices sent by large corporations employing automated processes.[6] Other study participants highlighted the importance of taking into consideration the experiences of non-professional creators who rely on the platforms enabled by the DMCA safe harbors to disseminate and receive remuneration for their works.[7]

Likewise, a heterogeneous picture of ISPs emerged from the first round of comments and the public roundtables, with large deviations in terms of functions, size, resources, and business models, as well as the volume of DMCA takedown notices received on an annual basis. While some of the larger platforms[8] like Google, Facebook, SoundCloud, and Pinterest have devoted resources to implementing automated filtering systems and other tools to remove significant amounts of infringing content,[9] there appear to be many more ISPs that are continuing to operate manual DMCA takedown processes for a lower volume of notices.[10] Some commenters expressed concern that promulgation of rules designed for the former could place an undue burden on the operations of the latter.[11]

In addition, several study participants highlighted the importance of taking into consideration the needs of individual Internet users when developing recommendations for possible changes to the DMCA safe

[2] *See* Section 512 Study: Announcement of Public Roundtables, 81 FR 14896 (Mar. 18, 2016).

[3] References to the transcripts in this document are indicated by ''Tr.,'' followed by the page(s) and line(s) of the reference, the date of the roundtable, and the speaker's name and affiliation.

[4] *See, e.g.,* Tr. at 174:13–17 (May 3, 2016) (Andrew Deutsch, DLA Piper) (''[T]he world of creators runs from individual singer-songwriters to gigantic studios and record producers. They have different needs, different problems, and it really is impossible to create a system that does everything for everyone.'').

[5] *See, e.g.,* Dirs. Guild of Am., Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015 Notice of Inquiry at 6 (Apr. 1, 2016) (''To utilize the DMCA notice and takedown mechanism, a rights holder must first prepare notices in exact accordance with the complicated legal requirements of Section 512. Sending these notices to a designated agent of the service provider requires a level of legal expertise that larger rights holders may possess but which smaller creators do not have at their disposal.''); Kernochan Ctr. for Law, Media & the Arts, Columbia Law Sch., Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015 Notice of Inquiry at 7 (Apr. 1, 2016) (''The process is burdensome for individuals and entities of any size. Larger entities, which may hold or manage numerous copyrighted works, may use technological tools and many employees or consultants to search for infringing files on the [I]nternet and to file notices in an attempt to get them removed. Independent creators, however, often have to face this issue alone.'').

[6] *See* Tr. at 146:8–20 (May 2, 2016) (Brianna Schofield, Univ. of Cal., Berkeley Sch. of Law) (''[W]e looked at notices sent to Google Images search and these notice senders tended to be individuals, smaller businesses and we saw a much different dynamic here in that these were targeting sites that we might be more fearful would compromise legitimate expression, so blogs, message board threads. . . . Fifteen percent weren't even copyright complaints to start with. They were submitted as a DMCA complaint but they were actually complaining about privacy or defamation, this sort of thing.''); Tr. at 36:3–37:9 (May 12, 2016) (Jennifer Urban, Univ. of Cal., Berkeley Sch. of Law). *But see* Jonathan Bailey, Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015 Notice of Inquiry at 2 (Feb. 16, 2016) (''With this automation has come increased mistakes. Machines are simply not as good at detecting infringement and fair use issues as humans.'').

[7] *See, e.g.,* Tr. at 282:21–283:6 (May 13, 2016) (Cathy Gellis, Dig. Age Def.); Tr. at 324:1–15 (May 2, 2016) (Ellen Schrantz, Internet Ass'n).

[8] Larger both in terms of the amount of content that appears on the site, and the technological and monetary resources available to address DMCA notices.

[9] *See, e.g.,* Audible Magic Corp., Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015 Notice of Inquiry at 4 (Mar. 21, 2016) (''[U]ser-generated-content sharing and cloud file sharing networks [including Facebook, Dailymotion, SoundCloud, and Twitch] . . . dramatically reduce copyright-infringing media sharing using Audible Magic software and hosted services [to] . . . detect[] registered audio and video content in the user upload stream.''); Pinterest Inc., Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015 Notice of Inquiry at 3 (Apr. 1, 2016) (''[O]ur engineering team built a tool that allowed us to . . . attach the author's name to [an] image. . . . Pinterest has also developed tools to help content owners prevent certain content from being saved to Pinterest, and to enable the quick removal of their content if they so wish.'').

[10] *See, e.g.,* Tr. at 111:17–21 (May 12, 2016) (Lila Bailey, Internet Archive) (''The Internet Archive definitely falls into the DMCA Classic [category]. They have a tiny staff . . . and they review every notice they get by a human being.''); Tr. at 157:3–10 (May 12, 2016) (Joseph Gratz, Durie Tangri LLP) (''[T]he Internet from 1998 is still all there . . . it's small OSPs, small content creators, small copyright holders needing remedies for small infringements.''); Tr. at 100:10–15 (May 12, 2016) (Charles Roslof, Wikimedia Found.) (''We operate Wikipedia and . . . despite the large amount of content we host, we receive very few takedown notices.'').

[11] *See* Internet Ass'n, Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015 Notice of Inquiry at 15 (Mar. 31, 2016) (''[S]tartups and small businesses lack the sophisticated resources of larger, more established businesses in responding to takedown requests.'').

harbor system.[12] Participants emphasized that the DMCA counter-notice process is an important mechanism to protect the legitimate online speech of individual Internet users, and that the proliferation of diverse platforms and services made possible by the DMCA safe harbors provides a critical benefit for the public.

B. Operation of the Current DMCA Safe Harbor System

While some study participants asserted that the section 512 safe harbors are currently operating effectively and as Congress intended, a number of participants identified various shortcomings and barriers for content creators, ISPs, and individual Internet users. These differing views were especially stark when comparing the experiences of content creators (large and small) with the experiences of online service providers.[13] ISPs generally painted a picture of a thriving and vibrant Internet ecosystem that was largely the result of the safeguards and protections of the DMCA safe harbors.[14] While ISP participants acknowledged the ever-increasing volume of takedown notices that are now being sent, they viewed the ability of larger ISPs to accommodate the increased volume as an example of the overall success of the system.[15] In stark contrast, many content creators of all sizes bemoaned what they saw as the inefficiency and ineffectiveness of the system.[16] These participants complained about the time and resources necessary to police the Internet and viewed the ever-increasing volume of notices as an example of the DMCA notice-and-takedown regime's failure to sufficiently address the continued proliferation of online infringement.[17]

ISPs, civic organizations, and content creators also expressed differing views regarding the extent to which false or abusive notices are a problem under the current system, and the effectiveness of the counter-notice process for ensuring access to legitimate content. Several ISPs and civic groups pointed to abusive notices as one of the primary shortcomings of the safe harbor regime. They pointed to the length of time required to have material replaced after a counter-notice,[18] and argued that having non-infringing content removed even for a few days can severely impact a business.[19] Several groups cited recent data released by researchers at the University of California, Berkeley School of Law as evidence of the scope of the problem.[20] Some content creators, on the other hand, expressed the view that abusive notices are in fact quite rare[21] and that the number of improper notices pales in comparison to the overwhelming volume of infringing content. They argued that the counter-notice process sufficiently protects legitimate material,[22] and pointed out that the financial burden of bringing a federal court case to prevent the reposting of infringing material within days of receiving a counter-notice makes the provision unusable in practice.[23]

Both content creators and ISPs identified shortcomings in their abilities to efficiently process notices under the current system. ISPs identified the difficulty of receiving notices through multiple channels (*e.g.,* email, web form, fax, etc.),[24] as well as incomplete or unclear notices,[25] as barriers to efficient processing of takedown requests. Several ISPs have reported moving to the use of web forms for receipt of takedown notices in order to overcome some of these difficulties.[26]

In contrast, many content creators identified ISP-specific web forms as a barrier to effective use of the notice-and-takedown process, increasing the amount of time required to have the same material taken down across multiple platforms.[27] Other barriers to use of the notice-and-takedown process identified by content creators included additional ISP-created requirements that some claimed go far beyond the requirements of the DMCA,[28] and

[12] *See* Pub. Knowledge, Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015 Notice of Inquiry at 4 (Apr. 1, 2016) (''Section 512 appropriately balances the interests of online platforms and copyright owners . . . . Where the balance is acutely in need of recalibration, though, is with respect to user rights.''); Tr. at 101:4–10 (May 13, 2016) (Daphne Keller, Stanford Law Sch. Ctr. for Internet & Soc'y).

[13] *Compare* Tr. at 92:6–11 (May 12, 2016) (Jordan Berliant, Revelation Mgmt. Grp.) (''I'm very concerned about even our biggest client's ability to earn a living under the current copyright protection system, which, in effect, sanctions the infringement of their rights and is devastating to the revenue that they can earn from recording music.''), *and* Tr. at 119:1–5 (May 2, 2016) (Jennifer Pariser, Motion Picture Ass'n of Am.) (''[T]his is where on the content side we feel the imbalance comes, that [processing takedown notices is] a cost of doing business for an online service provider that is relatively manageable for them, whereas on the creation side, we're being killed by piracy.''), *with* Facebook, Inc., Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015 Notice of Inquiry at 4 (Apr. 1, 2016) (''It is quite effective. . . . [W]hile the DMCA by necessity imposes some burden on the respective parties, its procedures unquestionably result in the effective and consistent removal of infringing content from the Internet.''), *and* Amazon.com, Inc., Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015 Notice of Inquiry at 3–4 (Apr. 1, 2016) (discussing the role of section 512 in fostering a balanced copyright regime that allows Internet creativity and innovation).

[14] *See* Intel Corp., Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015 Notice of Inquiry at 4–5 (Apr. 1, 2016) (''As stated in the House Report, the goal of the [Digital Millennium Copyright] Act was to lubricate the legitimate distribution of creative content. When measured by these Congressional yardsticks, Section 512 has been a stunning success. . . . At the same time, Congress desired 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.' Intel believes that the Act has done just that.'').

[15] *See, e.g.,* New Am.'s Open Tech. Inst., Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015 Notice of Inquiry at 3 (Apr. 1, 2016); Tr. at 77:7–13 (May 13, 2016) (Fred von Lohmann, Google, Inc.) (''I disagree with people who think that a large volume of notices is a sign of failure; in fact, quite the contrary. If the notices weren't doing any good, if it was too expensive to send, we would expect the numbers to be falling, not rising. And in fact, we see them rising because the systems are more efficient.'').

[16] *See, e.g.,* Am. Ass'n of Indep. Music et al., Joint Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015 Notice of Inquiry at 21 (Apr. 1, 2016); T Bone Burnett et al., Joint Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015 Notice of Inquiry at 2 (Apr. 1, 2016).

[17] *See, e.g.,* Tr. at 108:2–5 (May 13, 2016) (Dean Marks, Motion Picture Ass'n of Am.).

[18] *See, e.g.,* Jill Doe, Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015 Notice of Inquiry at 2 (Mar. 21, 2016); Verizon Commc'ns, Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015 Notice of Inquiry at 18 (Apr. 1, 2016).

[19] *See, e.g.,* Tr. at 153:3–17 (May 2, 2016) (Rebecca Prince, Becky Boop); Tr. at 75:4–8 (May 12, 2016) (Alex Feerst, Medium); Tr. at 164:9–16 (May 12, 2016) (Joseph Gratz, Durie Tangri LLP).

[20] *See, e.g.,* Engine et al., Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015 Notice of Inquiry at 9 (Apr. 1, 2016); Internet Commerce Coal., Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015 Notice of Inquiry at 3 (Apr. 1, 2016).

[21] *See, e.g.,* Tr. at 155:9–13 (May 2, 2016) (Steven Rosenthal, McGraw-Hill Educ.); Tr. at 183:21–184:1 (May 12, 2016) (Gabriel Miller, Paramount Pictures Corp.).

[22] *See* Copyright All., Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015 Notice of Inquiry at 20–21 (Apr. 1, 2016).

[23] *See, e.g.,* Dig. Media Licensing Ass'n, Inc. et al., Joint Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015 Notice of Inquiry at 7 (Apr. 1, 2016); Sony Music Entm't, Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015 Notice of Inquiry at 16 (Apr. 1, 2016) (citing the cost of litigation as accounting for the fact that ''since 2008, thousands of videos infringing Sony's copyrights have been reinstated on YouTube due to counter notifications not being contested by Sony'' even though ''[i]n the vast majority of those instances, there was no legitimate question that the use infringed Sony's exclusive rights'').

[24] *See* Tr. at 54:22–55:11 (May 3, 2016) (Matthew Schruers, Comput. & Commc'ns Indus. Ass'n).

[25] *See* Internet Archive, Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015 Notice of Inquiry at 3 (Mar. 22, 2016).

[26] *See* Jennifer M. Urban, Joe Karaganis & Brianna L. Schofield, *Notice and Takedown in Everyday Practice* 37 (UC Berkeley Pub. Law Research, Paper No. 2755628, 2016), *http://ssrn.com/abstract=2755628.*

[27] *See* Ass'n of Am. Publishers, Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015 Notice of Inquiry at 7 (Apr. 1, 2016); Tr. at 19:5–11 (May 12, 2016) (Devon Weston, Digimarc).

[28] *See, e.g.,* Ellen Seidler, Fast Girl Films, Comments Submitted in Response to U.S. Copyright

privacy concerns stemming from the public release of personal information about the notice sender.[29]

Study participants noted similar barriers that discourage users from submitting counter-notices, even in response to what some consider to be erroneous or fraudulent takedown notices. The identified barriers included a similar lack of standardization for filing counter-notices, a lack of education regarding the counter-notice process, privacy concerns, and the threat of potential legal proceedings.[30]

In addition to noting practical barriers that may make utilization of the safe harbor system difficult, several commenters pointed to court opinions that they argue have decreased the effectiveness of the statutory scheme created by Congress. These developments include judicial interpretations of the actual and red flag knowledge standards, the right and ability to control and financial benefit tests, section 512's references to ''representative lists,'' and section 512's requirement that ISPs implement a repeat infringer policy. Some content creators and others expressed concern that the first three developments, taken together, have systematically changed the application of section 512, tipping it in favor of ISPs,[31] while a number of ISPs expressed concerns about the ongoing impact of recent repeat infringer jurisprudence.[32]

One other debate between content creators and ISPs relates to the fact that section 512 sets forth a variety of differing safe harbor requirements for ISPs depending upon the function they are performing (*i.e.,* mere conduit, hosting, caching, or indexing). Thus, several telecommunications providers asserted that section 512 imposes no obligation on ISPs either to accept or act upon infringement notices when they are acting as a mere conduit under section 512(a).[33] Some content creators, however, expressed concern that failure to accept such notices, even if not part of a formal notice-and-takedown process, would weaken the requirement that ISPs adopt and reasonably implement a section 512(i) repeat infringer policy.[34]

C. Potential Future Evolution of the DMCA Safe Harbor System

Study participants have suggested a number of potential solutions to the issues raised above, though it should be understood that these solutions stem only from the subset of stakeholders who suggest or acknowledge in the first instance that the current regime requires or could benefit from changes. These solutions included both non-legislative solutions (such as education, the use of technology, or voluntary and standard technical measures) and legislative fixes (either through changes to section 512 itself or passage of legislation to address issues not directly addressed by section 512).

The non-legislative solution that appeared to have the broadest approval was the idea of creating governmental and private-sector educational materials on copyright and section 512. Participants recommended the creation of targeted educational materials for all participants in the Internet ecosystem, including content creators,[35] users,[36] and ISPs.[37]

A number of study participants noted that technology can help address some of the inefficiencies of the current notice-and-takedown process. Some participants cited increased efficiencies to be had from both automated notices and takedowns, as well as other technological tools.[38] Other participants, however, cautioned against over reliance on technology. Several reasons for questioning the ability of technology to resolve problems with the current system were mentioned, including the expense of developing systems capable of handling notice-and-takedown processes, concerns that automated processes may be more vulnerable to false positives, and the limited capabilities of even the most advanced current technology.[39]

Another potential non-legislative solution that was suggested was the development and adoption of industry-wide, or sub-industry-specific, voluntary measures[40] and standard technical measures,[41] and/or the standardization of practices for notice and takedown.[42] A number of study

Office's Dec. 31, 2015 Notice of Inquiry at 2 (Apr. 1, 2016) (''Because the email address for Google's DMCA Agent is not posted on its Web sites, rights holders must jump through various hoops and navigate through a series of questions in order to arrive at the correct form. Once there it takes additional time to complete the 9-part form. Before one can actually send it one must be sure to create a Google account, then login and send.''); Tr. at 59:14–19 (May 2, 2016) (Lisa Shaftel, Graphic Artists Guild).

[29] *See, e.g.,* Arts & Entm't Advocacy Clinic at George Mason Univ. Sch. of Law, Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015 Notice of Inquiry at 11 (Apr. 1, 2016) (''[P]ublicly revealing personal information about a notice sender may endanger the artist's property and safety.'').

[30] *See, e.g.,* Rodrigo Adair, Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015 Notice of Inquiry at 1–2 (Mar. 18, 2016); New Media Rights, Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015 Notice of Inquiry at 16–17 (Apr. 1, 2016); Tr. at 253:5–7 (May 13, 2016) (Michael Michaud, Channel Awesome, Inc.).

[31] *See, e.g.,* Matthew Barblan et al., Joint Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015 Notice of Inquiry at 1 (Apr. 1, 2016); Tr. at 196:25–197:12 (May 3, 2016) (June Besek, Kernochan Ctr. for Law, Media & the Arts) (''[I]n the last 18 years or so, I think courts have often placed a lot of emphasis on the ability of service providers to flourish and grow and perhaps less emphasis on the concerns of right holders. And you can see that in a lot of different ways—defining storage very broadly, defining red flag knowledge very narrowly, reading representative lists out of the statute, basically, leaving right holders with little recourse other than sending notice after notice after notice to prevent reposting of their material. And they can never really prevent it.'').

[32] *See, e.g.,* Am. Cable Ass'n, Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015 Notice of Inquiry at 5 (Apr. 1, 2016); CTIA—The Wireless Ass'n, Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015 Notice of Inquiry at 11–12 (Apr. 1, 2016).

[33] *See, e.g.,* Tr. 65:24–67:21 (May 2, 2016) (Jacqueline Charlesworth, U.S. Copyright Office; Patrick Flaherty, Verizon Commc'ns).

[34] *See* Tr. 257:12–15 (May 2, 2016) (David Jacoby, Sony Music Entm't).

[35] *See* Tr. at 73:23–74:8 (May 2, 2016) (Lisa Hammer, independent film director).

[36] *See* Tr. at 52:6–10 (May 2, 2016) (Janice Pilch, Rutgers Univ. Libraries); Tr. at 279:21–281:8 (May 12, 2016) (Brian Willen, Wilson Sonsini Goodrich); Tr. at 253:22–254:11 (May 13, 2016) (Michael Michaud, Channel Awesome, Inc.).

[37] *See* Future of Music Coal., Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015 Notice of Inquiry at 18 (Apr. 1, 2016).

[38] *See, e.g.,* Universal Music Grp., Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015 Notice of Inquiry at 18 (Apr. 1, 2016); Tr. at 97:17–98:4 (May 13, 2016) (Betsy Viola Zedek, The Walt Disney Co.).

[39] *See, e.g.,* Wikimedia Found., Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015 Notice of Inquiry at 7 (Apr. 1, 2016); Tr. at 312:16–20 (May 2, 2016) (Sarah Feingold, Etsy, Inc.).

[40] While many of the voluntary measures discussed by study participants were technological in nature (such as Google's Content ID system), there were other programs that some participants pointed to as potential blueprints for private action to improve the operation of the safe harbor processes, including development of industry best practices guidelines; initiatives like the Copyright Alert System; cooperative arrangements between content owners and payment processors, advertisers, and domain name registries; and voluntary demotion of infringing results by search engines. Although many participants expressed optimism that voluntary agreements could help improve the efficacy of the safe harbor system, other participants cautioned that voluntary measures should be viewed as supplements to reform, rather than replacements for it. *See* Content Creators Coal., Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015 Notice of Inquiry at 27–30 (Apr. 1, 2016). Still others objected to the idea of voluntary agreements as unrepresentative and potentially undemocratic. *See, e.g.,* Elec. Frontier Found., Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015 Notice of Inquiry at 15 (Apr. 1, 2016); Tr. at 177:17–22 (May 13, 2016) (Michael Masnick, Copia Institute); Tr. at 171:8–13 (May 13, 2016) (T.J. Stiles, author).

[41] *See* Tr. at 173:18–174:16 (May 13, 2016) (Sean O'Connor, Univ. of Washington (Seattle)) (''[O]ne-size-fits-all can't work . . . [but] if you create a taxonomy that [covers the] different kinds of content industry and also different kind[s] of service providers . . . you can . . . [c]ome up with . . . standard technical measures for that particular subdivision area.'').

[42] *See, e.g.,* Info. Tech. & Innovation Found., Comments Submitted in Response to U.S. Copyright

Continued

participants pointed to the failure to adopt standard technical measures under section 512(i), nearly two decades after passage of the DMCA, as a demonstrable failure of the current section 512 system.[43] Some study participants suggested that there may be a role for the government generally, or the U.S. Copyright Office in particular, to play in encouraging or supporting the adoption of such standard technical measures by convening groups of relevant stakeholders.[44]

Another potential solution proposed by some of the participants was legislative action to improve the section 512 safe harbor system, either by amending the statute itself, or adopting ancillary legislative reform proposals. The most frequently discussed potential legislative change was adoption of a notice-and-stay-down requirement.[45] Although many participants suggested a pressing need for such a requirement, they have not defined what is meant by ''stay-down,'' or what specific mechanisms might be utilized to comply with such a requirement. Some participants equated a notice-and-stay-down system with the use of a content filtering system like Content ID to pre-screen user uploads.[46] Other participants seemed to equate a notice-and-stay-down system with a requirement for the ISP to search its site for identical files upon receipt of a takedown notice from a rightsholder.[47] Many study participants, however, raised concerns about the possible adoption of a notice-and-stay-down requirement, citing both policy and practical/technological concerns.[48]

D. Other Developments

The Copyright Office is also seeking comments on three additional topics: judicial opinions that were not covered by the initial round of public comments, the disposition of Internet safe harbors under foreign copyright laws, and empirical research into the effectiveness, impact, and utilization of the current section 512 safe harbors.

The Copyright Office is interested in hearing from the public about judicial decisions issued since the first round of public comments closed in April 2016, and how they may impact the workings of one or more aspects of the section 512 safe harbors. These include, in particular, recent decisions from the Eastern District of Virginia and the Second Circuit. In *BMG Rights Management (US)* v. *Cox Communications, Inc.,* currently on appeal to the Fourth Circuit, the Eastern District of Virginia upheld a jury verdict that the defendant ISP was liable for willful contributory infringement based on its subscribers' use of BitTorrent to download and share copyrighted material.[49] The court found that the defendant was not able to invoke the section 512(a) safe harbor as a result of its failure to reasonably implement a repeat infringer policy.[50] In *Capitol Records, LLC* v. *Vimeo LLC,* the Second Circuit found that (1) the section 512(c) safe harbor extends to claims for infringement of pre-1972 sound recordings, which are protected under state, rather than federal, copyright laws, and (2) the fact that a defendant ISP's employee viewed a video that ''contains all or virtually all of a recognizable copyrighted song'' is insufficient to provide the ISP with actual or red flag knowledge of infringement.[51]

Similarly, while some of the initial written responses and roundtable discussions touched upon Internet safe harbor regimes outside the United States,[52] the Copyright Office welcomes additional information about foreign approaches to the questions of ISP safe harbors, Internet piracy, and other relevant topics.

Finally, the Copyright Office is asking for the submission of additional analyses and empirical data related to the effectiveness, impact, and utilization of the current section 512 safe harbors. While several participants referenced a trio of recent studies performed by researchers at the University of California, Berkeley School of Law, others noted that a nucleus of authoritative studies and evidence is still lacking, overall.[53] Given the economic importance of both the creative and technology industries to the U.S. economy, policymaking relating to the proper calibration of the costs and benefits of ISP safe harbors would benefit from a robust record of authoritative data. Potential subject matter for relevant submissions would include data relating to the number of improper takedown or counter-notices received by different classes of ISPs, information relating to the percentage of files that are re-uploaded following submission of a valid takedown notice, information regarding the effectiveness or ineffectiveness of takedown notices for combating different forms of piracy both here and abroad, the economic impact of policy choices relating to ISP safe harbors, and other topics.

II. Subjects of Inquiry

The Copyright Office seeks further public input in the form of written comments responsive to this Notice and the issues discussed above, as well as the submission of studies and empirical data relevant to the subject matter of this study. Parties may also take this opportunity to respond to positions or data raised in the first round of comments and/or at the roundtables.

Office's Dec. 31, 2015 Notice of Inquiry at 5 (Mar. 21, 2016) (''[T]he tools . . . used by online service providers to prevent and stop infringement vary widely. To address this problem, the U.S. Copyright Office should launch a multi-stakeholder working group to identify . . . [ways] to reduce infringement and lower compliance costs for all parties. For example . . . . standardize[d] notice-and-takedown processes across multiple service providers . . . .''); Tr. at 164:12–165:13 (May 13, 2016) (Dave Green, Microsoft) (suggesting a ''summit attended primarily by engineers,'' potentially including ''government support or encouragement . . . to come up with ways to make it easy to report . . . a single work to multiple ISPs without having to send notices multiple times'').

[43] *See, e.g.,* Tr. 68:22–69:12 (May 3, 2016) (Lisa Willmer, Getty Images); Tr. 18:10–21:6 (May 13, 2016) (Karyn Temple Claggett, U.S. Copyright Office; Keith Kupferschmid, Copyright All.).

[44] *See* Tr. 250:23–251:1 (May 3, 2016) (Todd Dupler, Recording Acad.).

[45] *See, e.g.,* Indep. Film & Television All., Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015 Notice of Inquiry at 4 (Apr. 1, 2016); Tr. at 230:11–23 (May 3, 2016) (Matthew Barblan, Ctr. for the Prot. of Intellectual Prop.).

[46] *See* Council of Music Creators et al., Joint Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015 Notice of Inquiry at 3 (Apr. 1, 2016).

[47] *See* Authors Guild, Inc., Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015 Notice of Inquiry at 14 (Apr. 1, 2016) (''Here's an example of how 'notice and stay-down' might work in practice: an author finds a pirated copy of her book on Google Play, offered by a user who has created an account called 'Best Books.'. . . She sends a notice to Google, with an image of the fake cover and false publisher name, along with a URL for the pirated copy. Google takes the copy down a day later. The next day, the same book with the same cover is reposted on the site. From then on, Google should be required to automatically remove any instance of the entire book that anyone other than an authorized person (as provided by the copyright owner) posts on the site.'').

[48] *See, e.g.,* Facebook, Inc., Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015 Notice of Inquiry at 6 (Apr. 1, 2016); Internet Archive, Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015 Notice of Inquiry at 2 (Mar. 22, 2016).

[49] *BMG Rights Mgmt. (US) LLC* v. *Cox Commc'ns., Inc.,* No. 1:14–cv–1611, 2016 WL 4224964 (E.D. Va. Aug. 8, 2016), *appeal docketed,* No. 16–1972 (4th Cir. Aug. 24, 2016).

[50] *Id.* at *4.

[51] *Capitol Records, LLC* v. *Vimeo, LLC,* 826 F.3d 87–98 (2d Cir. 2016).

[52] *See, e.g.,* Ctr. for Democracy & Tech. & R Street Inst., Joint Comments Submitted in Response to U.S. Copyright Office's Dec. 31, 2015 Notice of Inquiry at 19 n.79 (Apr. 1, 2016); Tr. 114:24–115:6 (May 3, 2016) (Victoria Sheckler, Recording Indus. Ass'n of Am.); Tr. 325:16–20 (May 12, 2016) (Daphne Keller, Stanford Law Sch. Ctr. for Internet & Soc'y).

[53] *See, e.g.,* Tr. at 255:11–12 (May 13, 2016) (Sean O'Connor, Univ. of Washington (Seattle)) (''[O]n the empirical research side, I do think we need to do a lot more . . . .''); Tr. at 260:3–4 (May 13, 2016) (Fred von Lohmann, Google, Inc.) (''We need more and better data.'').

Participants should, however, refrain from simply restating positions taken at the roundtables or previously submitted in response to the First Notice; such comments have already been made part of the record. While a party choosing to respond to this Notice of Inquiry need not address every subject below, the Office requests that responding parties clearly identify and separately address each subject for which a response is submitted.

Characteristics of the Current Internet Ecosystem

1. As noted above, there is great diversity among the categories of content creators and ISPs who comprise the Internet ecosystem. How should any improvements in the DMCA safe harbor system account for these differences? For example, should any potential new measures, such as filtering or stay-down, relate to the size of the ISP or volume of online material hosted by it? If so, how? Should efforts to improve the accuracy of notices and counter-notices take into account differences between individual senders and automated systems? If so, how?

2. Several commenters noted the importance of taking into account the perspectives and interests of individual Internet users when considering any changes to the operation of the DMCA safe harbors. Are there specific issues for which it is particularly important to consult with or take into account the perspective of individual users and the general public? What are their interests, and how should these interests be factored into the operation of section 512?

Operation of the Current DMCA Safe Harbor System

3. Participants expressed widely divergent views on the overall effectiveness of the DMCA safe harbor system. How should the divergence in views be considered by policy makers? Is there a neutral way to measure how effective the DMCA safe harbor regime has been in achieving Congress' twin goals of supporting the growth of the Internet while addressing the problem of online piracy?

4. Several public comments and roundtable participants noted practical barriers to effective use of the notice-and-takedown and counter-notice processes, such as differences in the web forms used by ISPs to receive notices or adoption by ISPs of additional requirements not imposed under the DMCA (*e.g.,* submission of a copyright registration or creation of certain web accounts). What are the most significant practical barriers to use of the notice-and-takedown and counter-notice processes, and how can those barriers best be addressed (*e.g.,* incentives for ISPs to use a standardized notice/counter-notice form, etc.)?

5. A number of study participants identified the timelines under the DMCA as a potential area in need of reform. Some commenters expressed the view that the process for restoring access to material that was the subject of a takedown notice takes too long, noting that the material for which a counter-notice is sent can ultimately be inaccessible for weeks or months before access is restored. Other commenters expressed the view that the timeframe for restoring access to content is too short, and that ten days is not enough time for a copyright holder to prepare and file litigation following receipt of a counter-notice. Are changes to the section 512 timeline needed? If so, what timeframes for each stage of the process would best facilitate the dual goals of encouraging online speech while protecting copyright holders from widespread online piracy?

6. Participants also noted disincentives to filing both notices and counter-notices, such as safety and privacy concerns, intimidating language, or potential legal costs. How do these concerns affect use of the notice-and-takedown and counter-notice processes, and how can these disincentives best be addressed?

7. Some participants recommended that the penalties under section 512 for filing false or abusive notices or counter-notices be strengthened. How could such penalties be strengthened? Would the benefits of such a change outweigh the risk of dissuading notices or counter-notices that might be socially beneficial?

8. For ISPs acting as conduits under section 512(a), what notice or finding should be necessary to trigger a repeat infringer policy? Are there policy or other reasons for adopting different requirements for repeat infringer policies when an ISP is acting as a conduit, rather than engaging in caching, hosting, or indexing functions?

Potential Future Evolution of the DMCA Safe Harbor System

9. Many participants supported increasing education about copyright law generally, and/or the DMCA safe harbor system specifically, as a non-legislative way to improve the functioning of section 512. What types of educational resources would improve the functioning of section 512? What steps should the U.S. Copyright Office take in this area? Is there any role for legislation?

10. How can the adoption of additional voluntary measures be encouraged or incentivized? What role, if any, should government play in the development and implementation of future voluntary measures?

11. Several study participants pointed out that, since passage of the DMCA, no standard technical measures have been adopted pursuant to section 512(i). Should industry-wide or sub-industry-specific standard technical measures be adopted? If so, is there a role for government to help encourage the adoption of standard technical measures? Is legislative or other change required?

12. Several study participants have proposed some version of a notice-and-stay-down system. Is such a system advisable? Please describe in specific detail how such a system should operate, and include potential legislative language, if appropriate. If it is not advisable, what particular problems would such a system impose? Are there ways to mitigate or avoid those problems? What implications, if any, would such as system have for future online innovation and content creation?

13. What other specific legislative provisions or amendments could improve the overall functioning of the DMCA safe harbor regime? Please be specific, including proposed statutory language as appropriate.

Other Developments

14. Several study participants mentioned concerns regarding certain case law interpretations of the existing provisions of section 512. Additionally, two new judicial decisions have come out since the first round of public comments was submitted in April 2016. What is the impact, if any, of these decisions on the effectiveness of section 512? If you believe it would be appropriate to address or clarify existing provisions of section 512, what would be the best ways to address such provisions (*i.e.,* through the courts, Congress, the Copyright Office, and/or voluntary measures)? Please provide specific recommendations, such as legislative language, if appropriate.

15. What approaches have jurisdictions outside the United States taken to address the question of ISP liability and the problem of copyright infringement on the Internet? To what extent have these approaches worked well, or created problems for consumers, content creators, ISPs, or other stakeholders?

16. Please identify any other pertinent issues that the Copyright Office may

wish to consider in conducting this study.

Submission of Empirical Research To Aid the Study

Many commenters expressed a desire for more comprehensive empirical data regarding the functioning and effects of the DMCA safe harbor system. The Copyright Office is providing an extended deadline for submissions of empirical research on any of the topics discussed in this Notice, or other topics that are likely to provide useful data to assess and/or improve the operation of section 512.

Dated: November 2, 2016.

Karyn Temple Claggett,

Acting Register of Copyrights and Director of the U.S. Copyright Office.

[FR Doc. 2016–26904 Filed 11–7–16; 8:45 am]

BILLING CODE 1410–30–P

NATIONAL ARCHIVES AND RECORDS ADMINISTRATION

[NARA–2017–005]

George W. Bush Presidential Library; Disposal of Presidential Records

AGENCY: National Archives and Records Administration (NARA).

ACTION: Notice of proposed disposal of Presidential records; request for public comment.

SUMMARY: The National Archives and Records Administration (NARA) has identified certain Presidential records from the George W. Bush Presidential Library as appropriate for disposal under the provisions of 44 U.S.C. 2203(f)(3). This notice describes our reasons for determining that these records do not warrant retaining any longer.

This notice does not constitute a final agency action, as described in 44 U.S.C. 2203(f)(3), and we will not dispose of any Presidential records following this notice. After reviewing any comments we receive during this 45-day notice and comment period, we will make a decision on the records. If we decide to dispose of them, we will issue a second, 60-day advance notice, which constitutes a final agency action.

DATES: Comments are due by December 23, 2016.

LOCATION: Submit written comments by mail to Director, Presidential Libraries; National Archives and Records Administration (LP), Suite 2200; 8601 Adelphi Road; College Park, MD 20740–6001, or by fax to 301.837.3199.

FOR FURTHER INFORMATION CONTACT: Susan K. Donius at 301.837.3250.

SUPPLEMENTARY INFORMATION: We propose the following materials for disposal because we have determined that they lack continuing administrative, historical, information, or evidentiary value.

The items identified include (full list below) ephemera located within the Staff Member Office Files and White House Office of Records Management Subject/Alpha Files of the George W. Bush Presidential Library:

NASA Pin
Connecting to Collections Black Shoulder Bag
Metal Edge, Inc. Mini Hollinger
IMLS Level and Tape Measurer
White Cotton Gloves
Faith Bottle
Indian River Community College Educational Program
Honor Cats Banners

Dated: October 25, 2016.

Susan K. Donius,

Director, Office of Presidential Libraries.

[FR Doc. 2016–26952 Filed 11–7–16; 8:45 am]

BILLING CODE 7515–01–P

THE NATIONAL FOUNDATION FOR THE ARTS AND THE HUMANITIES

Institute of Museum and Library Services

Notice of Proposed Information Collection Request: Community Catalyst: The Role of Libraries and Museums in Community Transformation (Community Catalyst)—A National Leadership Grants Special Initiative

AGENCY: Institute of Museum and Library Services, National Foundation for the Arts and the Humanities.

ACTION: Notice, request for comments, collection of information.

SUMMARY: The Institute of Museum and Library Service (''IMLS'') as part of its continuing effort to reduce paperwork and respondent burden, conducts a pre-clearance consultation program to provide the general public and federal agencies with an opportunity to comment on proposed and/or continuing collections of information in accordance with the Paperwork Reduction Act (44 U.S.C. 3501 et seq.). This pre-clearance consultation program helps to ensure that requested data can be provided in the desired format, reporting burden (time and financial resources) is minimized, collection instruments are clearly understood, and the impact of collection requirements on respondents can be properly assessed. The purpose of this Notice is to solicit comments concerning The Role of Libraries and Museums in Community Transformation (Community Catalyst)—A National Leadership Grants Special Initiative.

A copy of the proposed information collection request can be obtained by contacting the individual listed below in the **ADDRESSES** section of this notice.

DATES: Written comments must be submitted to the office listed in the **ADDRESSES** section below on or before January 5, 2017.

The IMLS is particularly interested in comments which:

- Evaluate whether the proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information will have practical utility;
- Evaluate the accuracy of the agency's estimate of the burden of the proposed collection of information, including the validity of the methodology and assumptions used;
- Enhance the quality, utility, and clarity of the information to be collected; and
- Minimize the burden of the collection of information on those who are to respond, including through the use of appropriate automated, electronic, mechanical, or other technological collection techniques or other forms of information technology, *e.g.,* permitting electronic submission of responses.

ADDRESSES: For a copy of the documents contact: Dr. Marvin Carr, Senior Advisor, STEM and Community Engagement, Institute of Museum and Library Services, 955 L'Enfant Plaza North SW., Suite 4000, Washington, DC 20024. Dr. Carr can be reached by telephone: 202–653–4752; fax: 202–653–4603; email: *mcarr@imls.gov* or by *teletype* (TTY/TDD) for persons with hearing difficulty at 202–653–4614.

SUPPLEMENTARY INFORMATION:

I. Background

The Institute of Museum and Library Services is the primary source of federal support for the Nation's 123,000 libraries and 35,000 museums. The Institute's mission is to inspire libraries and museums to advance innovation, learning and civic engagement. We provide leadership through research, policy development, and grant making. IMLS provides a variety of grant programs to assist the Nation's museums and libraries in improving their operations and enhancing their services to the public. (20 U.S.C. 9101 *et seq.*).

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Robert E. Maher Jr.,

Assistant Chief, Environmental Enforcement Section, Environment and Natural Resources Division.

[FR Doc. 2017–01848 Filed 1–26–17; 8:45 am]

BILLING CODE 4410–15–P

LIBRARY OF CONGRESS

U.S. Copyright Office

[Docket No. 2015–7]

Section 512 Study: Extension of Comment Period

AGENCY: U.S. Copyright Office, Library of Congress.

ACTION: Extension of comment period.

SUMMARY: The United States Copyright Office is extending the deadlines for the submission of written comments and empirical research studies in response to its November 8, 2016 request for additional comments (''Second Notice'') regarding the Digital Millennium Copyright Act (''DMCA'') safe harbor provisions contained in 17 U.S.C. 512.

DATES: Written responses to the questions outlined in the Second Notice are now due no later than 11:59 p.m. Eastern Time on February 21, 2017. Empirical research studies are due no later than 11:59 p.m. Eastern Time on March 22, 2017.

ADDRESSES: For reasons of government efficiency, the Copyright Office is using the *regulations.gov* system for the submission and posting of public comments in this proceeding. All comments are therefore to be submitted electronically through *regulations.gov.* Specific instructions for submitting comments are available on the Copyright Office Web site at *http://copyright.gov/policy/section512/comment-submission/*. If electronic submission of comments is not feasible due to lack of access to a computer and/or the Internet, please contact the Office, using the contact information below, for special instructions.

FOR FURTHER INFORMATION CONTACT: Cindy Abramson, Assistant General Counsel, by email at *ciab@loc.gov* or by telephone at 202–707–8350; Kevin Amer, Senior Counsel for Policy and International Affairs, by email at *kamer@loc.gov* or by telephone at 202–707–8350; or Kimberley Isbell, Senior Counsel for Policy and International Affairs, by email at *kisb@loc.gov* or by telephone at 202–707–8350.

SUPPLEMENTARY INFORMATION: The United States Copyright Office is conducting a study to evaluate the impact and effectiveness of the DMCA safe harbor provisions contained in 17 U.S.C. 512. The Office published an initial Notice of Inquiry on December 31, 2015, seeking written comments to thirty questions covering eight categories of topics.[1] After receiving more than 92,000 responses and holding public roundtables, the Office published a Second Notice on November 8, 2016.[2] The Second Notice sought responses to sixteen additional questions and also invited parties to submit empirical research studies assessing issues related to the operation of the safe harbor provisions on a quantitative or qualitative basis. To ensure that commenters have sufficient time to respond, the Office is extending the deadline for submission of comments in response to the questions provided in the Second Notice to February 21, 2017, at 11:59 p.m. Eastern Time, and the deadline for submission of empirical research studies to March 22, 2017, at 11:59 p.m. Eastern Time. Please note that in light of the expected time frame for this study, the Office is unlikely to grant further extensions for these submissions.

Dated: January 24, 2017.

Karyn Temple Claggett

Acting Register of Copyrights and Director of the U.S. Copyright Office.

[FR Doc. 2017–01888 Filed 1–26–17; 8:45 am]

BILLING CODE 1410–30–P

[1] *See* Section 512 Study: Notice and Request for Public Comment, 80 FR 81682 (Dec. 31, 2015).

[2] *See* Section 512 Study: Request for Additional Comments, 81 FR 78636 (Nov. 8, 2016).

NATIONAL FOUNDATION ON THE ARTS AND THE HUMANITIES

Federal Council on the Arts and the Humanities; Arts and Artifacts Indemnity Panel Advisory Committee

AGENCY: National Foundation on the Arts and the Humanities.

ACTION: Notice of meeting.

SUMMARY: Pursuant to the Federal Advisory Committee Act, notice is hereby given that the Federal Council on the Arts and the Humanities will hold a meeting of the Arts and Artifacts Domestic Indemnity Panel.

DATES: The meeting will be held on Tuesday, February 21, 2017, from 2:00 p.m. to 5:00 p.m.

ADDRESSES: The meeting will be held by teleconference originating at the National Endowment for the Arts, Washington, DC 20506.

FOR FURTHER INFORMATION CONTACT: Elizabeth Voyatzis, Committee Management Officer, 400 7th Street SW., Room 4060, Washington, DC 20506, (202) 606 8322; *evoyatzis@neh.gov.*

SUPPLEMENTARY INFORMATION: The purpose of the meeting is for panel review, discussion, evaluation, and recommendation on applications for Certificates of Indemnity submitted to the Federal Council on the Arts and the Humanities, for exhibitions beginning on or after April 1, 2017. Because the meeting will consider proprietary financial and commercial data provided in confidence by indemnity applicants, and material that is likely to disclose trade secrets or other privileged or confidential information, and because it is important to keep the values of objects to be indemnified, and the methods of transportation and security measures confidential, I have determined that that the meeting will be closed to the public pursuant to subsection (c)(4) of section 552b of Title 5, United States Code. I have made this determination under the authority granted me by the Chairman's Delegation of Authority to Close Advisory Committee Meetings, dated April 15, 2016.

Dated: January 23, 2017.

Elizabeth Voyatzis,

Committee Management Officer.

[FR Doc. 2017–01849 Filed 1–26–17; 8:45 am]

BILLING CODE 7536–01–P

NATIONAL SCIENCE FOUNDATION

Proposal Review Panel for Environmental Biology; Notice of Meeting

In accordance with the Federal Advisory Committee Act (Pub. L. 92–463, as amended), the National Science Foundation (NSF) announces the following meeting:

Name and Committee Code: Proposal Review Panel for Environmental Biology—Mid-term Site Review of Luquillo LTER (#10744)—Site Visit.

Dates and Times: March 29–31, 2017; 8 a.m.–5 p.m.

Place: Luquillo LTER, University of Puerto Rico, Km 19.5, Hwy PR–186, 00745, Puerto Rico.

Type of Meeting: Closed.

Contact Person: Louis Kaplan, Division of Environmental Biology, National Science Foundation, 4201 Wilson Blvd., Arlington, VA 22230. Phone 703–292–7187.

Purpose of Meeting: Formal mid-term review of the Luquillo LTER research program.

obtained by contacting the office listed below in the **ADDRESSES** section of this Notice.

DATES: Written comments must be submitted to the office listed in the **ADDRESSES** section below on or before April 2, 2019.

ADDRESSES: You may submit comments by mail, delivery service, or by hand to Ms. Yoon Ferguson, U.S. Department of Labor, 200 Constitution Ave. NW, Room S–3323, Washington, DC 20210; by fax (202) 354–9647; or email to *ferguson.yoon@dol.gov.* Please use only one method of transmission for comments (mail/delivery, fax or email). Please note that comments submitted after the comment period will not be considered.

SUPPLEMENTARY INFORMATION:

I. Background: The Office of Workers' Compensation Programs (OWCP) is the agency responsible for administration of the Federal Employees' Compensation Act (FECA), 5 U.S.C. 8101 *et seq.,* the Black Lung Benefits Act (BLBA), 30 U.S.C. 901 *et seq.,* and the Energy Employees Occupational Illness Compensation Program Act of 2000 (EEOICPA), 42 U.S.C. 7384 *et seq.* This information collection is used by OWCP examiners to ascertain the financial condition of the beneficiary to determine if the overpayment or any part can be recovered; to identify the possible concealment or improper transfer of assets; and to identify and consider present and potential income and current assets for enforced collection proceedings. The questionnaire provides a means for the beneficiary to explain why he/she is without fault in an overpayment matter. If this information were not collected BLBA, EEOICPA and FECA would have little basis to determine appropriate collection proceedings. This information collection is currently approved for use through April 30, 2019.

II. Review Focus: The Department of Labor is particularly interested in comments which:

* Evaluate whether the proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information will have practical utility;

* evaluate the accuracy of the agency's estimate of the burden of the proposed collection of information, including the validity of the methodology and assumptions used;

* enhance the quality, utility and clarity of the information to be collected; and

* minimize the burden of the collection of information on those who are to respond, including through the use of appropriate automated, electronic, mechanical, or other technological collection techniques or other forms of information technology, *e.g.,* permitting electronic submissions of responses.

III. Current Actions: The Department of Labor seeks the approval of the extension of this currently approved information collection in order to determine whether or not the recovery of any BLBA, EEOICPA or FECA overpayments may be waived, compromised, terminated, or collected in full.

Type of Review: Extension.

Agency: Office of Workers' Compensation Programs.

Title: Overpayment Recovery Questionnaire.

OMB Number: 1240–0051.

Agency Number: OWCP–20.

Affected Public: Individuals and households.

Total Respondents: 1,894.

Total Responses: 1,894.

Time per Response: 1 hour.

Estimated Total Burden Hours: 1,894.

Total Burden Cost (capital/startup): $0.

Total Burden Cost (operating/maintenance): $1,003.

Comments submitted in response to this notice will be summarized and/or included in the request for Office of Management and Budget approval of the information collection request; they will also become a matter of public record.

Dated: January 28, 2019.

Yoon Ferguson,

Agency Clearance Officer, Office of Workers' Compensation Programs, U.S. Department of Labor.

[FR Doc. 2019–00614 Filed 1–31–19; 8:45 am]

BILLING CODE 4510–CR–P

LIBRARY OF CONGRESS

Copyright Office

[Docket No. 2015–7]

Section 512 Study: Announcement of Public Roundtable

AGENCY: U.S. Copyright Office, Library of Congress.

ACTION: Notice of public roundtable.

SUMMARY: The U.S. Copyright Office is conducting a study to evaluate the impact and effectiveness of the Copyright Act's safe harbor provisions for online service providers. At this time, the Office is announcing that it will hold a one-day public roundtable to allow interested members of the public to address relevant domestic and international developments that have occurred since the close of the written comment period on February 6, 2017. The roundtable is not intended to allow participants to supplement the record with respect to events occurring before that date, and discussion will be limited to the specific topics set forth in this notice.

DATES: The public roundtable will be held on April 8, 2019 from 9:00 a.m. to approximately 5:00 p.m.

ADDRESSES: Library of Congress Madison Building, 101 Independence Avenue SE, Washington, DC 20540.

FOR FURTHER INFORMATION CONTACT: Cindy Abramson, Assistant General Counsel, at *ciab@copyright.gov;* Kevin Amer, Senior Counsel for Policy and International Affairs, at *kamer@copyright.gov;* or Kimberley Isbell, Senior Counsel for Policy and International Affairs, at *kisb@copyright.gov.* Each may be reached by telephone at 202–707–8350.

SUPPLEMENTARY INFORMATION:

I. Background

Enacted in 1998 as part of the Digital Millennium Copyright Act (''DMCA''), section 512 of Title 17 provides a system for copyright owners and internet service providers to address online infringement outside the context of litigation. This system includes a series of ''safe harbors'' through which an eligible service provider can limit its liability for copyright infringement by complying with certain requirements, generally consisting of implementing measures to expeditiously address online infringement.

At Congress's request, the U.S. Copyright Office is conducting a study to assess the impact and effectiveness of section 512. The Office published an initial Notice of Inquiry on December 31, 2015, seeking written comments to thirty questions covering eight categories of topics.[1] The Office received over 92,000 written submissions in response. Subsequently, in May 2016, the Office held two-day public roundtables in New York and San Francisco. The Office published a second Notice of Inquiry on November 8, 2016, seeking written comments to sixteen questions covering four topics, in addition to inviting the submission of empirical research studies assessing the operation of the safe harbor provisions

[1] *See* Section 512 Study: Notice and Request for Public Comment, 80 FR 81862 (Dec. 31, 2015).

on a quantitative or qualitative basis.[2] The Office received seventy-nine written comments and nine empirical studies in response. Information about the study, including the Notices of Inquiry, public comments, and transcripts of the public roundtables, may be accessed on the Copyright Office website at *https://www.copyright.gov/policy/section512/.*

The Office is now announcing that it will convene an additional roundtable to enable interested members of the public to address relevant domestic and foreign developments that have occurred since the close of the written comment period on February 6, 2017. Specifically, the roundtable will consider the following topics: (1) Recent domestic case law interpreting provisions of the DMCA safe harbor framework and (2) recent international legal and policy developments related to addressing liability for infringing content online.

Recent domestic case law has addressed various aspects of section 512. For example, in *BMG Rights Management (US) LLC* v. *Cox Communications, Inc.,* the U.S. Court of Appeals for the Fourth Circuit considered whether Cox reasonably implemented its repeat infringer policy for purposes of section 512(a). The court held that Cox failed to implement its policy in ''any consistent or meaningful way—leaving it essentially with no policy''—and thus could not qualify for the section 512(a) safe harbor.[3] Additionally, the U.S. Court of Appeals for the Ninth Circuit in *Mavrix Photographs LLC* v. *LiveJournal Inc.* held that there were genuine issues of material fact as to whether volunteer moderators who reviewed user-submitted content were agents of the service provider—an issue relevant to the provider's eligibility for the safe harbor protection under section 512(c).[4] Participants may discuss these cases as well as other recent domestic case law developments during the roundtable. The Office previously identified case law as a key issue in this study and is interested in stakeholder views as to whether recent cases indicate any emerging trends.

Since 2017, several other countries also have addressed issues of copyright infringement and online service provider liability. For example, in Europe, work towards a possible new Directive on Copyright in the Digital Single Market has been underway since 2016.[5] In September 2018, the European Parliament voted to approve a proposed Directive on Copyright in the Digital Single Market that, among other changes, would establish new obligations for online service providers that store and give public access to copyrighted works uploaded by users and that optimize and promote such works for profit-making purposes.[6] Further negotiations on the text via a ''trilogue'' process of negotiations between the European Commission, the European Parliament, and the Council of the European Union, are underway.[7] In addition, the Australian Parliament recently passed an amendment to its copyright law that provides copyright owners with additional tools to enforce their rights regarding infringing content online, including injunctions to block domain names.[8] The Office is aware that such proposals have generated widespread debate, with stakeholders expressing a variety of views concerning the potential implications for copyright owners, online service providers, and members of the public. At the roundtable, participants are invited to identify and discuss recent law and policy developments in other countries that bear on issues related to the effectiveness, ineffectiveness, and/or other impacts on online service provider liability.

II. Roundtable Subjects of Inquiry

The public roundtable will consist of two sessions: (1) Domestic case law developments since 2017 interpreting the section 512 safe harbors and (2) international legal and policy developments since 2017 relating to online service provider liability. The roundtable is not intended as an opportunity to supplement the written record with respect to matters outside these categories, and discussion will be limited to developments that have occurred after the close of the written comment period on February 6, 2017. The Copyright Office will not accept any written materials prior to or on the day of the roundtable. The sessions will be video recorded and transcribed, and copies of the recording and transcript will be made available on the Copyright Office website.

Members of the public who seek to participate in the roundtable should complete and submit the form available on the Copyright Office website at *https://www.copyright.gov/policy/section512/* no later than March 15, 2019. If you are unable to access a computer or the internet, please contact the Office using the contact information above for special instructions. Individuals selected for participation will be notified directly by the Office not later than March 29, 2019. In order to accommodate the expected level of interest, the Office expects to assign no more than one representative per organization to each session.

The roundtable hearing room will have a limited number of seats for participants and observers. For persons who wish to observe one or more of the roundtable sessions, the Office will provide public seating on a first-come, first-served basis on the day of the roundtable.

Dated: January 28, 2019.

Regan A. Smith,

General Counsel and Associate Register of Copyrights.

[FR Doc. 2019–00573 Filed 1–31–19; 8:45 am]

BILLING CODE 1410–30–P

[2] *See* Section 512 Study: Request for Additional Comments, 81 FR 78636 (Nov. 8, 2016).

[3] *BMG Rights Mgmt. (US) LLC* v. *Cox Commc'ns, Inc.,* 881 F.3d 293, 303–05 (4th Cir. 2018).

[4] *Mavrix Photographs LLC* v. *LiveJournal Inc.,* 873 F.3d 1045, 1054–57 (9th Cir. 2017).

[5] *Proposal for a Directive of the European Parliament and of the Council on Copyright in the Digital Single Market,* COM(2016) 593 final (Sept. 14, 2016).

[6] Amendments Adopted by the European Parliament on 12 September 2018 on the Proposal for a Directive of the European Parliament and of the Council on Copyright in the Digital Single Market, P8_TA–PROV(2018)0337, art. 2, ¶ 1, pt. 4b; art. 13 (Sept. 12, 2018).

[7] A trilogue meeting scheduled for January 21, 2019 was postponed as proposed compromise text was rejected by several countries. *See, e.g.,* Samuel Stolton, *Copyright directive faces further setback as final trilogue postponed,* EURACTIV (Jan. 21, 2019) *https://www.euractiv.com/section/digital/news/copyright-directive-faces-further-setback-as-final-trilogue-cancelled/.*

[8] Explanatory Memorandum, Copyright Amendment (Online Infringement) Bill 2018. (Austl.), *https://parlinfo.aph.gov.au/parlInfo/search/display/display.w3p;query=Id:%22legislation/ems/r6209_ems_b5e338b6-e85c-4cf7-8037-35f13166ebd4%22.*

LIBRARY OF CONGRESS

Copyright Royalty Board

[Docket No. 18–CRB–0015–AU (Educational Media Foundation)]

Notice of Intent To Audit

AGENCY: Copyright Royalty Board (CRB), Library of Congress.

ACTION: Public notice.

SUMMARY: The Copyright Royalty Judges announce receipt of a notice of intent to audit the 2015, 2016, and 2017 statements of account submitted by noncommercial webcaster Educational Media Foundation concerning royalty payments it made pursuant to a statutory license.

ADDRESSES: *Docket:* For access to the docket to read background documents, go to eCRB, the Copyright Royalty Board's electronic filing and case

APPENDIX B SECTION 512 STUDY ROUNDTABLE AGENDAS: NEW YORK, CALIFORNIA, AND WASHINGTON, DC

U.S. COPYRIGHT OFFICE

Section 512 Study

Thurgood Marshall United States Courthouse
New York, New York

Monday, May 2, 2016

9:00 – 10:30 AM

SESSION 1

Notice-and-Takedown Process—Identification of Infringing Material and Notice Submission

Overall effectiveness of process, including issues relating to timing and linked content; volume of notices; burdens on large- and small-scale creators and copyright owners; considerations and strategies in sending notices, including automated notices versus human review; fair use considerations; moral rights issues; "whack-a-mole" issue; relevant empirical data; and other pertinent issues.

Sandra Aistars	Arts and Entertainment Advocacy Clinic, George Mason University School of Law
Jonathan Band	Amazon
Richard Burgess	American Association of Independent Music
Stephen Carlisle	Nova Southeastern University
Alisa Coleman	ABKCO Music & Records, Inc.
Patrick Flaherty	Verizon
Kathy Garmezy	Directors Guild of America
Melvin Gibbs	Content Creators Coalition
Lisa Hammer	Independent Film Director
George Johnson	Geo Music Group
David Kaplan	Warner Brothers Entertainment Inc.
Natalie Madaj	National Music Publishers' Association
Michael Michaud	Channel Awesome, Inc.
Eugene Mopsik	American Photographic Artists
Janice Pilch	Rutgers University Libraries
Deborah Robinson	Viacom
Steven Rosenthal	McGraw-Hill Education
Maria Schneider	Musician
Samantha Schonfeld	Amplify Education Holding
Ellen Schrantz	Internet Association
Lisa Shaftel	Graphic Artists Guild
Victoria Sheckler	Recording Industry Association of America
Kate Viar*	Amazon

* Not present for panel

10:30 – 10:45 AM BREAK

10:45 AM – 12:15 PM

SESSION 2

Notice-and-Takedown Process—Service Provider Response and Counter-Notifications

Handling of and response to notices, including timing and notices from high-volume senders; sending and handling of counter-notifications; volume of notices and counter-notifications; costs and burdens on large- and small-scale service providers; role of automation, including filtering technologies; noncompliant notices and misuse of notice process; rejection of notices; impact of takedowns on users and public; protections for fair use; relevant empirical data; and other pertinent issues.

Perry Bashkoff	WEA Digital & Revenue Development
Rhonda Blakey*	BMG Rights Management
Andrew Bridges	Fenwick & West LLP
Kate Dean*	U.S. Internet Service Provider Association
Damon DiMarco	Author
Adrienne Fields	Artists Rights Society
Elizabeth Townsend Gard*	Tulane University Law School
Michael Housley	Viacom
Hillary Johnson	Author
Marcie Kaufman	Ithaka/Artstor
Thomas Kennedy	American Society of Media Photographers
Mickey Osterreicher	National Press Photographers Association
Marc Ostrow	Law Offices of Marc D. Ostrow
Jennifer Pariser	Motion Picture Association of America
Rebecca Prince	Becky Boop
Jay Rosenthal	ESL Music/ESL Music Publishing
Kevin Rupy	USTelecom
Brianna Schofield	University of California-Berkeley School of Law
Kerry Sheehan	Public Knowledge
Rebecca Tushnet	Organization for Transformative Works
Michael Weinberg	Shapeways
Charlyn Zlotnik	Photographer

*Not present for panel

12:15 – 1:30 PM LUNCH (ON YOUR OWN)

1:30 – 3:00 PM

SESSION 3

Applicable Legal Standards

Actual and "red flag" knowledge requirements; financial benefit/right to control test; willful blindness; repeat infringers; good-faith requirements; misrepresentation; fair use; use of representative lists; availability of injunctive relief; use of subpoenas; role of "standard technical measures"; and other pertinent issues.

Allan Adler	Association of American Publishers
Todd Anten	Quinn Emanuel Urquhart & Sullivan LLP
Jonathan Band	Library Copyright Alliance
June Besek	Kernochan Center for Law, Media and the Arts, Columbia Law School
Sarah Deutsch	Mayer Brown
Joseph DiMona	Broadcast Music, Inc.
Troy Dow	Disney
Jim Halpert	DLA Piper
Terry Hart	Copyright Alliance
David Jacoby	Sony Music Entertainment

George Johnson	Geo Music Group
Bruce Joseph	Wiley Rein LLP
Marcie Kaufman	Ithaka/Artstor
Christopher Mohr	Software & Information Industry Association
Marc Ostrow	Law Offices of Marc D. Ostrow
Michael Petricone	Consumer Technology Association
Rebecca Prince	Becky Boop
Mary Rasenberger	Authors Guild
Samantha Schonfeld	Amplify Education Holding
Kerry Sheehan	Public Knowledge

3:00 – 3:15 PM BREAK

3:15 – 4:45 PM

SESSION 4

Scope and Impact of Safe Harbors

Scope of entities and activities covered by safe harbors; incentives (and disincentives) for creators, copyright owners, online providers, investors, and users; impact on licensing activities; effectiveness of remedies, including ability to proceed in federal court in case of disputed notice or misrepresentation; economic impact on creators, copyright owners, service providers and copyrighted works; relevant empirical data; and other pertinent issues.

Allan Adler	Association of American Publishers
Sandra Aistars	Arts and Entertainment Advocacy Clinic, George Mason University School of Law
Matthew Barblan	Center for the Protection of Intellectual Property
Rhonda Blakey*	BMG Rights Management
Sarah Deutsch	Mayer Brown
Joseph DiMona	Broadcast Music, Inc.
Troy Dow	Disney
Sarah Feingold	Etsy, Inc.
Adrienne Fields	Artists Rights Society
Patrick Flaherty	Verizon
David Korzenik*	Miller Korzenik Sommers Rayman LLP
Natalie Madaj	National Music Publishers' Association
Michael Petricone	Consumer Technology Association
Maria Schneider	Musician
Ellen Schrantz	Internet Association
Matthew Schruers	Computer & Communications Industry Association
Rebecca Tushnet	Organization for Transformative Works
Jeff Walker	Sony Music Entertainment
Michael Weinberg	Shapeways
Lisa Willmer	Getty Images

*Not present for panel

Tuesday, May 3, 2016

9:00 – 10:30 AM

SESSION 5

Technological Strategies and Solutions

Infringement monitoring tools and services; automated sending of notices, including notice parameters; automated processing of notices; role of human review; identification of works through fingerprinting, hash identifiers, and other technologies; filtering, including "staydown" capabilities; fair use considerations; identification and tracking of repeat infringers; and other pertinent issues.

Jonathan Band	Library Copyright Alliance
Sofia Castillo	Association of American Publishers
Elizabeth Townsend Gard*	Tulane University Law School
Jim Halpert	DLA Piper
Michael Housley	Viacom
Sarah Howes	Copyright Alliance
David Kaplan	Warner Brothers Entertainment Inc.
Eugene Mopsik	American Photographic Artists
Michael Petricone	Consumer Technology Association
Casey Rae	Future of Music Coalition
Steven Rosenthal	McGraw-Hill Education
Maria Schneider	Musician
Brianna Schofield	University of California-Berkeley School of Law
Matthew Schruers	Computer & Communications Industry Association
Lisa Shaftel	Graphic Artists Guild
Victoria Sheckler	Recording Industry Association of America
Howie Singer	Warner Music Group
Kate Viar*	Amazon
Lisa Willmer	Getty Images
Nancy Wolff	Digital Media Licensing Association

* Not present for panel

10:30 – 10:45 AM BREAK

10:45 AM – 12:15 PM

SESSION 6

Voluntary Measures and Industry Agreements

Voluntary alternatives to and modifications of statutory notice-and-takedown process; best practices; collaborative efforts of content owners, service providers and others to address online infringement, including availability of programs to smaller service providers and creators; cooperation in identifying infringers; graduated response programs to address infringement; efforts to delist or downgrade infringing materials within online search results; participation of third-party providers, such as advertisers and payment processors, in voluntary arrangements; overall effectiveness of voluntary arrangements; educational outreach; government role in encouraging private solutions; and other pertinent issues.

Jonathan Band	Library Copyright Alliance
Gregory Barnes	Digital Media Association
Kate Dean*	U.S. Internet Service Provider Association
Troy Dow	Disney
John Garry	Pearson Education
Melvin Gibbs	Content Creators Coalition
Terry Hart	Copyright Alliance
Wayne Josel	American Society of Composers, Authors and Publishers
Thomas Kennedy	American Society of Media Photographers
Lee Knife*	Digital Media Association
Jennifer Pariser	Motion Picture Association of America
Michael Petricone	Consumer Technology Association
Janice Pilch	Rutgers University Libraries
Casey Rae	Future of Music Coalition
Mary Rasenberger	Authors Guild
Maria Schneider	Musician
Victoria Sheckler	Recording Industry Association of America
Kerry Sheehan	Public Knowledge
Lui Simpson	Association of American Publishers
Rebecca Tushnet	Organization for Transformative Works
Nancy Wolff	Digital Media Licensing Association

* Not present for panel

12:15 – 1:30 PM LUNCH (ON YOUR OWN)

1:30 – 3:00 PM

SESSION 7

Future of Section 512

General trends, including notice volume and other relevant empirical data; scalability and future viability of section 512 notice-and-takedown system; relevant technological developments; impact of international models and norms; overall balance (or imbalance) of system with respect to copyright owners, service providers, and consumers; whether system is fulfilling Congress' intended objectives; suggested improvements, including "notice-and-staydown" and enhanced protections against misuse of takedown process; interests of users and the general public; and other pertinent issues.

Matthew Barblan	Center for the Protection of Intellectual Property
Jonathan Band	Amazon
June Besek	Kernochan Center for Law, Media and the Arts, Columbia Law School
William Buckley	FarePlay, Inc.
Stephen Carlisle	Nova Southeastern University
Alisa Coleman	ABKCO Music & Records, Inc.
Sarah Feingold	Etsy, Inc.
Kathy Garmezy	Directors Guild of America
John Garry	Pearson Education
Jim Halpert	DLA Piper
Bruce Joseph	Wiley Rein LLP
Thomas Kennedy	American Society of Media Photographers

David Korzenik	Miller Korzenik Sommers Rayman LLP
Dina LaPolt	LaPolt Law, PC
Michael Michaud	Channel Awesome, Inc.
Christopher Mohr	Software & Information Industry Association
Mickey Osterreicher	National Press Photographers Association
Janice Pilch	Rutgers University Libraries
Kevin Rupy	USTelecom
Darius Van Arman	American Association of Independent Music
Kate Viar*	Amazon

* Not present for panel

3:00 – 3:15 PM BREAK

3:15 – 4:45 PM

Wrap-Up/Open Mic

Panelists from previous sessions and observers may sign up at the roundtable to comment on topics discussed during earlier panels or raise and discuss other pertinent issues.

U.S. COPYRIGHT OFFICE

Section 512 Study

James R. Browning Courthouse
San Francisco, California

Thursday, May 12, 2016

9:00 – 10:30 AM

SESSION 1

Notice-and-Takedown Process—Identification of Infringing Material and Notice Submission

Overall effectiveness of process, including issues relating to timing and linked content; volume of notices; burdens on large- and small-scale creators and copyright owners; considerations and strategies in sending notices, including automated notices versus human review; fair use considerations; moral rights issues; "whack-a-mole" issue; relevant empirical data; and other pertinent issues.

Jordan Berliant	Revelation Management Group
George Borkowski	Recording Industry Association of America
Rebecca Cusey	Arts and Entertainment Advocacy Clinic at George Mason University School of Law
Ron Gard*	Tulane University Law School
Dave Green	Microsoft
Alex Feerst	Medium
Wayne Kramer	Movie Prose
Keith Kupferschmid	Copyright Alliance
Jeff Lyon	Fight for the Future
Brian McNelis	Lakeshore Records
Corynne McSherry	Electronic Frontier Foundation
Braxton Perkins	NBC Universal
Jay Rosenthal	ESL Music/ ESL Music Publishing
Charles Roslof	Wikimedia Foundation
T.J. Stiles	Author
Jennifer Urban	University of California-Berkeley School of Law
Ruth Vitale	Creative Future
Devon Weston	Digimarc
Stephen Worth	Amazon
Betsy Viola Zedek	Disney

* Not present for panel

10:30 – 10:45 AM BREAK

10:45 AM – 12:15 PM

SESSION 2

Notice-and-Takedown Process—Service Provider Response and Counter-Notifications

Handling of and response to notices, including timing and notices from high-volume senders; sending and handling of counter-notifications; volume of notices and counter-notifications; costs and burdens on large- and small-scale service providers; role of automation, including filtering technologies; noncompliant notices and misuse of notice process; rejection of notices; impact of takedowns on users and public; protections for fair use; relevant empirical data; and other pertinent issues.

.

Lila Bailey	Internet Archive
Eric Cady	Independent Film & Television Alliance
Dan Coleman	Modern Works Music Publishing
Carl Crowell	Crowell Law
Deron Delgado	American Association of Independent Music
East Bay Ray	Dead Kennedys (Musician)
Steven Ellerd	Graduate Student
Evan Engstrom	Engine
Cathy Gellis	Digital Age Defense
Joseph Gratz	Durie Tangri LLP
Daphne Keller	Stanford Law School Center for Internet and Society
Peter Midgley	Brigham Young University
Gabriel Miller	Paramount Pictures Corporation
Chris Riley	Mozilla
Ellen Seidler	Fast Girl Films
Ira Siegel	Copyright Enforcement Group Inc.
Jonathan Taplin	USC Annenberg Innovation Lab
Elizabeth Valentina	Fox Entertainment Group
Fred von Lohmann	Google
Devon Weston	Digimarc

12:15 – 1:30 PM LUNCH (ON YOUR OWN)

1:30 – 3:00 PM

SESSION 3

Applicable Legal Standards

Actual and "red flag" knowledge requirements; financial benefit/right to control test; willful blindness; repeat infringers; good-faith requirements; misrepresentation; fair use; use of representative lists; availability of injunctive relief; use of subpoenas; role of "standard technical measures"; and other pertinent issues.

Ian Ballon	Stanford Law School Center for E-Commerce
George Borkowski	Recording Industry Association of America
Andrew Bridges	Fenwick & West LLP
Dan Coleman	Modern Works Music Publishing
Carl Crowell	Crowell Law
Paul Doda	Elsevier
Evan Engstrom	Engine
Alex Feerst	Medium
Cathy Gellis	Digital Age Defense
Devlin Hartline	Center for the Protection of Intellectual Property
Corynne McSherry	Electronic Frontier Foundation
Peter Midgley	Brigham Young University
Tom Murphy	Content Creators Coalition
Ryan Noormohamed	Tulane University Law School
Sean O'Connor	University of Washington (Seattle)

Jeffrey Sedlik	PLUS Coalition
Ellen Schrantz	Internet Association
Ben Sheffner	Motion Picture Association of America
Brian Willen	Wilson Sonsini Goodrich
Stephen Worth	Amazon

3:00 – 3:15 PM BREAK

3:15 – 4:45 PM

SESSION 4

Scope and Impact of Safe Harbors

Scope of entities and activities covered by safe harbors; incentives (and disincentives) for creators, copyright owners, online providers, investors, and users; impact on licensing activities; effectiveness of remedies, including ability to proceed in federal court in case of disputed notice or misrepresentation; economic impact on creators, copyright owners, service providers and copyrighted works; relevant empirical data; and other pertinent issues.

Lila Bailey	Internet Archive
Jordan Berliant	Revelation Management Group
Andrew Bridges	Fenwick & West LLP
Eric Cady	Independent Film & Television Alliance
Rebecca Cusey	Arts and Entertainment Advocacy Clinic at George Mason University School of Law
Paul Doda	Elsevier
East Bay Ray	Dead Kennedys (Musician)
Steven Ellerd	Graduate Student
Dave Green	Microsoft
Devlin Hartline	Center for the Protection of Intellectual Property
Daphne Keller	Stanford Law School Center for Internet and Society
Joshua Lamel	Re:Create
Steve Marks	Recording Industry Association of America
Michael Masnick	Copia Institute
Donald Passman	Gang Tyre Ramer & Brown, Inc.
Jeffrey Sedlik	PLUS Coalition
Ellen Schrantz	Internet Association
Jonathan Taplin	USC Annenberg Innovation Lab
Elizabeth Valentina	Fox Entertainment Group
Brian Willen	Wilson Sonsini Goodrich

Friday, May 13, 2016

9:00 – 10:30 AM

SESSION 5

Technological Strategies and Solutions

Infringement monitoring tools and services; automated sending of notices, including notice parameters; automated processing of notices; role of human review; identification of works through fingerprinting, hash identifiers, and other technologies; filtering, including "staydown" capabilities; fair use considerations; identification and tracking of repeat infringers; and other pertinent issues.

Scott Andrews	eBay, Inc.
Ron Gard*	Tulane University Law School
Joseph Gratz	Durie Tangri LLP
Daphne Keller	Stanford Law School Center for Internet and Society
Keith Kupferschmid	Copyright Alliance
Jeff Lyon	Fight for the Future
Dean Marks	Motion Picture Association of America
Brian McNelis	Lakeshore Records
Gabriel Miller	Paramount Pictures Corporation
Tom Murphy	Content Creators Coalition
Braxton Perkins	NBC Universal
Chris Riley	Mozilla
Tony Rodriguez	Digimarc
Charles Roslof	Wikimedia Foundation
Jeffrey Sedlik	PLUS Coalition
Ellen Seidler	Fast Girl Films
Jonathan Taplin	USC Annenberg Innovation Lab
Jennifer Urban	University of California-Berkeley School of Law
Fred von Lohmann	Google
Betsy Viola Zedek	Disney

* Not present for panel

10:30 – 10:45 AM BREAK

10:45 AM – 12:15 PM

SESSION 6

Voluntary Measures and Industry Agreements

Voluntary alternatives to and modifications of statutory notice-and-takedown process; best practices; collaborative efforts of content owners, service providers and others to address online infringement, including availability of programs to smaller service providers and creators; cooperation in identifying infringers; graduated response programs to address infringement; efforts to delist or downgrade infringing materials within online search results; participation of third-party providers, such as advertisers and payment processors, in voluntary arrangements; overall effectiveness of voluntary arrangements; educational outreach; government role in encouraging private solutions; and other pertinent issues.

Scott Andrews	eBay, Inc.
Alex Feerst	Medium
Dave Green	Microsoft
Devlin Hartline	Center for the Protection of Intellectual Property
Keith Kupferschmid	Copyright Alliance
Jeff Lyon	Fight for the Future
Dean Marks	Motion Picture Association of America
Michael Masnick	Copia Institute
Brian McNelis	Lakeshore Records
Michael Michaud	Channel Awesome, Inc.
Gabriel Miller	Paramount Pictures Corporation
Tom Murphy	Content Creators Coalition
Sean O'Connor	University of Washington (Seattle)
Tony Rodriguez	Digimarc
Jeffrey Sedlik	PLUS Coalition
Ira Siegel	Copyright Enforcement Group Inc.
T.J. Stiles	Author
Jennifer Urban	University of California-Berkeley School of Law
Ruth Vitale	Creative Future
Fred von Lohmann	Google

12:15 – 1:30 PM LUNCH (ON YOUR OWN)

1:30 – 3:00 PM

SESSION 7

Future of Section 512

General trends, including notice volume and other relevant empirical data; scalability and future viability of section 512 notice-and-takedown system; relevant technological developments; impact of international models and norms; overall balance (or imbalance) of system with respect to copyright owners, service providers, and consumers; whether system is fulfilling Congress' intended objectives; suggested improvements, including "notice-and-staydown" and enhanced protections against misuse of takedown process; interests of users and the general public; and other pertinent issues.

Ian Ballon*	Stanford Law School Center for E-Commerce
Eric Cady	Independent Film & Television Alliance
Deron Delgado	American Association of Independent Music
Paul Doda	Elsevier
Alex Feerst	Medium
Cathy Gellis	Digital Age Defense
Joseph Gratz	Durie Tangri LLP
Joshua Lamel	Re:Create
Corynne McSherry	Electronic Frontier Foundation
Michael Michaud	Channel Awesome, Inc.
Michael Nash	Universal Music Group
Sean O'Connor	University of Washington (Seattle)
Chris Riley	Mozilla
Jay Rosenthal	ESL Music/ ESL Music Publishing

Charles Roslof	Wikimedia Foundation
Ben Sheffner	Motion Picture Association of America
T.J. Stiles	Author
Bob Tourtellotte	FilmMcQueen LLC
Fred von Lohmann	Google
Stephen Worth	Amazon

* Not present for panel

3:00 – 3:15 PM BREAK

3:15 – 4:45 PM

Wrap-Up/Open Mic

Panelists from previous sessions and observers may sign up at the roundtable to comment on topics discussed during earlier panels or raise and discuss other pertinent issues.

U.S. COPYRIGHT OFFICE

Section 512 Study Roundtable

Library of Congress
Montpelier Room

Monday, April 8, 2019

8:50 – 9:00 AM

OPENING REMARKS

Karyn A. Temple,
Register of Copyrights and Director, U.S. Copyright Office

9:00 – 10:30 AM

SESSION 1

Domestic Developments

Erich C. Carey	National Music Publishers' Association
Ken Hatfield	Artist Rights Caucus of Local 802 of the American Federation of Musicians
Mike Lemon	Internet Association
Mickey Osterreicher	National Press Photographers Association
Jennifer Pariser	Motion Picture Association of America
Meredith Rose	Public Knowledge
Aws Shemmeri	ImageRights International, Inc.
Robert Winterton	NetChoice
Rasty Turek	Pex
Rebecca L. Tushnet	Organization for Transformative Works
Brian Willen	Wilson Sonsini Goodrich & Rosati

10:30 – 10:45 AM BREAK

10:45 AM – 12:15 PM

SESSION 2

Domestic Developments

Jonathan Band	Library Copyright Alliance
Sofia Castillo	Association of American Publishers
Caleb Donaldson/Brian Carver	Google
Stephen Carlisle	Nova Southeastern University
Kenneth L. Doroshow	Recording Industry Association of America
Douglas T. Hudson	Etsy
Keith Kupferschmid	Copyright Alliance
Arthur Levy	Association of Independent Music Publishers
Peter Midgley	Brigham Young University
Sasha Moss	R Street Institute
Mary Rasenberger	Authors Guild

12:15 – 1:00 PM LUNCH

1:00 – 2:30 PM **SESSION 3** Domestic Developments	Richard James Burgess	American Association of Independent Music
	Alex Feerst	Medium
	Devlin Hartline	Center for the Protection of Intellectual Property, Antonin Scalia Law School, George Mason University
	Catherine Gellis	The Copia Institute
	Eric Goldman	Santa Clara University School of Law
	Joseph Gratz	Durie Tangri LLP
	Jared Polin	FroKnowsPhoto
	Tamber Ray	NTCA — The Rural Broadband Association
	Robert Schwartz	Consumer Technology Association
	Christian Troncoso	Business Software Alliance
	Kate Tummarello	Engine
	Ping Wang	Freelancer/writer
	Nancy Wolff	Digital Media Licensing Association

2:30 – 2:45 PM BREAK

2:45 – 4:30 PM **SESSION 4** International Developments	Stan Adams	Center for Democracy & Technology
	Eric Cady	Independent Film & Television Alliance
	Danielle Coffey	News Media Alliance
	Alec French	Thorsen French Advocacy
	Ashley Friedman	Information Technology Industry Council
	Joshua Lamel	Re:Create
	Carlo Scollo Lavizzari	International STM Association
	Stan McCoy	Motion Picture Association EMEA
	Corynne McSherry	Electronic Frontier Foundation
	Katherine Oyama	Google
	Christopher Randle	Facebook
	Steven Rosenthal	McGraw-Hill Education
	Matthew Schruers	Computer and Communications Industry Association
	Lui Simpson	Association of American Publishers
	Sherwin Siy	Wikimedia Foundation
	Abby Vollmer	GitHub
	Rachel Wolbers	Engine

4:30 – 6:00 PM

OPEN MIC

APPENDIX C GLOSSARY OF TERMS AND ACRONYMS

Acronym or Term	Full Name
512(a)	An online service provider that serves as a conduit for the automatic transmission of material at the direction of third parties; also known as "mere conduit" service providers or ISPs
512(b)	An online service provider that temporarily stores material that is being transmitted automatically over the internet from one third party to another; also known as "caching" service providers
512(c)	An online service provider that stores material at the direction of a user on the service provider's system or network; also known as "hosting" service providers
512(d)	An online service provider that refers or links users to online sites using information location tools; also known as "linking" or "search" service providers
A2IM	American Association of Independent Music
AAP	Association of American Publishers
ACA	American Cable Association
ACR	Automatic Content Recognition
AFM	American Federation of Musicians
AGCOM	Autorità per la Garanzie nelle Comunicazioni; Italian regulatory authority
AIMP	Association of Independent Music Publishers
AIPLA	American Intellectual Property Law Association
ANA	Association of National Advertisers
APA	American Photographic Artists
ARS	Artists Rights Society
ASMP	American Society of Media Photographers
BMI	Broadcast Music, Inc.
BSA	BSA | The Software Alliance
c3	Content Creators Coalition
CAS	Copyright Alert System
CCI	Center for Copyright Information
CCIA	Computer & Communications Industry Association
CDT	Center for Democracy & Technology
CEG	Copyright Enforcement Group Inc.
CJEU	Court of Justice of the European Union
Content ID	A rights-management system for YouTube
Counter-notice	A notice sent by a user whose material has been removed to the OSP under section 512(g), seeking return of access to the material
CTA	Consumer Technology Association
Cyberlockers	OSPs that provide secure file storage and sharing services for different types of media and data
DGA	Directors Guild of America
DiMA	Digital Media Association
DMCA	Digital Millennium Copyright Act

Acronym or Term	Full Name
DMCA+	DMCA Plus; refers to systems offered by OSPs that go beyond their obligations under the notice-and-takedown system, such as rights-management systems
DMCA Classic	OSPs that operate under traditional notice-and-takedown policies, often ones that receive relatively few takedown notices
DMLA	Digital Media Licensing Association
DNS	Domain Name System; protocol for resolving domain names to their corresponding IP addresses
DSM Copyright Directive	Directive EU 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
EFF	Electronic Frontier Foundation
Fair Use Principles	*Fair Use Principles for User Generated Video Content*; a set of guidelines developed by user advocacy groups to address the free speech impact of content removal and filtering
FMC	Future of Music Coalition
FTA	Free Trade Agreement
GAG	Graphic Artists Guild
Green Paper	Internet Policy Task Force, *Copyright Policy, Creativity, and Innovation in the Digital Economy* (2013)
Hadopi	High Authority for the Diffusion of Works and the Protection of Rights on the Internet; French agency tasked with overseeing the graduated response system
IAB	Interactive Advertising Bureau
IACC	International AntiCounterfeiting Coalition
ICC	Internet Commerce Coalition
IFPI	International Federation of the Phonographic Industry
IFTA	Independent Film & Television Alliance
IITF	Information Infrastructure Task Force
InfoSoc Directive	Directive 2001/29/EC of the European Parliament and of the Council of 22 May 2001 on the Harmonisation of Certain Aspects of Copyright and Related Rights in the Information Society
IP Address	Internet Protocol address; a numerical "address" that identifies each device or server that is connected to a computer network
IPEC	Intellectual Property Enforcement Coordinator
IPO	Intellectual Property Owners Association
IPTF	Department of Commerce's Internet Policy Task Force
ISP	Internet Service Provider: includes mere conduit service providers categorized under section 512(a)
ITIF	Information Technology and Innovation Foundation
JSP	Joint Strategic Plan; written by the Office of the Intellectual Property Coordinator who is charged with developing, with certain federal departments and agencies, the Administration's Joint Strategic Plan on Intellectual Property Enforcement for submission to Congress every three years

Acronym or Term	Full Name
LCA	Library Copyright Alliance
MPAA	Motion Picture Association of America
NIST	National Institute of Standards and Technologies
NMPA	National Music Publishers Association
OSP	Online Service Provider: includes service providers categorized under sections 512(a)–(d)
OTW	Organization for Transformative Works
P2P	Peer-to-Peer: describes a type of file distribution network that allows users to obtain files directly, without using a central server
PK	Public Knowledge
PPA	Professional Photographers of America
QAG	Quality Assurance Guidelines; a set of guidelines developed by the Interactive Advertising Bureau for certification of advertisers
Red Flag Knowledge	Term for when an OSP is "aware of facts or circumstances from which infringing activity is apparent"
RIAA	Recording Industry Association of America
Rights Manager	A rights-management system for Facebook
RIPG	Ringtone Intellectual Property Group
RVO	Reliability Verification Organization; groups approved under Japan's Provider Liability Limitation Act to verify the contents of takedown notices
SIIA	Software & Information Industry Association
SONA	Songwriters of North America
STM	Standard Technical Measures; technical measures used by rightsholders to identify or protect copyrighted content that have been developed pursuant to a multi-industry standards process
Störerhaftung	Translated generally as "breach of duty of care"; German legal doctrine regarding liability of certain OSPs for infringing material
TAG	Trustworthy Accountability Group
Takedown Notice	A notice sent by a rightsholder to an OSP identifying infringing material for removal
TPP	Trans-Pacific Partnership
UGC	User Generated Content; material that is uploaded to an OSP for storage by its users
UGC Principles	*Principles for User Generated Content Services*; a set of guidelines developed by rightsowners and OSPs to address online infringement
UMG	Universal Music Group
URL	Uniform Resource Locator; identifies the location (or address) of a specific resource (such as a webpage or file) on a computer network
USTelecom	United States Telecom Association
WCT	WIPO Copyright Treaty
White Paper	*Intellectual Property And The National Information Infrastructure: The Report Of The Working Group On Intellectual Property Rights* (1995)
Willful Blindness	Term for when an OSP acts deliberately to avoid obtaining actual or red flag knowledge of infringing conduct or material

Acronym or Term	Full Name
WIPO	World Intellectual Property Organization
WMG	Warner Music Group
WPPT	WIPO Performances and Phonograms Treaty

The Register of Copyrights of the United States of America
United States Copyright Office · 101 Independence Avenue SE · Washington, DC 20559-6000

The Honorable Thom Tillis
United States Senate
113 Dirksen Senate Office Building
Washington, DC 20510

December 1, 2021

Dear Senator Tillis:

I am pleased to provide this response to your request for an update on the U.S. Copyright Office's study on issues relating to online publication.[1] As noted in your letter of May 24, 2021, the Office issued a Notification of Inquiry in December 2019 seeking public comment on potential steps that Congress or the Office could take to provide additional guidance to stakeholders regarding the term "publication" as defined in the Copyright Act. Below, the Office summarizes the progress of this study to date, including its procedural history, the significance of publication under U.S. copyright law, recent actions taken by the Copyright Office in this area, and the issues raised in public comments, including proposed statutory and regulatory changes.

I. <u>Study History and Legal Background</u>

A. Notification of Inquiry

The Copyright Act defines publication as "the distribution of copies or phonorecords of a work to the public by sale or other transfer of ownership, or by rental, lease, or lending." It further provides that "[t]he offering to distribute copies or phonorecords to a group of persons for purposes of further distribution, public performance, or public display, constitutes publication. A public performance or display of a work does not of itself constitute publication."[2]

The present study was initiated in response to concerns expressed by many copyright stakeholders regarding the proper application of this definition in the online context. On December 4, 2019, the Office published a Notification of Inquiry ("NOI") seeking perspectives and suggestions regarding possible new regulations interpreting the statutory definition of publication and policy guidance regarding the role that publication should play in copyright law

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[1] *See* Letter from Sen. Thom Tillis, Ranking Member, S. Subcomm. on Courts, Intellectual Prop. & the Internet of the S. Comm. on the Judiciary, to Shira Perlmutter, Register of Copyrights, U.S. Copyright Office, at 1 (May 24, 2021). The letter requested that the Office provide its report by December 1, but we were subsequently advised by Subcommittee staff that an update on the progress of the study may be provided at this time.
[2] 17 U.S.C. § 101 (definition of "publication").

and the registration process.[3] The NOI noted the uncertainty expressed by some registration applicants as to how the term "publication" applies in the online context, as well as a perceived lack of consensus among courts on the issue.[4]

The NOI set out a series of questions concerning potential statutory, regulatory, or other changes that could help to alleviate some of the difficulty in determining a work's publication status. The NOI also invited comment on any other issues relating to online publication that were not addressed by specific questions. The Office received thirty-seven Initial Comments, five Additional Comments, and fourteen Reply Comments to the NOI.[5] The commenters comprised a wide range of stakeholders, from individual creators, to industry trade groups, to academics, to bar association intellectual property groups. In general, the comments indicate that uncertainty as to the meaning of publication is a significant concern for many stakeholders.

Commenters provided examples of situations in which they believe it is unclear whether, or when, a work has been published. For example, the American Bar Association Section of Intellectual Property Law ("ABA-IPL") explained that it is unclear whether uploading one's work to a social media website like Instagram, whose terms of use allow the site to publish the work, constitutes publication.[6] Similarly, the Graphic Artists Guild noted that it can be difficult to discern whether posting a portfolio online is a public display (which is not a publication) or an offer to distribute the copies to others for further distribution or display (which is a publication).[7] The Coalition of Visual Artists posed the following additional hypotheticals:

> Take a common scenario experience[d] by family, portrait, pet, and wedding photographers who frequently distribute images to a family. They may allow them to share the images with the extended family so they can decide if others want to buy prints. Or the photographer may allow the client to distribute pictures, but only to the extended family. Is that [an offering to distribute copies to] a "group of people"? Or does the doctrine of limited publication apply? At what point would a "distribution" take place?[8]

These questions are not merely theoretical. As discussed below, the publication status of a work has significant legal implications, and determining the correct publication status is an essential aspect of the copyright registration process.

B. Legal Implications of Publication

The publication status of a work can have significant legal implications for copyright owners. First, registration of a work before publication or within five years of first publication

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[3] *See generally* Online Publication, 84 Fed. Reg. 66,328 (Dec. 4, 2019) ("NOI").
[4] *Id.*
[5] The comments received in response to the NOI are available at https://www.copyright.gov/rulemaking/online-publication/. The thirty-seven "Initial Comments" and the five "Additional Comments" were submitted prior to the March 19, 2020 deadline to submit initial comments and are referred to in this letter as "Initial Comments."
[6] ABA-IPL Initial Comments at 3.
[7] Graphic Artists Guild Initial Comments at 4–5.
[8] Coalition of Visual Artists Initial Comments at 8.

constitutes *prima facie* evidence of the validity of the copyright and the facts stated on the certificate.[9] Second, if a work is registered within three months of first publication, a copyright owner is eligible to recover attorneys' fees and statutory damages for infringement that began prior to the registration of the work.[10]

Additionally, the date of publication can determine the term of a work's copyright: the term for works made for hire, anonymous works, and pseudonymous works is the shorter of ninety-five years from the date of the work's publication or one-hundred-twenty years from the date of the work's creation.[11] The date of publication can also affect termination rights. Authors of works or their heirs can terminate transfers of copyright that cover the right of publication and were effected after January 1, 1978 during a five-year period that begins at the earlier of thirty-five years from the date of first publication or forty years from the date of the transfer.[12]

Finally, the publication status of a work can also be relevant to a fair use analysis. One factor in that analysis is the "nature of the work," which includes whether the work had previously been published, with the scope of fair use being narrower with respect to unpublished works.[13]

C. Legal Implications of the Nation of First Publication

The place where a work has been published can also have important legal consequences under copyright law. First, whether a work is eligible for copyright protection under U.S. law may depend on whether it is published and, if so, the nation in which it was first published. For example, unpublished, original works of authorship fixed in a tangible medium of expression are eligible for U.S. copyright protection, regardless of the author's nationality or domicile or where the work was created.[14] However, protection of published works depends on various factors, including, but not limited to, whether the author is a national or domiciliary of the United States or a treaty party and whether the work was first published in the United States or a treaty party.[15]

Second, access to the courts may depend on whether a work is considered a United States work or a foreign work, and publication is a key concept in making that determination. Under the Copyright Act, before a copyright owner can bring an action for infringement of a United States work, the Copyright Office must either register or refuse to register the claim to copyright.[16] Registration or refusal is not required for works that are not United States works.[17] An unpublished work is a United States work if all of the authors of the work are nationals,

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[9] 17 U.S.C. § 410(c)
[10] *Id.* § 412.
[11] *Id.* § 302(c).
[12] *Id.* § 203(a)(3).
[13] *See id.* § 107; *Harper & Row Publishers, Inc. v. Nation Enters.*, 471 U.S. 539, 564 (1985).
[14] *See* 17 U.S.C. §§ 102(a), 104(a)
[15] *Id.* § 104(b).
[16] *See* 17 U.S.C. § 411(a); *Fourth Estate Pub. Benefit Corp. v. Wall-Street.com*, 139 S. Ct. 881, 888 (2019).
[17] *See* Berne Convention Implementation Act of 1988, Pub. L. No. 100-568, § 9(b), 102 Stat. 2853, 2859 (1988); *Fourth Estate*, 139 S. Ct. at 891.

domiciliaries, or habitual residents of the United States.[18] Whether a published work is a United States work, however, depends largely on the country in which the work was first published.[19] One unresolved question is whether a work that is accessible worldwide via the internet is considered published simultaneously in all countries. If so, then any work made available in that manner would be considered a United States work for purposes of U.S. copyright law, with the consequence that it must be registered in the United States before the copyright owner can bring an infringement lawsuit in this country.[20] Cases examining this issue in the United States have not been uniformly decided.[21]

Additionally, whether and where a work is published can determine whether a work whose copyright was lost due to failure to comply with formalities or lack of national eligibility is eligible for restoration under U.S. law.[22] And the location of publication impacts the application of the Copyright Act's mandatory deposit requirement. A copyright owner must deposit two copies of most works that are published in the United States with the Copyright Office for the use or disposition of the Library of Congress.[23] That requirement does not apply to non-U.S. works or unpublished works.

D. Importance of Publication Status in the Copyright Registration Process

The distinction between published and unpublished works is woven into many aspects of the Office's registration system. The publication status will determine which application form should be used and the requirements for completing that form. The publication status also determines the proper deposit to submit with an application for registration. For unpublished works, or works first published outside the United States, applicants generally are required to submit one copy of the work with their applications.[24] If the work is published in the United States, applicants generally must submit two copies of the "best edition" to the Office.[25] The

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[18] 17 U.S.C. § 101 (definition of "United States work"). In addition, for unpublished audiovisual works, if all the authors of a work are legal entities headquartered in the United States, the work is a United States work. *Id.*
[19] *See id*.
[20] Although foreign works need not be registered before a suit is brought, they are not exempt from the requirement under section 412 to be registered before infringement (for unpublished works) or within three months of first publication (for published works) in order for their owners to be eligible to recover statutory damages and attorneys' fees. *See, e.g.*, *Chadha v. Chadha*, No. CV 16-3739 (ENV) (AKT), 2020 WL 1031385, at *7 (E.D.N.Y. Mar. 2, 2020); *The Football Ass'n Premier League Ltd. v. YouTube, Inc.*, 633 F. Supp. 2d 159, 162–63 (S.D.N.Y. 2009).
[21] *Compare Kernal Records Oy v. Mosley*, 794 F. Supp. 2d 1355, 1368 (S.D. Fla. 2011) (publication online in Australia is simultaneous publication everywhere), *aff'd on other grounds*, 694 F.3d 1294 (11th Cir. 2012), *with Moberg v. 33T LLC*, 666 F. Supp. 2d 415, 422–24 (D. Del. 2009) (publishing work online in Germany does not constitute simultaneous publication in the United States).
[22] *See* 17 U.S.C. § 104A.
[23] *Id.* § 407(a)–(b).
[24] *See id*. 408(b)(1), (3).
[25] *Id.* § 408(b)(2). If a work is published exclusively online, then the applicant may submit one electronic copy of the work. 37 C.F.R. 202.19 § (c)(5).

publication status of a work also determines how long the Office will preserve the deposit that is submitted with the application.[26]

Publication status is also important when an applicant seeks to use one of the group registration options provided by the Office's regulations.[27] Certain types of works—*e.g.*, photographs,[28] serials,[29] and secure test items[30]—may be registered as a group by submitting a single application and fee. Generally, when an applicant uses a group registration option, each work in the group is considered separately registered.[31] However, the Office's regulations currently require that a group consist entirely either of works that are published or of works that are unpublished.[32]

Many technical aspects of the Office's registration system were designed to account for the publication status of a work. For example, the system assigns a registration number to all of the works in a group, the prefix for which indicates if the work is published or unpublished.[33] The system does not have the capability to assign a "hybrid" prefix for published and unpublished works. Similarly, it does not allow the Office to issue registration certificates or public records that combine published and unpublished works on the same record because it is configured to identify the date or range of dates when works were published and not to provide a publication date for unpublished works.

II. <u>Copyright Office Activities Related to Publication</u>

A. Amicus Curiae Brief Filed in *Unicolors, Inc. v. H&M Hennes & Mauritz, L.P.*

One issue frequently cited in the comments to the NOI was the concern that a copyright registration could be invalidated due to an applicant having made an incorrect determination about the work's publication status.[34] The significance of this issue—as well as the need for any legislative or regulatory remedies—will depend in part on the Supreme Court's decision in *Unicolors, Inc. v. H&M Hennes & Mauritz, L.P.*, which was argued this Term.

Unicolors involves the construction of section 411(b) of the Copyright Act, which states that a certificate of registration satisfies the requirements of the statute even if the certificate

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[26] 17 U.S.C. § 704(d) (deposits for unpublished works must be retained for the full term of the copyright, while deposits for published works must be retained for the "longest period considered practicable and desirable by the Register of Copyrights and the Librarian of Congress.").
[27] *See id.* § 408(c)(1), (2) (authorizing group registrations).
[28] *See* 37 C.F.R. § 202.4(h) (unpublished photographs); *id.* § 202.4(i) (published photographs).
[29] *See id.* § 202.4(d).
[30] *See id.* § 202.4(o).
[31] *See id.* § 202.4(r).
[32] *See, e.g.*, *id.* § 202.4(h)(6) (requiring all photographs registered through a group registration of unpublished photographs to be unpublished); *id.* § 202.4(i)(6) (requiring all photographs registered through a group registration of published photographs to be published).
[33] For example, a prefix could be VA (Visual Arts) or VAU (Visual Arts Unpublished).
[34] *E.g.*, Ass'n of Med. Illustrators ("AMI") Initial Comments at 2; Coalition of Visual Artists Initial Comments at 3-4; Copyright Alliance Initial Comments at 6–7.

contains inaccurate information, unless: "(A) the inaccurate information was included on the application for copyright registration with knowledge that it was inaccurate; and (B) the inaccuracy of the information, if known, would have caused the Register of Copyrights to refuse registration."[35] The question presented in *Unicolors* is whether an applicant's knowledge of the underlying facts, even if it has an erroneous belief as to the legal effect of those facts, is sufficient to constitute "knowledge" of inaccurate information on the application.

The Office worked with the Department of Justice and other federal agencies to prepare an amicus brief to the Supreme Court. The Government's brief argued that when a statement made on a copyright application "reflects the applicant's misunderstanding of pertinent law, the registrant lacks 'knowledge that [the information] was inaccurate,'" and the registration should be considered valid for purposes of allowing the copyright holder to pursue an infringement action.[36] In addition to relying on the text of section 411(b) and other provisions of the Copyright Act and the backdrop against which Congress adopted section 411(b), the Government's position advances the policy interest in ensuring that the registration process does not become a trap for the unwary. The brief notes that "[b]ecause copyright registrants generally are not experts in either copyright law or procedures, treating Section 411(b)(1)(A)'s scienter requirement as inapplicable to mistakes of law could impede enforcement of valid copyrights through civil infringement suits."[37]

If the Court agrees with the Government that an application may not be invalidated where the error in a registration application is based on a genuine mistake of law, then the consequences of making an error with respect to a work's publication status will be diminished. Conversely, a Court ruling that errors based on a mistake of law can invalidate a registration could have significant consequences in litigation. If a registration is invalidated with respect to the work at issue in a litigation, then a plaintiff must submit a new application for registration, and wait until it is issued or refused, before refiling a lawsuit.[38] Having to file a new application after a lawsuit has commenced would likely cause the plaintiff to lose the opportunity to obtain statutory damages and attorneys' fees.[39] Concerns about making an incorrect publication determination may also discourage copyright owners from registering their works until they are certain about the publication status, which could mean they will not register in time to claim statutory damages and attorneys' fees.[40] Should the Court's decision permit this outcome, it may be advisable to consider amending the statute.

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[35] 17 U.S.C. § 411(b)(1).
[36] Brief for the United States as Amicus Curiae Supporting Petitioner at 10, Unicolors, Inc. v. H&M Hennes & Mauritz, L.P., No. 20-915 (U.S. Aug. 10, 2021).
[37] *Id.* at 27.
[38] *See* 17 U.S.C. § 411(a) (requiring registration of United States works, or refusal of registration, before filing lawsuit); *Fourth Estate*, 139 S. Ct. at 892 (application to register not sufficient to satisfy section 411(a)).
[39] *See* 17 U.S.C. § 412 (requiring the effective date of registration to precede the infringement, or be within three months of first publication in order for a plaintiff to be eligible to recover statutory damages and attorneys' fees).
[40] *See* Coalition of Visual Artists Initial Comments at 10 & n.28 (noting that "[t]he challenge of making this determination [*i.e.*, whether a work is published or not] is one of the many frustrating barriers to registration that cause[s] so many to simply forego registration altogether").

The *Unicolors* case was argued on November 8, and is expected to be decided within the first half of 2022. The Office will carefully consider the Court's decision in developing our final conclusions and recommendations in this study.

B. Changes to Copyright Office Materials

Partly in response to comments in this study, the Office has provided additional guidance regarding publication issues in the *Compendium of U.S. Copyright Office Practices* (the "*Compendium*").[41] Commenters indicated that it would be particularly useful to provide guidance targeted to specific types of creators.[42]

For example, the Coalition of Visual Artists explained that many artists are unsure of whether and when a work has been published in cases where copies are provided to a client.[43] The new version of the *Compendium* clarifies that providing copies of a photograph to a client with a license that would permit further distribution or display of the photograph constitutes publication, regardless of whether the client ever further distributes or displays the photograph.[44] Similarly, the Office added the example of an illustrator transmitting a copy of an illustration to a client with the copyright owner's authorization, without imposing any restrictions on the client's ability to disclose that work to the public. The *Compendium* now clarifies that such action would constitute publication.[45] The Office also added several detailed examples to assist applicants in determining whether photographs are published when registering groups of published and unpublished photographs.[46] This updated *Compendium* guidance was targeted at answering some of the most common questions the Office has received regarding publication.

Commenters also requested that the Office provide public guidance regarding publication through other means, including video tutorials, FAQs, and in-application assistance.[47] The Office is currently developing the technological infrastructure for its new copyright registration system, which will include considerable in-application assistance for applicants, including with regard to determining if a work has been published. The Office also will be adding a video regarding publication issues to its Learning Engine video series, which introduces various copyright concepts to the public.[48]

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[41] *See, e.g.*, Entm't Software Ass'n ("ESA") Initial Comments at 5; Motion Picture Ass'n ("MPA") Initial Comments at 1.
[42] *See* AMI Initial Comments at 2; Coalition of Visual Artists Initial Comments at 24–25; Graphic Artists Guild Initial Comments at 3.
[43] Coalition of Visual Artists Initial Comments at 23.
[44] U.S. COPYRIGHT OFFICE, COMPENDIUM OF U.S. COPYRIGHT OFFICE PRACTICES § 1906.1 (3d ed. 2021) ("COMPENDIUM (THIRD)").
[45] *Id.* § 1905.1.
[46] *See id.* §§ 1114.1, 1114.5.
[47] Coalition of Visual Artists Initial Comments at 24; ESA Initial Comments at 5; Graphic Artists Guild Initial Comments at 3.
[48] The Learning Engine videos are available at https://www.copyright.gov/learning-engine/.

III. Public Comments Regarding Possible Statutory and Regulatory Amendments

As noted, the NOI specifically asked about various options that Congress or the Office could consider to clarify the meaning of the term "publication" in the online context. The comments discussing these options are summarized below.

A. Statutory Amendments

1. Amend 17 U.S.C. § 409(8) to Eliminate Requirement to Identify Publication Information in Copyright Applications

The Office solicited public input concerning the statutory requirement to include publication information in a copyright registration application. Specifically, the NOI asked whether "there [is] a need to amend section 409 so that applicants for copyright registrations are no longer required to identify whether a work has been published and/or the date and nation of first publication."[49]

A slight majority of commenters answering this question opposed amending section 409(8).[50] Several groups argued that including publication information in a registration application serves useful functions, including determining term length (in cases of works made for hire and anonymous/pseudonymous works), eligibility for termination, and the copyright owner's entitlement to seek statutory damages and attorneys' fees.[51] Some commenters further argued that the inclusion of publication information can help to resolve disputes prior to litigation.[52] The Committee on Copyright and Literary Property of the New York City Bar Association explained:

> For example, absent a publication date, a defendant will not always know, at least pre-litigation or pre-discovery, if a plaintiff can obtain statutory damages and will not want to just trust a putative plaintiff to explain the applicable facts. Nor would a defendant be able to properly assess any fair use defense under Section 107 of the Copyright Act without a clear designation of the published nature of the registered work. . . . Similarly, the nation of first publication has important

[49] NOI at 66,334.

[50] *See* ABA-IPL Initial Comments at 6; Alliance for Recorded Music ("ARM") Initial Comments at 8; Int'l Assn of Scientific, Technical & Med. Publishers ("STM") Initial Comments at 6; Int'l Trademark Ass'n ("INTA") Initial Comments at 10; MPA Initial Comments at 4–5; Nat'l Music Publishers Ass'n ("NMPA") Initial Comments at 4; N.Y.C. Bar Ass'n Reply Comments at 4–5; *see also* Authors Alliance Initial Comments at 11–12 (arguing that amending statute may be helpful, but is not necessary because Office can issue regulations interpreting publication); ESA Initial Comments at 11–12 (arguing that amendment is not necessary because "[t]he current statute provides the Office enough flexibility to register the copyrights in games with less balkanization by publication status and date").

[51] ABA-IPL Initial Comments at 6; INTA Initial Comments at 10; MPA Initial Comments at 1, 4–5; NMPA Initial Comments at 4; N.Y.C. Bar Ass'n Reply Comments at 4–5.

[52] *See, e.g.*, ABA-IPL Initial Comments at 6; ARM Initial Comments at 8; INTA Initial Comments at 10; MPA Initial Comments at 4-5; NMPA Initial Comments at 4.

> ramifications . . . with respect to choice of law to assess copyrightability and copyright ownership.[53]

Other commenters were in favor of amending the statute, with some offering specific proposals.[54] For example, in separate comments, consulting firm Shaftel & Shmelzer and Linda Kattwinkel suggested eliminating entirely the requirement to identify whether a work has been published and the date and nation of first publication, arguing that it would be preferable for courts to decide these issues if necessary during the course of a lawsuit rather than risk jeopardizing a copyright owner's ability to proceed with an infringement action due to incorrect publication information on an application.[55] The Coalition of Visual Artists, the Digital Media Licensing Association ("DMLA"), and Jennifer Unruh recommended amending section 409(8) to make providing publication status optional.[56] The Authors Guild suggested revising section 409(8) "to apply in cases where that information is indeed needed and not otherwise provided" and replacing the nation of publication requirement with a statement of whether the work was first or simultaneously published 1) outside of the United States by a national of another country, and if so, 2) whether it was first published in a country that has copyright relations with the United States.[57] Other proposals included requiring only the year of the publication rather than the exact date,[58] and treating the date of completion of the final version of an illustrator's or graphic artist's work as the year of publication.[59]

The Office appreciates that eliminating the requirements to provide certain publication information in a registration application would prevent some of the errors that can undermine the validity of a registration. We also recognize, however, the importance of the date and nation of publication for determining the availability of certain remedies and whether the work is a United States work subject to the pre-lawsuit registration requirement.[60] Omitting the publication date from the registration certificate could complicate litigation. The Office continues to consider whether a statutory amendment could be crafted to appropriately balance the concerns on both sides.

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[53] N.Y.C. Bar Ass'n Reply Comments at 5.

[54] *See, e.g.*, AMI Initial Comments at 8–9; Coalition of Visual Artists Initial Comments at 32–33; Linda J. Kattwinkel Initial Comments at 6.

[55] Shaftel & Shmelzer Initial Comments at 19–20; Linda J. Kattwinkel Initial Comments at 6; *see also* Nat'l Writers Union ("NWU") & Am. Photographic Artists ("APA") Initial Comments at 5 (arguing for removal of requirement to provide date and nation of first publication).

[56] Coalition of Visual Artists Initial Comments at 32–33; DMLA Initial Comments at 6; Jennifer L. Unruh Initial Comments at 7.

[57] Authors Guild Initial Comments at 8–9.

[58] Mike Austin Initial Comments at 2 ("Often I only create one illustration for a client and then my contact person has moved on. I can only guess within a couple months of when it was published.").

[59] Shafter & Schmelzer Initial Comments at 6.

[60] *See* 17 U.S.C. § 412 (allowing copyright owners to recover attorneys' fees and statutory damages for pre-registration infringement when registration is made within three months of first publication); *Id.* § 411(a) (requiring a copyright owner to have either registered the work with the Office or had the application refused before commencing an infringement action regarding a United States work).

2. Amend Statutory Definition of Publication in Section 101

The NOI requested comments on whether Congress should clarify the definition of publication in the digital environment.[61] Several commenters opposed any amendment.[62] For example, ARM argued that the current statutory definition is sufficiently clear with respect to sound recordings, and that any amendment could introduce confusion.[63] In its view, the Office should instead focus on clarifying how the definition applies to photographs, articles, and other works that are displayed or transmitted online, which ARM believes to be the chief source of confusion.[64] The Copyright Alliance argued that "[a]ny alteration to the definition of publication could inadvertently broaden, narrow or otherwise alter the interpretation of the term and could present new questions or unintended consequences."[65] STM proposed alternatives to amending the statute, such as requesting that the Office provide further guidance regarding what constitutes online publication that is "respectful of evolving industry standards and best practices."[66]

Other commenters supported amending the definitional language. For example, APA asked the Office to "urge Congress to give 'publication' a plain language definition consistent with its ordinary meaning."[67] The Coalition of Visual Artists "urge[d] revising the definition of publication, even if just to add language clarifying the most troubling scenarios for visual artists . . . including online publication, posting to social media, and delivery to clients and potential clients."[68] Several commenters offered more specific proposals.[69] The Kernochan Center for Law, Media, and the Arts at Columbia Law School ("Kernochan Center") suggested that a work should be considered published in the online context when it is first made available to the public "regardless of whether the access is by download, stream or display (or any combination of these)."[70] Similarly, the Authors Guild proposed that a work should be considered published "if it has been made publicly available— other than solely by public display or performance—provided the making available was authorized by the copyright owner."[71] AIPLA proposed replacing the existing definition with a "practical test" where "'publication' only occurs if a distribution or offer to distribute copies of works is made 'by or under the authority of the copyright owner.'"[72] Shaftel & Schmelzer would define publication as

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[61] NOI at 66,334.
[62] *See, e.g.*, ARM Initial Comments at 5; ESA Initial Comments at 13; Copyright Alliance Initial Comments at 9; MPA Initial Comments at 5; NMPA Initial Comments at 4; N.Y.C. Bar Ass'n Reply Comments at 6.
[63] ARM Initial Comments at 5.
[64] *Id.*; *see also* ESA Initial Comments at 13 (noting that "recent policy discussions of publication issues have largely centered on the online display of photographs and other visual art works").
[65] Copyright Alliance Initial Comments at 9.
[66] STM Initial Comments at 7.
[67] AMA Initial Comments at 4.
[68] Coalition of Visual Artists Initial Comments at 34–35.
[69] *See, e.g.*, Am. Intell. Prop. L. Ass'n ("AIPLA") Initial Comments at 5–6; APA Initial Comments at 4; Coalition of Visual Artists Initial Comments at 34–35; Shaftel & Schmelzer Initial Comments at 21.
[70] Kernochan Center Initial Comments at 6.
[71] Authors Guild Initial Comments at 10.
[72] AIPLA Initial Comments at 5–6.

"a deliberate and intentional act by the creator or rights holder to make the visual work available for distribution, reproduction or sale."[73]

The NOI also sought comment on whether Congress should consider amending the Copyright Act so that a different event, rather than publication, triggers some or all of the legal consequences currently tied to publication.[74] Commenters differed on which events should be considered under this approach. ABA-IPL and DMLA supported adding a "making available" right to the list of exclusive rights of a copyright owner[75] and argued that making a work available would be "an appropriate trigger for some or all of the consequences that currently flow from a work's publication."[76] Jennifer L. Unruh proposed that Congress should amend the Copyright Act to "exclude publication as a triggering event in the case of online works."[77]

Amending the definition of the term "publication" would allow Congress to take into account the vast technological changes that have occurred since the definition was first included in the Copyright Act of 1976. The Office recognizes that evolving technology has made it possible for creators to make their works accessible to the public in many different ways, and that not all of these mechanisms fit neatly into a definition that turns on the distribution of copies. As discussed above, however, the concept of publication is intertwined with many other copyright concepts and requirements in the Copyright Act. The Office is continuing to consider whether amendments to the statutory definition are warranted, and whether any of the solutions proposed by commenters would be beneficial to the registration system in light of the overall goals of copyright.

B. Regulatory Changes

The Office generally requires that separate works be registered using separate applications and filing fees.[78] The Copyright Act, however, provides the Register with authority to create registration options through which multiple works may be registered using one application and fee.[79] The Office has created a number of such options, including for registration of certain collective works along with individual contributions to that collective work, as well as for registration of certain published works that constitute a single "unit of publication."[80] The Office has also created group registration options for serials, newspapers, newsletters, contributions to periodicals, unpublished photographs, published photographs, short online

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[73] Shaftel & Schmelzer Initial Comments at 21.
[74] NOI at 66,334.
[75] *See generally* U.S. COPYRIGHT OFFICE, THE MAKING AVAILABLE RIGHT IN THE UNITED STATES (2016), https://www.copyright.gov/docs/making_available/making-available-right.pdf (assessing the state of U.S. law recognizing and protecting copyright holders' exclusive right of "making available").
[76] ABA-IPL Initial Comments at 6–7; *see* DMLA Initial Comments at 10.
[77] Jennifer L. Unruh Initial Comments at 7.
[78] COMPENDIUM (THIRD) § 511.
[79] 17 U.S.C. § 702 (authorizing the Register to establish regulations not inconsistent with law for the administration of the functions and duties made the responsibility of the Register in Title 17); *see also id.* § 408(c)(2) (requiring the Register to establish regulations specifically permitting a single registration for a group of works first published as contributions to periodicals).
[80] *See* 37 C.F.R. § 202.3(b)(2), (4).

literary works, works on an album of music, secure test items, and automated databases.[81] As discussed above, none of these group registration options permits registration of published and unpublished works through the same application.

In the NOI, the Office asked commenters to consider possible regulatory changes that could minimize the consequences of making an error during the application process as to whether a work is published.[82] As explained above, the Supreme Court's ruling in *Unicolors* may diminish applicants' concerns on this issue. If, however, the Court holds that a copyright registration can be invalidated based on a legal error regarding whether a work is published, regulatory changes that provide greater flexibility to change the publication status of a work after an application is filed may be warranted.

1. Partition Published and Unpublished Works after Registration

The Office asked commenters to consider whether we should issue regulations allowing a group registration to be amended and partitioned, post-registration, into published and unpublished groups.[83] Twenty-three commenters supported such a regulation. One commenter, the New York Intellectual Property Law Association ("NYIPLA"), proposed allowing partition and correction, together with additional or substitute deposit copies as needed, additional fees to cover the costs, and submission of a declaration of good faith, accompanied by details about any prior partitioning.[84] Only one commenter, AIPLA, opposed this proposal. Although it agreed "that certain changes to Copyright Office policies and regulations pertaining to group registration options would go a long way in reducing the considerable harm that genuine confusion regarding publication status can cause for rights holders,"[85] it objected to singling out publication as the only item for which amendments may be made, arguing that doing so "would provide preference for these mistakes over those that may require a new application."[86]

Any consideration of this proposal would need to take into account potential implications of section 408(d), which authorizes the Office to promulgate regulations for supplementary registrations, in order "to correct an error in a copyright registration or to amplify the information given in a registration."[87] If section 408(d) is interpreted to be the sole manner in which the Office can permit registrants to correct an error, the Office would lack authority to adopt the proposed regulation. Section 408(d) also provides that "[t]he information contained in a supplementary registration augments but does not supersede that contained in the earlier registration."[88] Even if the Office could issue regulations permitting post-registration partition,

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[81] *Id.* §§ 202.3(b)(5), 202.4(c-j), (o).
[82] NOI at 66,334.
[83] *Id.* at 66334.
[84] NYIPLA Initial Comments at 3–4.
[85] AIPLA Initial Comments at 3 (citing *Gold Value Int'l Textile, Inc. v. Sanctuary Clothing, Ltd. Liab. Co.*, 925 F.3d 1140, 1148 (9th Cir. 2019)).
[86] *Id.*
[87] 17 U.S.C. § 408(d).
[88] *Id.*; *see also* 37 C.F.R. § 202.6(f)(2) ("[T]he information contained in a supplementary registration augments but does not supersede that contained in the basic registration.").

questions would remain regarding whether the information contained in the partitioned registrations would supersede the earlier information, and what effective date of registration the partitioned registrations should be assigned.

Another difficulty involves the deposit requirements. The Office generally does not permit changing a registered work's status from unpublished to published, because of the different deposit requirements for each type of work. With a few exceptions, an applicant registering an unpublished work must submit one copy of the work with the application; if the work is published, two copies of the best edition of the work are required.[89] The Office would need to build the infrastructure to permit registrants to submit an additional copy of a work post-registration when changing its status from unpublished to published, as the registration system presently does not accommodate such a change.

Finally, there is some concern that a post-registration partition could be misused by applicants to register published and unpublished works together in the initial registration in order to save money, relying on the ability to correct that error during a lawsuit if the information is challenged as erroneous.[90]

2. Group Registration Options for Published and Unpublished Works in a Single Registration

The NOI also invited comment on whether the Office's next-generation registration system should provide an option to register unpublished and published works in a single registration. The Office specifically requested commenters' views regarding the practical and administrative considerations we should take into account in exploring such an option.[91]

Commenters overwhelmingly supported this proposal.[92] Several commenters indicated that permitting published and unpublished works to be registered in the same application would simplify the registration process and decrease costs for applicants. For example, the Copyright Alliance opined that "making this change would be more cost-effective for applicants without imposing an undue burden on the Office, and improve the ease and efficiency of registration."[93]

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[89] 17 U.S.C. §§ 407(a), 408(b)(1), (2). The Office recognizes an exception where the deposit copy requirements for a published work are the same as those needed for an application for an unpublished work, such as for e-books and serials. 37 C.F.R. §§ 202.20(b)(2)(iii)(B), 202.20(c)(2) (listing works for which two deposit copies are not required); *see also* COMPENDIUM (THIRD) § 1107.5(A) (deposit requirements for serials); *id*. § 1507.2 (deposit requirements for electronic publications). In those cases, the deposit requirements are not an impediment to allowing a change in status from unpublished to published on a registration.
[90] *See* NYIPLA Initial Comments at 5.
[91] NOI at 66,334.
[92] *See, e.g.*, Deborah Gerhardt Initial Comments at 14; Jennifer Unruh Initial Comments at 6–7; NMPA Initial Comments at 3–4; Science Fiction & Fantasy Writers of America ("SFWA") Initial Comments at 3; Shaftel & Schmelzer Initial Comments at 15, 18.
[93] Copyright Alliance Initial Comments at 8.

Similarly, the Authors Guild opined that providing applicants with the ability to register both published and unpublished works in one application would "inevitably lead to more registrations."[94]

Permitting registration of published and unpublished works in the same claim would, however, require extensive changes to the existing regulations, technological systems, applications, and deposit retention requirements, which would be costly and time-consuming.[95] Additionally, although a new system might make it easier to change the publication information for works after the Office has issued a group registration, applicants would still be required by statute to distinguish the unpublished works from the published works and to provide publication dates for the latter. Allowing registration of published and unpublished works in the same claim could also impede the goal of encouraging registration of unpublished works before any distribution has occurred.

We are considering the feasibility of these regulatory options as we develop our next-generation registration system. In doing so, we will weigh the potential benefits these changes could provide against the costs and effort they would require in light of our comprehensive modernization goals.

* * * *

In sum, the Office understands the difficulty applicants have in assessing whether their works have been published, and recognizes the importance this determination has in multiple areas of copyright law and practice. We hope that the Supreme Court's decision in *Unicolors* will clarify that an applicant's good faith legal error regarding a work's publication status cannot invalidate a registration in the context of an infringement action, which would address many of the concerns expressed in comments to the NOI.

Regardless of that outcome, however, a broad range of copyright stakeholders find the current statutory definition of publication insufficiently clear, particularly with respect to online works. Commenters provided insightful, but sometimes conflicting, suggestions about whether and how Congress or the Office could provide further clarity. The Office has already taken action to provide additional guidance regarding what constitutes publication, and we will supplement those efforts going forward. The Office also continues to analyze the comments submitted regarding potential statutory and regulatory changes, and to consider the feasibility of commenters' various proposals in light of our current and future technological infrastructure and systems.

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[94] Authors Guild Initial Comments at 7–8; *see also* Copyright Alliance Initial Comments at 8 (suggesting that this option would assuage concerns over making a publication determination).

[95] *See* N.Y.C. Bar Ass'n Reply Comments at 5 (noting the "additional development and administrative costs" that would accompany "develop[ing] the infrastructure necessary to process" applications with published and unpublished works).

Thank you for your attention to this issue. If my staff and I may be of further assistance, please do not hesitate to contact us.

Sincerely,

Shira Perlmutter
Register of Copyrights and Director
U.S. Copyright Office

Syllabus

NOTE: Where it is feasible, a syllabus (headnote) will be released, as is being done in connection with this case, at the time the opinion is issued. The syllabus constitutes no part of the opinion of the Court but has been prepared by the Reporter of Decisions for the convenience of the reader. See *United States* v. *Detroit Timber & Lumber Co.,* 200 U. S. 321, 337.

SUPREME COURT OF THE UNITED STATES

Syllabus

UNICOLORS, INC. *v.* H&M HENNES & MAURITZ, L. P.

CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE NINTH CIRCUIT

No. 20–915. Argued November 8, 2021—Decided February 24, 2022

A valid copyright registration provides a copyright holder with important legal advantages, including the right to bring a "civil action for infringement" of the copyrighted work. 17 U. S. C. §411(a). Petitioner Unicolors, the owner of copyrights in various fabric designs, filed a copyright infringement action against H&M Hennes & Mauritz (H&M). A jury found in favor of Unicolors. H&M sought judgment as a matter of law, arguing that Unicolors could not maintain an infringement suit because Unicolors knowingly included inaccurate information on its registration application, rendering its copyright registration invalid. The alleged inaccuracy stemmed from Unicolors having filed a single application seeking registration for 31 separate works despite a Copyright Office regulation that provides that a single application may cover multiple works only if they were "included in the same unit of publication." H&M argued that Unicolors did not meet this requirement because Unicolors had initially made some of the 31 designs available for sale exclusively to certain customers, while offering the rest to the general public. The District Court determined that because Unicolors did not know when it filed its application that it had failed to satisfy the "single unit of publication" requirement, Unicolors' copyright registration remained valid by operation of the safe harbor provision provided under §411(b)(1)(A). On appeal, the Ninth Circuit determined that it did not matter whether Unicolors was aware that it had failed to satisfy the single unit of publication requirement, because the safe harbor excuses only good-faith mistakes of fact, not law. Unicolors had known the relevant facts, so its knowledge of the law (or lack thereof) was irrelevant.

Held: Section 411(b) does not distinguish between a mistake of law and a mistake of fact; lack of either factual or legal knowledge can excuse

an inaccuracy in a copyright registration under §411(b)(1)(A)'s safe harbor. Pp. 4–9.

(a) The Copyright Act provides that a certificate of registration is valid, even though it contains inaccurate information, as long as the copyright holder lacked "knowledge that it was inaccurate." §411(b)(1)(A). Case law and the dictionary instruct that "knowledge" has historically "meant and still means the fact or condition of being aware of something." *Intel Corp. Investment Policy Comm.* v. *Sulyma*, 589 U. S. ___, ___ (internal quotation marks omitted). Nothing in §411(b)(1)(A) suggests that the safe harbor applies differently simply because an applicant made a mistake of law as opposed to a mistake of fact. If Unicolors was not aware of the legal requirement that rendered information in its application inaccurate, it could not have included the inaccurate information "with knowledge that it was inaccurate." §411(b)(1)(A). Pp. 4–5.

(b) Nearby statutory provisions help confirm that here "knowledge" refers to knowledge of the law as well as the facts. Registration applications call for information that requires both legal and factual knowledge. See, *e.g.*, §409(4) (whether a work was made "for hire"); §409(8) (when and where the work was "published"); §409(9) (whether the work is "a compilation or derivative work"). Inaccurate information in a registration may arise from a mistake of law or a mistake of fact. Nothing in the statutory language suggests that Congress wanted to forgive applicants—many of whom lack legal training—for factual but not (often esoteric) legal mistakes. Moreover, had Congress intended a scienter requirement other than actual knowledge, it would have said so explicitly, as it did in other parts of the Copyright Act. Indeed, cases decided before Congress enacted §411(b) overwhelmingly concluded that inadvertent mistakes on registration certificates—many of which involved mistakes of law—neither invalidated copyright registrations nor disallowed infringement actions. The Court finds no indication that Congress intended to alter this well-established rule when it enacted §411(b). Pp. 5–7.

(c) Those who consider legislative history will find indications that Congress enacted §411(b) to make it easier, not more difficult, for nonlawyers to obtain valid copyright registrations. It did so in part by "eliminating loopholes" that allowed infringers to exploit mistakes in the application process to prevent enforcement of otherwise validly registered copyrights. H. R. Rep. No. 110–617, p. 20. Given this history, it would make no sense if §411(b) left copyright registrations exposed to invalidation based on applicants' good-faith misunderstandings of the details of copyright law. P. 7.

(d) H&M's remaining arguments are unavailing. First, the Court's interpretation of the statute will not allow copyright holders to avoid

the consequences of an inaccurate application by claiming lack of knowledge. As in other legal contexts, courts need not automatically accept a copyright holder's claim that it was unaware of the relevant legal requirements. Willful blindness may support a finding of actual knowledge. Additionally, circumstantial evidence may demonstrate that an applicant was actually aware of, or willfully blind to, legally inaccurate information. Second, the legal maxim that "ignorance of the law is no excuse" does not apply in this civil case concerning the scope of a statutory safe harbor that arises from ignorance of collateral legal requirements. Finally, the "knowledge" question that the parties have argued, and which the Court decides, was a "subsidiary question fairly included" in the petition's question presented. See this Court's Rule 14.1(a). And the Ninth Circuit explicitly addressed the knowledge issue when it held that Unicolors' "knowledge" of the facts underlying the inaccuracy on its application was sufficient to demonstrate knowledge under §411(b)(1)(A) without regard to Unicolors' knowledge of the relevant law. Pp. 8–9.

959 F. 3d 1194, vacated and remanded.

BREYER, J., delivered the opinion of the Court, in which ROBERTS, C. J., and SOTOMAYOR, KAGAN, KAVANAUGH, and BARRETT, JJ., joined. THOMAS, J., filed a dissenting opinion, in which ALITO, J. joined, and in which GORSUCH, J. joined, except as to Part II.

NOTICE: This opinion is subject to formal revision before publication in the preliminary print of the United States Reports. Readers are requested to notify the Reporter of Decisions, Supreme Court of the United States, Washington, D. C. 20543, of any typographical or other formal errors, in order that corrections may be made before the preliminary print goes to press.

SUPREME COURT OF THE UNITED STATES

No. 20–915

UNICOLORS, INC., PETITIONER *v.*
H&M HENNES & MAURITZ, L. P.

ON WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE NINTH CIRCUIT

[February 24, 2022]

JUSTICE BREYER delivered the opinion of the Court.

A valid copyright registration provides a copyright holder with important and sometimes necessary legal advantages. It is, for example, a prerequisite for bringing a "civil action for infringement" of the copyrighted work. 17 U. S. C. §411(a). Additionally, a plaintiff in an infringement action normally cannot obtain an award of statutory damages or attorney's fees for infringement that occurred prior to registration. §412.

To obtain registration, the author of a work must submit to the Register of Copyrights a copy of the work and an application. §§408, 409. The application must provide information about the work. §409. Some of this information is purely factual, but some of it incorporates legal conclusions. *Ibid.* If the Register determines that the work is copyrightable and meets other statutory requirements, she will issue a certificate of registration. §410(a). The information on this certificate reflects the information that the copyright holder provided on the application. *Ibid.*

Naturally, the information provided on the application for registration should be accurate. Nevertheless, the Copyright Act provides a safe harbor. It says that a certificate

of registration is valid

> "regardless of whether the certificate contains any inaccurate information, unless—
>
> "(A) the inaccurate information was included on the application for copyright registration *with knowledge that it was inaccurate*; and
>
> "(B) the inaccuracy of the information, if known, would have caused the Register of Copyrights to refuse registration." §411(b)(1) (emphasis added).

The important point for our purposes is that a certificate of registration is valid even though it contains inaccurate information, as long as the copyright holder lacked "knowledge that it was inaccurate." §411(b)(1)(A).

The question before us concerns the scope of the phrase "with knowledge that it was inaccurate." The Court of Appeals for the Ninth Circuit believed that a copyright holder cannot benefit from the safe harbor and save its copyright registration from invalidation if its lack of knowledge stems from a failure to understand the law rather than a failure to understand the facts. In our view, however, §411(b) does not distinguish between a mistake of law and a mistake of fact. Lack of knowledge of either fact or law can excuse an inaccuracy in a copyright registration. We therefore vacate the Court of Appeals' contrary holding.

I

The petitioner here, Unicolors, owns copyrights in various fabric designs. App. 50–51. It sued the respondent, H&M Hennes & Mauritz, L.P. (H&M), for copyright infringement. 959 F. 3d 1194, 1195 (CA9 2020). The jury found in Unicolors' favor, but H&M asked the trial court to grant it judgment as a matter of law. *Id.,* at 1196–1197. H&M argued, among other things, that Unicolors' registration certificate was invalid (and that therefore Unicolors

could not sue for infringement) because it contained inaccurate information. *Id.,* at 1197–1198; see also §411(a). Specifically, H&M argued that Unicolors' registration certificate was inaccurate because Unicolors had improperly filed a single application seeking registration for 31 separate works. App. 91–92, 170–172. H&M relied on a Copyright Office regulation, which provides that a single registration can cover multiple works *only if those works were "included in the same unit of publication." Id.,* at 170 (emphasis added); 37 CFR §202.3(b)(4) (2020). H&M argued that the 31 fabric designs covered by Unicolors' single application (and therefore single registration) had not been published as a single unit of publication because Unicolors had initially made some of the designs available for sale exclusively to certain customers, while other designs were immediately available to the general public. App. 170–171. Because the first statutory requirement for invalidating Unicolors' registration (a knowing inaccuracy) was satisfied, H&M argued, the District Court should move to the second requirement and ask the Register of Copyrights whether it would have refused to register Unicolors' copyright if it had been aware of the inaccuracy. *Id.,* at 172–173; see also §§411(b)(1)(B), (b)(2).

The District Court denied H&M's motion. *Id.,* at 202. Among other things, it noted that "a registration remains effective despite containing inaccurate information" if the registrant included the inaccurate information in the registration application without "knowledge that it was inaccurate." *Id.,* at 180–181 (internal quotation marks omitted). Because Unicolors did not know that it had failed to satisfy the "single unit of publication" requirement when it filed its application, the purported inaccuracy could not invalidate the registration. *Id.,* at 182.

The Ninth Circuit disagreed. It agreed with H&M that Unicolors had failed to satisfy the "single unit of publication" requirement (because it offered some of the 31 designs

exclusively to certain customers). 959 F. 3d, at 1198–1200. But did Unicolors *know* about this inaccuracy? In the Ninth Circuit's view, it did not matter whether Unicolors did or did not know that it had failed to satisfy the "single unit of publication" requirement. *Id.,* at 1200. That was because, in the Ninth Circuit's view, the statute excused only good-faith mistakes of fact, not law. *Ibid.* And Unicolors had known the relevant facts, namely, that some of the 31 designs had initially been reserved for certain customers. *Ibid.*

Unicolors sought certiorari, asking us to review the Ninth Circuit's interpretation of §411(b)(1)(A). We granted the petition.

II

A brief analogy may help explain the issue we must decide. Suppose that John, seeing a flash of red in a tree, says, "There is a cardinal." But he is wrong. The bird is not a cardinal; it is a scarlet tanager. John's statement is inaccurate. But what kind of mistake has John made?

John may have failed to see the bird's black wings. In that case, he has made a mistake about the brute facts. Or John may have seen the bird perfectly well, noting all of its relevant features, but, not being much of a birdwatcher, he may not have known that a tanager (unlike a cardinal) has black wings. In that case, John has made a labeling mistake. He saw the bird correctly, but does not know how to label what he saw. Here, Unicolors' mistake is a mistake of labeling. But unlike John (who might consult an ornithologist about the birds), Unicolors must look to judges and lawyers as experts regarding the proper scope of the label "single unit of publication." The labeling problem here is one of law. Does that difference matter here? Cf. *United States* v. *Fifty-Three (53) Eclectus Parrots*, 685 F. 2d 1131, 1137 (CA9 1982). We think it does not.

Our reasons are straightforward. For one thing, we follow the text of the statute. See *Hardt* v. *Reliance Standard Life Ins. Co.*, 560 U. S. 242, 251 (2010). Section 411(b)(1) says that Unicolors' registration is valid "regardless of whether the [registration] certificate contains any inaccurate information, unless . . . the inaccurate information was included on the application for copyright registration with knowledge that it was inaccurate." Both case law and the dictionary tell us that "knowledge" has historically "meant and still means 'the fact or condition of being aware of something.'" *Intel Corp. Investment Policy Comm.* v. *Sulyma*, 589 U. S. ___, ___ (2020) (slip op., at 6) (quoting Webster's Seventh New Collegiate Dictionary 469 (1967)); see also Black's Law Dictionary 888 (8th ed. 2004); New Oxford American Dictionary 938 (def. 2) (2d ed. 2005); Webster's New College Dictionary 625 (3d ed. 2008).

Unicolors says that, when it submitted its registration application, it was not aware (as the Ninth Circuit would later hold) that the 31 designs it was registering together did not satisfy the "single unit of publication" requirement. If Unicolors was not aware of the legal requirement that rendered the information in its application inaccurate, it did not include that information in its application "*with knowledge that it was inaccurate*." §411(b)(1)(A) (emphasis added). Nothing in the statutory language suggests that this straightforward conclusion should be any different simply because there was a mistake of law as opposed to a mistake of fact.

To the contrary, nearby statutory provisions help confirm that here "knowledge" refers to knowledge of the law as well as the facts. Registration applications call for information that requires both legal and factual knowledge. See, *e.g.*, §409(4) (whether a work was made "for hire"); §409(8) (when and where the work was "published"); §409(9) (whether the work is "a compilation or derivative work"). Inaccurate information in a registration is therefore equally

(or more) likely to arise from a mistake of law as a mistake of fact. That is especially true because applicants include novelists, poets, painters, designers, and others without legal training. Nothing in the statutory language suggests that Congress wanted to forgive those applicants' factual but not their (often esoteric) legal mistakes.

Other provisions of the Copyright Act confirm that, in this context, the word "knowledge" means actual, subjective awareness of both the facts and the law. Those provisions suggest that if Congress had intended to impose a scienter standard other than actual knowledge, it would have said so explicitly. See, *e.g.,* §121A(a) (safe harbor for entities that "did not know or have reasonable grounds to know" that exported works would be used by ineligible persons); §512(c)(1)(A) (safe harbor for internet service providers who are not actually aware of infringing activities on their systems and are "not aware of facts or circumstances from which infringing activity is apparent"); §901(a)(8) ("'notice of protection'" requires "actual knowledge . . . or reasonable grounds to believe" that a "work is protected"); §1202(b) (civil remedies for certain acts performed by a person who knows or has "reasonable grounds to know" that he or she was facilitating infringement); §1401(c)(6)(C)(ii) (for purposes of paragraph regarding the "[u]nauthorized use of pre-1972 sound recordings," "knowing" includes one who "has actual knowledge," "acts in deliberate ignorance of the truth or falsity of the information," or "acts in grossly negligent disregard of the truth or falsity of the information"). The absence of similar language in the statutory provision before us tends to confirm our conclusion that Congress intended "knowledge" here to bear its ordinary meaning. See *Nken* v. *Holder*, 556 U. S. 418, 430 (2009).

For another thing, cases decided before Congress enacted §411(b) "overwhelming[ly held] that inadvertent mistakes on registration certificates [did] not invalidate a copyright and thus [did] not bar infringement actions." *Urantia*

Foundation v. *Maaherra*, 114 F. 3d 955, 963 (CA9 1997). Many of those cases involved mistakes of law. See, *e.g.*, *id.,* at 961, 963; *Billy-Bob Teeth, Inc.* v. *Novelty, Inc.*, 329 F. 3d 586, 591 (CA7 2003); *Advisers, Inc.* v. *Wiesen-Hart, Inc.*, 238 F. 2d 706, 707–708 (CA6 1956) (*per curiam*). We can find no indication that Congress intended to alter this well-established rule when it enacted §411(b). See *Davis* v. *Michigan Dept. of Treasury*, 489 U. S. 803, 813 (1989) ("When Congress codifies a judicially defined concept, it is presumed, absent an express statement to the contrary, that Congress intended to adopt the interpretation placed on that concept by the courts"); see also *Kirtsaeng* v. *John Wiley & Sons, Inc.*, 568 U. S. 519, 538 (2013) (similar).

Further, those who consider legislative history will find that history persuasive here. It indicates that Congress enacted §411(b) to make it easier, not more difficult, for nonlawyers to obtain valid copyright registrations. The House Report states that its purpose was to "improve intellectual property enforcement in the United States and abroad." H. R. Rep. No. 110–617, p. 20 (2008). It did so in part by "eliminating loopholes that might prevent enforcement of otherwise validly registered copyrights." *Ibid.* The Report specifically notes that some defendants in copyright infringement cases had "argued . . . that a mistake in the registration documents, such as checking the wrong box on the registration form, renders a registration invalid and thus forecloses the availability of statutory damages." *Id.,* at 24. Congress intended to deny infringers the ability to "exploi[t] this potential loophole." *Ibid.* Of course, an applicant for a copyright registration—especially one who is not a lawyer—might check the wrong box on the registration documents as a result of a legal, as well as a factual, error. Given this history, it would make no sense if §411(b) left copyright registrations exposed to invalidation based on applicants' good-faith misunderstandings of the details of copyright law.

III

H&M argues that our interpretation of the statute will make it too easy for copyright holders, by claiming lack of knowledge, to avoid the consequences of an inaccurate application. But courts need not automatically accept a copyright holder's claim that it was unaware of the relevant legal requirements of copyright law. We have recognized in civil cases that willful blindness may support a finding of actual knowledge. *Intel Corp.*, 589 U. S., at ___–___ (slip op., at 11–12). Circumstantial evidence, including the significance of the legal error, the complexity of the relevant rule, the applicant's experience with copyright law, and other such matters, may also lead a court to find that an applicant was actually aware of, or willfully blind to, legally inaccurate information. See *id.,* at ___ (slip op., at 11).

H&M also argues that our interpretation is foreclosed by the legal maxim that "ignorance of the law is no excuse." See Brief for Respondent 41–43. This maxim "normally applies where a defendant has the requisite mental state in respect to the elements of [a] crime but claims to be unaware of the existence of a statute proscribing his conduct." *Rehaif* v. *United States*, 588 U. S. ___, ___ (2019) (slip op., at 8) (internal quotation marks omitted). It does not apply in this civil case concerning the scope of a safe harbor that arises from ignorance of collateral legal requirements. See *ibid.*

Finally, H&M claims that neither Unicolors' petition for certiorari nor the Ninth Circuit's opinion addressed the question we decide here. The petition, however, asked us to decide whether a registration may be invalidated under §411(b) even though there are no "indicia of fraud . . . as to the work at issue in the subject copyright registration." Pet. for Cert. i. Fraud typically requires "[a] *knowing* misrepresentation . . . of a material fact." Black's Law Dictionary 802 (11th ed. 2019) (emphasis added). If, as the Ninth Circuit concluded, §411(b)(1)(A) does not require "knowledge"

of legal errors, then it does not always require knowledge of the misrepresentation in the registration application, and therefore does not require the typical elements of fraud. Thus, the "knowledge" question that the parties have argued, and which we decide, was a "subsidiary question fairly included" in the petition's question presented. See this Court's Rule 14.1(a).

As to the decision below, the Ninth Circuit wrote that "the knowledge inquiry is not whether Unicolors knew that including a mixture of confined and non-confined designs would run afoul of the single-unit registration requirements; the inquiry is merely whether Unicolors knew that certain designs included in the registration were confined and, therefore, were each published separately to exclusive customers." 959 F. 3d, at 1200. In context, we understand this statement to hold that Unicolors' "knowledge" of the *facts* that produced the inaccuracy was sufficient to demonstrate its knowledge of the inaccuracy itself under §411(b)(1)(A). Unicolors' knowledge of the relevant law was irrelevant. The Ninth Circuit therefore explicitly addressed the question we here decide.

* * *

For these reasons, the judgment of the Ninth Circuit is vacated, and the case is remanded for further proceedings consistent with this opinion.

It is so ordered.

SUPREME COURT OF THE UNITED STATES

No. 20–915

UNICOLORS, INC., PETITIONER *v.*
H&M HENNES & MAURITZ, L. P.

ON WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE NINTH CIRCUIT

[February 24, 2022]

JUSTICE THOMAS, with whom JUSTICE ALITO joins, and with whom JUSTICE GORSUCH joins as to all but Part II, dissenting.

A copyright registration is invalid if the registrant included materially inaccurate information in its application "with knowledge that [the information] was inaccurate." 17 U. S. C. §411(b)(1)(A). In its petition for certiorari, Unicolors asked us to decide a question on which the Courts of Appeals were split: whether §411(b)(1)(A)'s "knowledge" element requires "indicia of fraud." Pet. for Cert. i. Specifically, Unicolors argued that "knowledge" requires "inten[t] to defraud the Copyright Office." *Id.,* at 7.

Yet now, after having "persuaded us to grant certiorari on this issue," Unicolors has "chosen to rely on a different argument in [its] merits briefing." *Visa Inc.* v. *Osborn*, 580 U. S. ___, ___ (2016) (internal punctuation altered). It no longer argues that §411(b)(1)(A) requires fraudulent intent and instead proposes a novel "actual knowledge" standard. Because I would not reward Unicolors for its legerdemain, and because no other court had, before today, ever addressed whether §411(b)(1)(A) requires "actual knowledge," I would dismiss the writ of certiorari as improvidently granted.

I

We should dismiss this case for the reasons we gave in *City and County of San Francisco* v. *Sheehan*, 575 U. S. 600 (2015), and *Yee* v. *Escondido*, 503 U. S. 519 (1992). In *Sheehan*, we granted review to resolve a Circuit split and decide whether the Americans with Disabilities Act requires law enforcement officers to provide reasonable accommodations to armed, violent, and mentally ill criminals while arresting them. 575 U. S., at 608. But after the petitioners' opening brief "effectively concede[d]" that it may and pressed a narrower, "qualified" version of the original argument, *id.,* at 609, we dismissed the case for lack of "adversary presentation" of the question presented, *id.,* at 610. In *Yee*, the petitioner raised an argument that was not clearly pressed or passed upon below, that was not the subject of a known circuit split, and that, in fact, no court in the country had squarely addressed before. See 503 U. S., at 534, 537–538. We declined to "be the first court in the Nation" to decide the petitioner's novel legal question. *Id.*, at 538.

These considerations counsel dismissal here. First, Unicolors has abandoned the actual question presented and now presses novel arguments in favor of reversal. We took this case to resolve an apparent split between the Eleventh Circuit, which has held that §411(b)(1)(A) requires "deceptive intent," *Roberts* v. *Gordy*, 877 F. 3d 1024, 1030 (2017), and the Ninth Circuit, which held below that "there is no such intent-to-defraud requirement," 959 F. 3d 1194, 1198 (2020) (citing *Gold Value Int'l Textile, Inc.* v. *Sanctuary Clothing, LLC*, 925 F. 3d 1140, 1147 (CA9 2019)). Agreeing with the Eleventh Circuit, Unicolors argued in its petition for certiorari that "knowledge" requires "inten[t] to defraud." Pet. for Cert. 7. But now, siding with the Ninth Circuit, Unicolors contends that a mere "knowing failure" satisfies §411(b)(1)(A). Brief for Petitioner 33, 37 (internal quotation marks omitted). The United States, as *amicus*

supporting Unicolors, agrees. See Brief for United States as *Amicus Curiae* 25, n. 5. And, obviously, so does H&M. See Brief for Respondent 1. Thus, no party or *amicus* before us supports the Eleventh Circuit's position. Without "adversary presentation" on the actual question presented, we should dismiss. *Sheehan*, 575 U. S., at 610.

Second, as in *Yee*, Unicolors' new merits-stage arguments present novel legal questions. Unicolors claims that "knowledge" in §411(b)(1)(A) is satisfied only by *actual* knowledge (*i.e.,* an applicant subjectively knew of an inaccuracy) rather than actual or *constructive* knowledge (*i.e.,* an applicant should have known of an inaccuracy). It further contends that a copyright applicant must actually know that it is misapplying a *legal* standard rather than simply misstating the *facts*.

It is undisputed that Unicolors raised neither point below. It is also undisputed that there is no circuit split on either of Unicolors' new arguments. And it is clear that the Court of Appeals did not meaningfully consider these questions. It said nothing about actual versus constructive knowledge, see 959 F. 3d, at 1200, and it merely implied, in a cursory sentence, that §411(b)(1)(A) requires knowledge of facts and not law, see *ante,* at 9 (citing 959 F. 3d, at 1200). Other than this halfway relevant and completely unreasoned statement, the Court cites no other opinion from any court that interprets §411(b)(1)(A). Thus, we are the "first court in the Nation" to decide the important questions that Unicolors belatedly presents. *Yee*, 503 U. S., at 538. I would decline the invitation to take that imprudent step.

The Court disputes none of this. Instead, it reasons that Unicolors' new arguments are "'fairly included'" in the question presented because, even though Unicolors originally proposed a fraud standard, it now argues for at least an element of that standard: actual knowledge of a misrepresentation. *Ante,* at 9 (quoting this Court's Rule 14.1(a)).

The Court misapplies Rule 14.1(a). An argument is

"fairly included" only if it raises a "*prior* question." *Lebron* v. *National Railroad Passenger Corporation*, 513 U. S. 374, 381 (1995). That is, resolving the new argument must be "a predicate to an intelligent resolution of the question presented." *Ohio* v. *Robinette*, 519 U. S. 33, 38 (1996) (internal quotation marks omitted). Here, to decide whether §411(b)(1)(A) requires fraud, we do not *first* need to decide what kind of knowledge fraud requires. To the contrary, it makes more sense to establish the correct legal standard before deciding what satisfies its elements. Cf. *Manuel* v. *Joliet*, 580 U. S. ___, ___–___, n. 1 (2017) (slip op., at 2–3, n. 1) (ALITO, J., dissenting). This case proves the point: Unicolors effectively concedes that §411(b)(1)(A) has no fraudulent-intent requirement and *then* asks us to hold that the provision nevertheless requires actual rather than constructive knowledge, and knowledge of legal and factual misstatements rather than knowledge of factual misstatements alone. Evidently, Unicolors can discern whether the statute requires fraud without addressing those questions. Likewise, the Ninth Circuit has held that §411(b)(1)(A) does not require fraud based on its "plain language." *Gold Value*, 925 F. 3d, at 1147. In reaching that conclusion, the Court of Appeals did not address the actual-versus-constructive-knowledge issue, and it reserved the law-versus-fact issue. See *ibid.* In short, deciding whether §411(b)(1)(A) requires a particular element of fraud is not "prior" to deciding whether fraud is the proper standard in the first place.

But even if Unicolors' arguments were "prior" questions, the Court still misapplies Rule 14.1(a). We are free to address "subsidiary question[s]" in deciding "any *question presented*." This Court's Rule 14.1(a) (emphasis added). Put another way, the subsidiary questions must be "inextricably linked" to the question under review and necessarily contribute to that question's resolution. *City of Sherrill* v. *Oneida Indian Nation of N. Y.*, 544 U. S. 197, 214, n. 8 (2005). Here, though, the Court never answers the ultimate

question about fraud. To provide an incomplete answer to the question presented disserves the public and our fellow judges. The Court does not decide the question that has split the Courts of Appeals, but instead decides a question that no court has addressed. And by granting review of one question but answering another, we encourage litigants "to seek review of a circuit conflict only then to change the question to one that seems more favorable." *Czyzewski* v. *Jevic Holding Corp.*, 580 U. S. ___, ___ (2017) (THOMAS, J., dissenting) (slip op., at 2); see also *Yee*, 503 U. S., at 536 (parties would be "encouraged to fill their limited briefing space and argument time with discussion of issues other than the one on which certiorari was granted"). The result is muddled briefing on questions we did not agree to resolve, and a ruling that bypasses the ordinary process of appellate review.

II

In this case, the Court's misstep comes at considerable cost. A requirement to know the law is ordinarily satisfied by constructive knowledge, cf. *Jerman* v. *Carlisle, McNellie, Rini, Kramer & Ulrich, L. P. A.*, 559 U. S. 573, 584 (2010), because "actual knowledge of illegality" can be "difficult or impossible" to prove, *Ratzlaf* v. *United States*, 510 U. S. 135, 162 (1994) (Blackmun, J., dissenting). Yet here, the Court imposes an actual-knowledge-of-law standard that is virtually unprecedented except in criminal tax enforcement. See *Cheek* v. *United States*, 498 U. S. 192, 201–203 (1991). And while the Court claims the word "knowledge" in §411(b)(1)(A) compels this conclusion, see *ante,* at 5, that result is far from certain. In *Cheek*, this Court required actual knowledge of law in light of a "willfulness" requirement. 498 U. S., at 201–202. A "knowledge" requirement, by contrast, often encompasses actual *and* constructive knowledge. See *Intel Corp. Investment Policy Comm.* v. *Sulyma*, 589 U. S. ___, ___–___ (2020) (slip op., at 6–7).

Moreover, as the Court recognizes, the other knowledge requirements in the Copyright Act are satisfied by either kind of knowledge. See *ante,* at 6. The Court points to no other Copyright Act provision that is satisfied by actual knowledge alone. That the Court reads §411(b)(1)(A) to be the lone exception is dubious. That the Court does so without permitting any other court in the country to first consider the question is unwise.

* * *

I would dismiss the writ of certiorari as improvidently granted because Unicolors has abandoned the question presented and instead proposes novel questions of copyright law that no other court addressed before today. I respectfully dissent.

Copyright Review Board
United States Copyright Office · 101 Independence Avenue SE · Washington, DC 20559-6000

February 14, 2022

Ryan Abbott, Esq.
Brown, Neri, Smith & Khan, LLP
11601 Wilshire Blvd #2080
Los Angeles, CA 90025

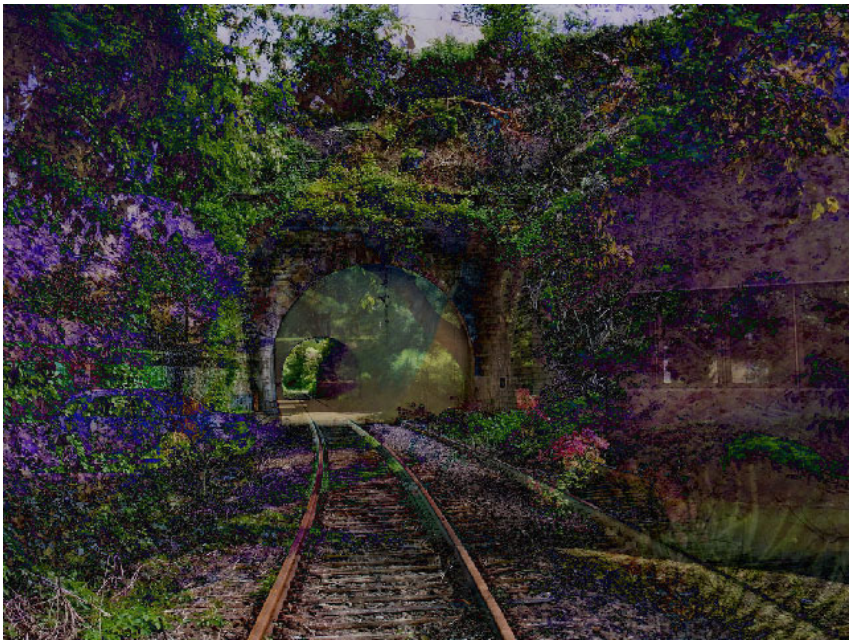
Re: Second Request for Reconsideration for Refusal to Register A Recent Entrance to Paradise (Correspondence ID 1-3ZPC6C3; SR # 1-7100387071)

Dear Mr. Abbott:

The Review Board of the United States Copyright Office ("Board") has considered Steven Thaler's ("Thaler's") second request for reconsideration of the Registration Program's refusal to register a two-dimensional artwork claim in the work titled "A Recent Entrance to Paradise" ("Work"). After reviewing the application, deposit copy, and relevant correspondence, along with the arguments in the second request for reconsideration, the Board affirms the Registration Program's denial of registration.

I. DESCRIPTION OF THE WORK

The Work is a two-dimensional artwork, reproduced below:



II. ADMINISTRATIVE RECORD

On November 3, 2018, Thaler filed an application to register a copyright claim in the Work. The author of the Work was identified as the "Creativity Machine," with Thaler listed as the claimant alongside a transfer statement: "ownership of the machine." In his application, Thaler left a note for the Office stating that the Work "was autonomously created by a computer algorithm running on a machine" and he was "seeking to register this computer-generated work as a work-for-hire to the owner of the Creativity Machine." In an August 12, 2019, letter, a Copyright Office registration specialist refused to register the claim, finding that it "lacks the human authorship necessary to support a copyright claim." Initial Letter Refusing Registration from U.S. Copyright Office to Ryan Abbott (Aug. 12, 2019).

Thaler subsequently requested that the Office reconsider its initial refusal to register the Work, arguing that "the human authorship requirement is unconstitutional and unsupported by either statute or case law." Letter from Ryan Abbott to U.S. Copyright Office at 1 (Sept. 23, 2019) ("First Request").[1] After reviewing the Work in light of the points raised in the First Request, the Office re-evaluated the claims and again concluded that the Work "lacked the required human authorship necessary to sustain a claim in copyright," because Thaler had "provided no evidence on sufficient creative input or intervention by a human author in the Work." Refusal of First Request for Reconsideration from U.S. Copyright Office to Ryan Abbott at 1 (March 30, 2020). The Office also stated that it would not "abandon its longstanding interpretation of the Copyright Act, Supreme Court, and lower court judicial precedent that a work meets the legal and formal requirements of copyright protection only if it is created by a human author." *Id.* at 1–2.

Now, in a second request for reconsideration, pursuant to 37 C.F.R. § 202.5(c), Thaler renews his arguments that the Office's human authorship requirement is unconstitutional and unsupported by case law. Letter from Ryan Abbott to U.S. Copyright Office (May 27, 2020) ("Second Request"). The Second Request repeats the same arguments from the First Request, largely advancing public policy arguments that the Office "should" register copyrights in machine-generated works because doing so would "further the underlying goals of copyright law, including the constitutional rationale for copyright protection." Second Request at 2. In response to the Office's citation of relevant case law addressing human authorship, Thaler asserts that "there is no binding authority that prohibits copyright for [computer-generated works]," *id.*; that copyright law already allows non-human entities to be authors under the work made for hire doctrine, *id.* at 4; and ultimately that the Copyright Office "is currently relying upon non-binding judicial opinions from the Gilded Age to answer the question of whether [computer-generated works] can be protected." *Id.* at 7.

III. DISCUSSION

The Board accepts as a threshold matter Thaler's representation that the Work was autonomously created by artificial intelligence without any creative contribution from a human actor: "As a general rule, the U.S. Copyright Office accepts the facts stated in the registration

[1] The top of the First Request is dated September 8, 2019, but the attorney's signature bears a date of September 23, 2019.

materials." U.S. COPYRIGHT OFFICE, COMPENDIUM OF U.S. COPYRIGHT OFFICE PRACTICES § 602.4(C) (3d ed. 2021) ("COMPENDIUM (THIRD)"). But copyright law only protects "the fruits of intellectual labor" that "are founded in the creative powers of the [human] mind." COMPENDIUM (THIRD) § 306 (quoting *Trade-Mark Cases*, 100 U.S. 82, 94 (1879)); *see also* COMPENDIUM (THIRD) § 313.2 (the Office will not register works "produced by a machine or mere mechanical process" that operates "without any creative input or intervention from a human author" because, under the statute, "a work must be created by a human being"). So Thaler must either provide evidence that the Work is the product of human authorship or convince the Office to depart from a century of copyright jurisprudence.[2] He has done neither.

Thaler does not assert that the Work was created with contribution from a human author,[3] so the only issue before the Board is whether, as he argues, the Office's human authorship requirement is unconstitutional and unsupported by case law. Currently, "the Office will refuse to register a claim if it determines that a human being did not create the work." COMPENDIUM (THIRD) § 306. Under that standard, the Work is ineligible for registration. After reviewing the statutory text, judicial precedent, and longstanding Copyright Office practice, the Board again concludes that human authorship is a prerequisite to copyright protection in the United States and that the Work therefore cannot be registered.

The Copyright Act affords protection to "original works of authorship" that are fixed in a tangible medium of expression. 17 U.S.C. § 102(a). The phrase "original work of authorship" was "purposely left undefined" by Congress in order to "incorporate without change the standard of originality established by the courts under the . . . [1909] copyright statute." H.R. REP. NO. 94-1476, at 51 (1976). The term is "very broad," *id.* at 52, but its scope is not unlimited. Congress chose this language to encompass a smaller set of creative works than could be protected under the Constitution.[4] Because of this gap, the Act leaves "unquestionably other

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[2] Under the heading "Policy Objections," the Second Request argues that denying copyright protection for machine-generated works will encourage individuals to "act dishonestly" and "inaccurately claim authorship for work done by machines." Second Request at 5. The Board is unconvinced that applying existing case law will result in applicants committing fraud. The Copyright Act provides criminal penalties for anyone who "knowingly makes a false representation of a material fact in the application for copyright registration . . . or in any written statement tied in connection with the application." 17 U.S.C. § 506(e). In addition, the Register of Copyrights has the authority to cancel any registration where the "material deposited does not constitute copyrightable subject matter" or "the claim is invalid for any other reason." 17 U.S.C. § 410(b); *see also* COMPENDIUM (THIRD) § 1807. Applicants who mislead the Office do so at their peril.

[3] Because Thaler has not raised this as a basis for registration, the Board does not need to determine under what circumstances human involvement in the creation of machine-generated works would meet the statutory criteria for copyright protection. *See* COMPENDIUM (THIRD) § 313.2 (the "crucial question" of human authorship is whether a computer is "merely being an assisting instrument" or "actually conceive[s] and execute[s]" the "traditional elements of authorship in the work") (quoting U.S. COPYRIGHT OFFICE, SIXTY-EIGHTH ANNUAL REPORT OF THE REGISTER OF COPYRIGHTS FOR THE FISCAL YEAR ENDING JUNE 30, 1965, AT 5 (1966)).

[4] As the House Report explains, Congress selected the term to avoid confusion about how the scope of statutory protection compared with the scope of material the Constitution authorizes Congress to protect. H.R. REP. NO. 94-1476, at 51. Under the 1909 Copyright Act, protection accrued to "all the writings of an author," which led to uncertainty about whether the scope of protected material under the law was "coextensive" with the "writings" of "authors" that the Constitution gives Congress the power to protect. H.R. REP. NO. 94-1476, at 51; *compare* 1909 Copyright Act, Pub. L. No. 60–349, § 4, 35 Stat. 1075, 1076 (1909) ("the works for which copyright may be secured under this Act shall include all the writings of an author") *with* U.S. CONST. art I, § 8, cl. 8 (authorizing Congress

areas of existing subject matter that this bill does not propose to protect but that future Congresses may want to." *Id.* at 52.[5]

Courts interpreting the Copyright Act, including the Supreme Court, have uniformly limited copyright protection to creations of human authors. For example, in *Burrow-Giles Lithographic Co. v. Sarony*, a copyright defendant argued that photographs could not be protected by copyright because the statute at the time protected certain types of creations of an "author or authors" and "a photograph is not a writing nor the production of an author" because it is simply "a reproduction on paper of the exact features of some natural object or of some person." 111 U.S. 53, 56 (1884). The Court rejected this argument, holding that an author is "he to whom anything owes its origin; originator; maker; one who completes a work of science or literature" and that photographs are "representatives of original intellectual conceptions of [an] author." *Id*. at 57–59. In the opinion, the Court referred to "authors" as human. *See id.* at 58 (describing a copyright as "the exclusive right of a man to the production of his own genius or intellect"), 60–61 (citing as "instructive" a decision from England where justices described an "author" as the "person" who was "the cause of the picture which is produced" and "the man" who creates or gives effect to the idea in the work).[6]

The Court has continued to articulate the nexus between the human mind and creative expression as a prerequisite for copyright protection. In *Mazer v. Stein*, the Court cited *Burrow-Giles* for the proposition that a work "must be original, that is, the author's tangible expression of his ideas." 347 U.S. 201, 214 (1954). And in *Goldstein v. California*, the Court again cited *Burrow-Giles* for the proposition that "[w]hile an 'author' may be viewed as an individual who writes an original composition, the term in its constitutional sense, has been construed to mean an 'originator,' 'he to whom anything owes its origin.'" 412 U.S. 546, 561 (1973). The Office is compelled to follow Supreme Court precedent, which makes human authorship an essential element of copyright protection.

In addition to the Supreme Court precedent, lower courts have repeatedly rejected attempts to extend copyright protection to non-human creations. For example, the Ninth Circuit held that a book containing words "'authored' by non-human spiritual beings" can only gain copyright protection if there is "human selection and arrangement of the revelations." *Urantia Found. v. Kristen Maaherra*, 114 F.3d 955, 957–59 (9th Cir. 1997) (holding that "some element

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"[t]o promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries").

[5] For this reason, the Board rejects Thaler's argument that the human authorship requirement is "unconstitutional" because registration of machine-generated works would "further the underlying goals of copyright law, including the constitutional rationale for copyright protection." *See* Second Request at 1–2. Congress is not obligated to protect all works that may constitutionally be protected. "[I]t is generally for Congress," not the Board, "to decide how best to pursue the Copyright Clause's objectives." *Eldred v. Ashcroft*, 537 U.S. 186, 212 (2003). The Board must apply the statute enacted by Congress; it cannot second-guess whether a different statutory scheme would better promote the progress of science and useful arts.

[6] In this case, as well as a previous case, the Court suggested that the requirement that an "author" be human is required by the Constitution. *See Burrow-Giles*, 111 U.S. at 56 (describing beneficiaries of the Constitution's intellectual property clause as "authors," who are one of "two classes" of "persons"); *see also Trade-Mark* Cases, 100 U.S. 82, 94 (1879) (reading the Constitution's grant of power to Congress to protect "writings" as extending "only as such [works] as are original, and are founded in the creative powers of the mind" or are "the fruits of intellectual labor").

of human creativity must have occurred in order for the Book to be copyrightable" because "it is not creations of divine beings that the copyright laws were intended to protect"). Similarly, a monkey cannot register a copyright in photos it captures with a camera because the Copyright Act refers to an author's "children," "widow," "grandchildren," and "widower," — terms that "all imply humanity and necessarily exclude animals." *Naruto v. Slater*, 888 F.3d 418, 426 (9th Cir. 2018); *see also Kelley v. Chicago Park Dist.*, 635 F.3d 290, 304 (7th Cir. 2011) (rejecting a copyright claim in a "living garden" because "[a]uthorship is an entirely human endeavor" and "a garden owes most of its form and appearance to natural forces") (internal citations omitted); *Satava v. Lowry*, 323 F.3d 805, 813 (9th Cir. 2003) (finding depictions of jellyfish not protected by copyright because material "first expressed by nature are the common heritage of humankind, and no artist may use copyright law to prevent others from depicting them"). These court decisions are reflected in the Office's guidance in the *Compendium*, which provides examples of works lacking human authorship such as "a photograph taken by a monkey" and "an application for a song naming the Holy Spirit as the author." COMPENDIUM (THIRD) § 313.2. While the Board is not aware of a United States court that has considered whether artificial intelligence can be the author for copyright purposes,[7] the courts have been consistent in finding that non-human expression is ineligible for copyright protection.

Federal agencies have followed the courts. In the 1970s, questions about the impact of computing technology on the copyright system led to the creation of the National Commission on New Technological Uses of Copyrighted Works ("CONTU"). CONTU's mandate was, in part, to study "the creation of new works by the application or intervention of [] automatic systems of machine reproduction." National Commission on New Technological Uses of Copyrighted Works, Pub. L. 93-573, § 201(b)(2), 88 Stat. 1873, 1873 (1974). After conducting its review, CONTU determined that the existing judicial construction of "original work[s] of authorship" as requiring human authorship was sufficient to enable protection for works created with the use of computers and thus "no amendment [to copyright law] is needed." CONTU, FINAL REPORT at 1 (1978). As CONTU explained, "the eligibility of any work for protection by copyright depends not upon the device or devices used in its creation, but rather upon the presence of at least minimal human creative effort at the time the work is produced." *Id.* at 45–46 (noting that "[t]his approach is followed by the Copyright Office today").

The CONTU Report mirrors the views of the Copyright Office. A decade before passage of the 1976 Copyright Act, the annual report of the Register of Copyrights considered when copyright protection could vest in expressive works created with a computer. The Register concluded that human authorship was required:

> The crucial question appears to be whether the "work" is basically one of human authorship, with the computer merely being an assisting instrument, or whether the traditional element of authorship in the work (literary, artistic or musical

[7] It appears, however, that the Eastern District of Virginia held that artificial intelligence systems cannot claim inventorship of patents. *Thaler v. Hirshfeld*, No. 1:20-cv-903, 2021 U.S. Dist. LEXIS 167393, at *16–18 (E.D. Va. Sep. 2, 2021) (concluding that under the Patent Act, "an 'inventor' must be a natural person" and upholding refusal of a patent application). Though the court's opinion was based on construction of the Patent Act, rather than the Copyright Act, the similarity of the court's statutory analysis to that in the copyright cases relied on by the Board supports the conclusion here.

> expression or elements of selection, arrangements, etc.) were actually conceived and executed not by man but by a machine.

U.S. COPYRIGHT OFFICE, SIXTY-EIGHTH ANNUAL REPORT OF THE REGISTER OF COPYRIGHTS FOR THE FISCAL YEAR ENDING JUNE 30, 1965, at 5 (1966).

For this reason, the *Compendium of U.S. Copyright Office Practices* — the practice manual for the Office — has long mandated human authorship for registration. After enactment of the 1976 Copyright Act, the second edition of the *Compendium* was updated to reflect the Office's understanding that human authorship is required by the law. *See* U.S. COPYRIGHT OFFICE, COMPENDIUM OF U.S. COPYRIGHT OFFICE PRACTICES § 202.02(b) (2d ed. 1984) ("COMPENDIUM (SECOND)") ("The term 'authorship' implies that, for a work to be copyrightable, it must owe its origin to a human being. Materials produced solely by nature, by plants, or by animals are not copyrightable."), *available at* https://www.copyright.gov/history/comp/compendium-two.pdf. The current *Compendium* retains this requirement and articulates its application in multiple circumstances where non-human expression raises unique challenges. *See* COMPENDIUM (THIRD) §§ 709.1 (automated computer translations); 803.6(B) (derivative sound recordings made by purely mechanical processes); 805.4(C) & 806.4(C) (human performance required for choreography and pantomimes); 808.8(E) (human selection of color in colorized motion pictures); 906.8 (machine produced expression in visual arts works, such as linoleum flooring); 909.3(B) (x-rays and other medical imaging); 1006.1(A) (hypertext markup language if created by a human being "rather than a website design program"). Although no *Compendium* section explicitly addresses artificial intelligence, the Board concludes that Office policy and practice makes human authorship a prerequisite for copyright protection.

The Office's position is supported by a recent report from the U.S. Patent and Trademark Office ("USPTO") addressing intellectual property issues raised by AI. USPTO sought public comment on whether "a work produced by an AI algorithm or process, without the involvement of a natural person . . . qualif[ies] as a work of authorship" under the Copyright Act. U.S. PATENT AND TRADEMARK OFFICE, PUBLIC VIEWS ON ARTIFICIAL INTELLIGENCE AND INTELLECTUAL PROPERTY POLICY at 19 (2020), *available at* https://www.uspto.gov/sites/default/files/documents/USPTO_AI-Report_2020-10-07.pdf. In its summary of responses, USPTO noted that "the vast majority of commenters acknowledged that existing law does not permit a non-human to be an author [and] this should remain the law." *Id.* at 20–21. The Board agrees.

Thaler's secondary argument, that artificial intelligence can be an author under copyright law because the work made for hire doctrine allows for "non-human, artificial persons such as companies" to be authors, is similarly unavailing. *See* Second Request at 3–4. First, the Work is clearly not a work made for hire as defined in the Copyright Act. A work made for hire must be either (A) prepared by "an employee" or (B) by one or more "parties" who "expressly agree in a written instrument" that the work is for-hire. 17 U.S.C. § 101 (definition of "work made for hire"). In both cases, the work is created as the result of a binding legal contract—an employment agreement or a work-for-hire agreement. The "Creativity Machine" cannot enter

into binding legal contracts and thus cannot meet this requirement.[8] Second, the work-for-hire doctrine only speaks to the identity of a work's owner, not whether a work is protected by copyright. As explained above, the statute requires that a work contain human authorship. In sum, the Work is not a work made for hire because it is neither a "work of authorship" nor a work created "for hire."

Much of Thaler's second request amounts to a policy argument in favor of legal protection for works produced solely by artificial intelligence. He cites to no case law or other precedent that would undermine the Office's construction of the Copyright Act. Because copyright law as codified in the 1976 Act requires human authorship, the Work cannot be registered.

IV. CONCLUSION

For the reasons stated herein, the Review Board of the United States Copyright Office affirms the refusal to register the copyright claim in the Work. Pursuant to 37 C.F.R. § 202.5(g), this decision constitutes final agency action in this matter.

U.S. Copyright Office Review Board
Shira Perlmutter, Register of Copyrights
Suzanne Wilson, General Counsel and
Associate Register of Copyrights
Kimberley Isbell, Deputy Director of Policy and
International Affairs

[8] Autonomous systems are not "artificial persons" because they lack legal personhood. *See* Nadia Banteka, *Artificially Intelligent Persons*, 58 HOUS. L. REV. 537, 593 (2021) (noting the "trend" across state and federal courts that legal personhood requires "that an entity be an aggregate of individuals [who] have legal personhood," as is true for corporations); *cf. Software Solutions Partners Ltd. v. H.M. Customs & Excise*, [2007] EWHC 971 [67] (Admin) (noting that "on current authority," "automated systems" could not enter contracts because "only a person with a 'mind' can be an agent in law").