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101 Independence Avenue, SE
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VIA ONLINE SUBMISSION

Re: Comments of Engine Advocacy Regarding *Standard Technical Measures and Section 512*, Docket No. 2022-2

Dear Ms. Schultz & Mr. Brady:

Engine is a non-profit technology policy, research, and advocacy organization that bridges the gap between policymakers and startups. Engine works with government and a community of thousands of high-technology, growth-oriented startups across the nation to support the development of technology entrepreneurship through economic research, policy analysis, and advocacy on local and national issues. We appreciate the opportunity to submit these comments as the U.S. Copyright Office (Office) gathers information "on the development and use of standard technical measures for the protection and identification of copyrighted works."[1]

Across the country, startups are major drivers of innovation, economic growth, and job creation.[2] And many startups encounter user-generated content—whether they offer digital services where artists connect with fans, new e-commerce platforms, podcasting tools, website infrastructure, or more.[3] The Office's current effort to study 35 U.S.C. § 512(i) and "standard technical measures," therefore, implicates critical issues for these startups and their ability to innovate and compete.

[1] Standard Technical Measures and Section 512, 87 Fed. Reg. 25049 (Apr. 27, 2022).
[2] *See Startups & the U.S. Patent System: Prioritizing Quality and Balance to Promote Innovation*, Engine 2 (July 2021), *available at* https://www.engine.is/news/category/prioritizing-quality-and-balance-to-promote-innovation.
[3] *See, e.g.*, *Startup Agenda 2022*, Engine 7 (Jan. 31, 2022), *available at* https://www.engine.is/news/category/engine-releases-2022-startup-agenda.

Indeed, startups that encounter user-generated content face unique circumstances (and challenges) in this context that the Office must account for.[4]

We agree § 512's balanced framework has been a success story.[5] In large part, that success is born from Congress's correct understanding that (especially nascent) online and Internet service providers need certainty when it comes to liability over alleged copyright infringement they have no knowledge of or direct involvement in.[6] And thanks to § 512, the U.S. continues to demonstrate leadership in the Internet ecosystem, and a wide variety of new innovative industries and entirely new creative pursuits have come into existence.[7] To continue to foster this innovation, creativity, and competition, today's startups need the same certainty that was afforded to their predecessors.

Changes to the § 512 framework, including definitions or treatment around standard technical measures, could create new uncertainties and ambiguities in the law and throw up new barriers to entry for emerging service providers. Among other things, changes could exacerbate existing imbalance in copyright law and force service providers that encounter user-generated content—including startups and platforms that rarely experience alleged infringement—to screen every user post for potential infringement. Changes could also make it easier for purported content owners to sue or threaten to sue emerging platforms for millions of dollars. If those sorts of changes were pursued, they would disproportionately impact startups.

Lawmakers must consider the importance of innovation when weighing changes to copyright law—especially since copyright is so ubiquitous in our society and, outside of § 512, the law is heavily imbalanced in favor of certain traditional rightsholders. Making changes to § 512 that tilt the scales further in favor of certain copyright holders, and against startups, innovators, and rightful users of content, would be misguided.

With that in mind, Engine offers these responses to several of the questions posed by the Office:[8]

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[4] *See, e.g.*, Technical Measures: Public Consultations, 86 Fed. Reg. 72638, 72639 (Dec. 22, 2021) (cautioning against the exclusion of certain stakeholders).

[5] *E.g.*, *The Digital Millennium Copyright Act at 22: What is it, why it was enacted, and where we are now: Hearing Before the Subcomm. on Intellectual Property of the S. Comm. on the Judiciary*, 116th Congress at 1:51:41 (2020) (statement of Sen. Leahy), https://www.judiciary.senate.gov/meetings/the-digital-millennium-copyright-act-at-22-what-is-it-why-it-was-enacted-and-where-are-we-now.

[6] *E.g.*, 144 Cong. Rec. S11889 (statement of Sen. Hatch) ("[T]he DMCA also clarifies the liability of on-line and Internet service providers—OSPs and ISPs—for copyright infringement liability. The OSPs and ISPs needed more certainty in this area in order to attract the substantial investments necessary to continue the expansion and upgrading of the Internet.").

[7] Engine has previously summarized and quantified new innovative and creative industries § 512 enabled. *E.g.*, *Is the DMCA's Notice-and-Takedown System Working in the 21st Century?: Hearing Before the Subcomm. on Intellectual Property of the S. Comm. on the Judiciary*, 116th Congress 3-5 (2020) (testimony of Abigail A. Rives), https://www.judiciary.senate.gov/imo/media/doc/Rives%20Testimony.pdf.

[8] Engine has written about similar issues and responded to related questions in the past. These comments and this response draw on, and in some portions reiterate, those earlier statements. *E.g.*, Letter to Sen. Tillis from Engine 1-2 (Mar. 5, 2021), https://static1.squarespace.com/static/571681753c44d835a440c8b5/t/6042b2bedf2e290b9c1fdd86/1614983871229/2021.03.05_Engine+Comments+on+Discussion+Draft.pdf.

5. Consensus: Under section 512(i)(2)(A), a measure can qualify as an STM if it has been "developed pursuant to a broad consensus of copyright owners and service providers in an open, fair, voluntary, multi-industry standards process." (c) Can the phrase "multi-industry" as used in the statute mean a grouping within a subset of industries? Could such sub-industry divisions adopt separate STMs? What would be appropriate sub-industry divisions?

Adopting separate "standard" technical measures for different sub-industry divisions, for the purposes of § 512's safe harbor, would give rise to several concerns and could defeat the balance and certainty embodied in the DMCA. Depending on how the new "standards" were defined and how the industry was divided, it could quickly (and likely) create a lot of new questions, confusion, compliance difficulties, perhaps conflicting obligations, and more litigation. And this would in turn disadvantage small or emerging service providers, stifling innovation, competition, and emerging technologies.[9]

Today the Internet is a vibrant and diverse place, and startups and small businesses are constantly launching new ideas to fill gaps, offer new services, and deliver unique products. Carving service providers up into smaller groups, and redefining copyright law depending on those groupings, would be fraught. The following (non-representative) scenarios might help shed light on the diversity of experience in the startup ecosystem, and why trying to draw lines around groups of companies would be difficult and problematic.[10]

- Two hypothetical websites could encounter user-generated text (and only text), and both be run by pre-revenue startups that cannot afford anything more than salaries right now. While both might experience relatively little alleged infringement, one might experience basically none and the other might have a bit more.
    - One website might include a chat function or comment boxes where users can enter their opinions about books. It may have millions of user comments, and have received a small handful of takedown notices. Upon further inspection, all but a small handful of those notices were sent based on a user pasting quotes from a book into an unfavorable review.
    - Another website might include a chat function or comment boxes where users enter their own original writing. It may have tens of thousands of users and have received a handful of takedown notices after a few users uploaded entire poems or blog posts (pieces those users did not write) as their own work.
- Three hypothetical platforms might allow users to share images and text, but the risk and type of infringement differs as do the resources available to each.
    - A late-stage, VC-backed startup might allow users to advertise events, and have thousands of users each posting dozens of events. It may be very common for users

[9] Engine has written about similar issues and responded to related questions in the past. These comments and this response draw on, and in some portions reiterate, those earlier statements. *E.g.*, Engine Comments on *Draft – Proposed Amendments to 512(i) and Creation of New 514*, at 1-3, 5 (Mar 14, 2022), https://static1.squarespace.com/static/571681753c44d835a440c8b5/t/626810f09b14c4027d6b95f3/1650987248387/2022.03.14_Engine+response+re+512i+and+514.pdf.

[10] *Id.*

to upload photos, and most of the users either create their own images, use Creative Commons images with attribution, or purchase licenses to the images. But the startup may have received a handful of takedown notices, based on certain users uploading copyrighted images without permission and certain others uploading images but failing to use the correct attribution or comply with all license terms.
    - A seed-stage startup might allow users to post gardening-related content, with the idea of connecting local gardeners to meet and exchange seeds and plants. The vast majority of users only upload images and text, but the platform is technically capable of hosting other types of content, as some users occasionally upload instructional videos. One of its users may have set out to upload a photo she took of roses she grew, only to find out several weeks later she had inadvertently uploaded a song with "roses" in the title. Upon realizing the error, she removed the accidental post and uploaded the correct picture.
    - A pre-seed, pre-revenue startup might allow clothing designers to upload images of their designs. It may have very few users and very few posts, and no accusations of infringement. But some of the photos might include copyright-protected images in the background – for example an image of a model standing in front of a famous movie poster.
- Two hypothetical companies might help creators connect with fans by uploading graphic designs. One company might be relatively well-established, with five million users, and it might have received takedown notices alleging that 75 posts are infringing. The other company might be much earlier stage, with only 1,000 users so far, and no allegedly infringing posts.
- The same ideas apply to companies that offer multimedia services.
    - A video conferencing tool might allow users to process and share audio and video, and the only real risk of infringement they've seen is users joining a video call from a room where there was a copyrighted image hanging on the wall or copyrighted music inadvertently playing in the background.
    - A platform might allow creators to upload pre-recorded audio-visual works, comment on posts, and exchange direct private messages. A small fraction of its users may have been accused of uploading copyright protected videos, a small fraction of users separately accused of uploading original videos where copyright protected songs played in the background, a very small number accused of infringement based on posts that contained quotes, and a small fraction accused based on playing clips of news reports during a podcast.
- Finally, emerging technologies add further layers. For example, a seed-stage AR/VR startup might allow creators to establish virtual spaces to connect with and perform for fans at, e.g., virtual concerts or demonstrations, and have no allegations of infringement yet.

Moreover, startups are always growing and often pivoting, creating further uncertainty about what "standards" and groupings would apply to which startups when.

There would also be substantial challenges in practice. Service providers would have to learn the definitions of different sub-industries, figure out which group(s) they fit in, and then determine

which technical measure(s) applied to their group(s). If there were multiple technical measures to apply, and any conflicts, startup service providers would also have to maneuver that. This might all be easy enough for larger companies with legal teams, but out of reach for many startups. For context, the average seed-stage startup has about $1.2 million dollars—a sum that is expected to cover all of its expenses for 22 months.[11] While most startups have far less funding than that, this means the average seed-stage startup has $55,000 per month to cover everything from R&D and product development to salaries and marketing. It is difficult for companies with those resource constraints to find extra room in the budget for this type of (continuing) legal advice.

Relatedly, crafting different "standards" for different service providers would trigger several things companies have to litigate if one of their users was accused of infringement. For example, to show compliance with § 512(i) and qualify for the safe harbor, a company would have to establish in court which "sub-industries" it was in and which technical measure(s) applied (which would likely be a summary judgment decision, because the company would at least need evidence about the various sub-industry definitions and how it satisfied the relevant one(s)). If startups that encounter user-generated content have to litigate these issues in every case, it could render the safe harbor of little or no practical value.[12]

> *7. Costs and burdens: Under section 512(i)(2)(C), an STM must not "impose substantial costs on service providers or substantial burdens on their systems or networks." How should the substantiality of costs and burdens on internet service providers be evaluated? Should this evaluation differ based on variations in providers' sizes and functions?*

Section 512 currently treats service providers the same, regardless of size, and that contributes to the certainty and clarity of the statutory framework. Crafting different standard technical measures for companies based on size could defeat that certainty and clarity. And there are problems when using size as a proxy in these circumstances.

Engine agrees it is essential to recognize the unique circumstances and needs of startups, and strives to seek solutions and work with lawmakers to find approaches that ensure clarity for startups, and the details about how size differentials might operate in the § 512(i) context would be critical to offering a more targeted response to this question. The following response provides general concerns with an approach to technical measures that would treat different sized companies differently.[13] Likewise, to the extent this question contemplates different "standards" applying to

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[11] *The State of the Startup Ecosystem*, Engine 17 (2021), *available at* https://www.engine.is/news/engine-releases-report-on-the-health-of-the-startup-ecosystem.

[12] *See, e.g.*, Rives, *supra* note 7, at 20; Evan Engstrom & Nick Feamster, *The Limits of Filtering: A Look at the Functionality & Shortcomings of Content Detection Tools* 24 (Mar. 2017), *available at* https://www.engine.is/the-limits-of-filtering; *see also, e.g.*, *Startups, Content Moderation, & Section 230*, Engine (Dec. 9, 2021), *available at* https://www.engine.is/news/category/startups-content-moderation-and-section-230 (reporting costs of intermediary liability litigation).

[13] Engine has written about similar issues and responded to related questions in the past. These comments and this response draw on, and in some portions reiterate, those earlier statements. *E.g.*, Letter to Sen. Tillis from Engine 1-6 (Dec. 1, 2020), https://static1.squarespace.com/static/571681753c44d835a440c8b5/t/5fc6cbb3c7c45a5eaf91f84d/1606863800509/20

different service providers depending on size, it implicates the same concerns raised in response to question 5.[14]

For one, in part this question goes to proportionality.[15] Especially for startups and smaller service providers that rarely encounter allegedly infringing content, "the high costs of proactively monitoring user activity or the significant risks of litigation are difficult to justify."[16] Indeed, as the Senate's IP Subcommittee heard throughout the course of hearings in 2020, "a vast majority of platforms receive relatively few notices of claimed infringement. OSPs which receive a handful of notices (on the order of dozens to hundreds) can subject each notice to human review. Even for companies that receive a higher number of notices, in most cases the claims of infringement are vastly outnumbered by the non-infringing content on the site."[17] As such, especially for startups and smaller OSPs, "deploy[ing] expensive content moderation tools will only make it more costly and difficult to run [a] business[] without any meaningful impact on copyright infringement."[18]

Beyond that, establishing thresholds within § 512, so that different obligations and technical measures applied to different companies depending on some size metric, could have a lot of downsides. As we have previously explained:[19]

> Establishing thresholds for OSPs of different sizes risks merely delaying, rather than resolving, the consequences of possible changes to § 512. . . . Some of the problems may just kick-in as companies approach those thresholds. Moreover, the incorporation of thresholds could generate new uncertainties (or create traps for the unwary), incentivize unproductive behavior, and be difficult to implement in the context of high-growth startups.
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> First, even with thresholds, many of the concerns that motivate treating smaller OSPs differently would immediately re-emerge when those smaller OSPs near the threshold. Larger OSPs would still be able to cover costs and risks of changes to § 512. But their smaller (albeit maybe not their smallest) potential competitors—those who are just

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20.12.01_Engine+Responses+to+DMCA+Questions+for+Stakeholders.pdf (responding to question about concerns that could emerge if DMCA were re-written to treat OSPs different based on size).

[14] *Supra* response to Question 5.

[15] Engine has written about similar issues and responded to related questions in the past. These comments and this response draw on, and in some portions reiterate, those earlier statements. *E.g.*, March 5 Letter, *supra* note 8.

[16] Rives, *supra* note 7, at 8.

[17] *Id.* (citing *The Digital Millennium Copyright Act at 22: What is it, why it was enacted, and where we are now: Hearing Before the Subcomm. on Intellectual Property of the S. Comm. on the Judiciary*, 116th Congress at 1:30:44 (2020) (testimony of Professor Rebecca Tushnet, Frank Stanton Professor of the First Amendment, Harvard Law School), https://www.judiciary.senate.gov/imo/media/doc/Tushnet%20Testimony.pdf; Jennifer M. Urban et al., *Notice and Takedown: Online Service Provider and Rightsholder Accounts of Everyday Practice*, 64 J. Copyright Soc'y U.S.A. 371, 381-82 (2017) (results of survey in which approximately one third of OSPs reported receiving fewer than 100 takedown notices per year)).

[18] Letter to Members of European Parliament (Sept. 10, 2018), https://static1.squarespace.com/static/571681753c44d835a440c8b5/t/5b96a38ac2241b0779235c8d/1536598923659/Article+13+-+Company+Letter.pdf.

[19] December 1 Letter, *supra* note 13.

large enough to exceed a threshold—would have a harder time competing.[20] Indeed, such thresholds could harm competition, as emerging companies nearing the threshold would have an incentive to be acquired by a more-established competitor that already has the technological and financial resources to weather a changed § 512 framework.[21] Relatedly, thresholds in the law can operate like traps for startups.[22] Unsuspecting companies, either unaware of various thresholds or growing unpredictably, could quickly find themselves out of compliance and suddenly liable for alleged user-generated infringement they had no knowledge of or involvement in.

Second, and similarly, establishing thresholds within the § 512 safe harbors could create problematic incentives. For example, establishing discrete thresholds would give some small companies a reason to stay below that number, and create a sort of "reward for staying small."[23] Indeed, other legal regimes that "penalize growing businesses by requiring [them] to satisfy costly and complex legal requirements as they increase in size" discourage entrepreneurial growth.[24] . . .

Third, . . . as we have previously explained:[25] [I]nherent in the question is the challenge of defining large and small OSPs. Would a small OSP be measured by employee headcount, volume of user-generated content, average daily users, revenue, or something else? The goal of a high-growth startup is to increase, ideally rapidly, in all of these metrics. . . .

[I]t can be difficult (if not impossible) for companies to predict their growth, which would make it difficult (or impossible) to know when the new liabilities and monitoring costs would kick in. And much of this growth is outside of a company's immediate control. For example, if an OSP has a piece of content go viral, it might see

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[20] *See, e.g.*, Thomas Spoerri, *On Upload-Filters and Other Competitive Advantages for Big Tech Companies under Article 17 of the Directive on Copyright in the Digital Single Market*, 10 J. Intel. Prop. Info. Tech. E-Commerce L. 173, 179 (2019), https://www.jipitec.eu/issues/jipitec-10-2-2019/4914 (referring to Europe's Article 17, explaining how "[a] small or young company offering services related to content uploaded by users and thereby trying to compete with established [OSPs] . . . will - at the latest after three years of its existence . . . - fall under the direct liability regime of article 17 DSM and have to apply filtering technologies").

[21] Lenard Koschwitz, *Startups Told to Pack Their Bags After Three Years*, EU Observer (Feb. 8, 2019), https://euobserver.com/stakeholders/144126 (discussing Europe's carve-out from Article 17, noting that "European startups will become more likely to be acquired at an early stage instead of scaling-up"); *see also, e.g.*, Michael Mandel & Melissa Blaustein, Opinion, *Entrepreneurs Need Policy to Escape the 'Startup Trap,'* Gainesville Sun (Feb. 26, 2019), https://www.gainesville.com/opinion/20190226/point-of-view-entrepreneurs-need-policy-to-escape-startup-trap (explaining while "'carve-outs' are beneficial for companies who stay below the relevant thresholds, the threat of losing these exemptions can make entrepreneurs think twice before expanding").

[22] Mandel & Blaustein, *supra* note 21.

[23] Koschwitz, *supra* note 21.

[24] Kelly Hamren, Note, *Closing the Entrepreneurial Gap: Liberalizing Employment Law to Restore French Competitiveness*, 34 Nw. J. Int'l L. & Bus. 519, 546-47 (2014) (discussing French labor laws which start to apply once a company reaches fifty employees, and how this has been found to influence companies not to grow).

[25] *Is the DMCA's Notice-and-Takedown System Working in the 21st Century?: Hearing Before the Subcomm. on Intellectual Property of the S. Comm. on the Judiciary*, 116th Congress 21-22 (2020) (response to Questions for the Record (QFR) No. 4 from Senator Patrick Leahy to Abigail Rives), https://www.judiciary.senate.gov/imo/media/doc/Rives%20Responses%20to%20QFRs.pdf.

its average daily user numbers skyrocket for a limited period of time. Without advance notice that it needs to have litigation reserve funding or filtering tools ready, it could suddenly find itself out of compliance with copyright law with no accessible, affordable way to resolve the problem. Likewise, if the average daily user count falls the following month, it could become "small" again, having incurred risk and cost in the interim that are shortly-thereafter moot. . . .

Defining and distinguishing between larger and smaller OSPs would introduce other uncertainties in practical application that could easily eviscerate the benefit for companies below the threshold. Currently, OSPs accused of infringement have to prove that they qualify for immunity under § 512. If the law contained size thresholds, OSPs accused of infringement would have to prove not only that they qualify for immunity but also that they fall below the threshold.[26] Size would be a fact-bound inquiry, and a small company that fell below the statute's thresholds would still have to go through fact discovery and wait until summary judgment to prove size.[27] The cost of litigating just to summary judgment is more than many startups can afford,[28] so if a startup cannot afford to prove it is below the law's threshold, the protections intended by the threshold lose practical value. Making it more expensive to prove safe harbor eligibility would also make it more expensive to get even bad faith lawsuits dismissed. Increasing costs on startup OSPs who are below the threshold, in turn, makes the threat of litigation a bigger problem and increases incentives to threaten lawsuits in hopes that small companies will settle (or capitulate to wealthy rightsholder demands to take additional measures beyond what is required for safe harbors).

Likewise, in other areas of the law where thresholds come up, complex legal tests have been developed to determine where a given company falls relative to the threshold. For example, the affiliation rule and the "integrated employer" tests complicate the inquiry of a company's size.[29] It is hard for many companies to know their "size" under

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[26] *E.g.*, *Adler v. Her Campus Media, LLC*, 411 F. Supp. 3d 121, 123-4, 125 (D. Mass. 2019) (denying motion to dismiss asserting safe harbor affirmative defense, deferring resolution until after development of factual record).

[27] *Cf. Engelhardt*, 472 F.3d at 3 (affirming summary judgment that defendant-employer did not employ requisite number of people and was therefore not in violation of FMLA); *Cardinale v. Southern Homes of Polk County, Inc.*, No. 8:06-CV-1295-JDW-MSS, 2008 WL 788460, at *1, 3-6 (M.D. Fla. Mar. 19, 2008) (granting summary judgment that defendant-employer was not subject to FMLA, in part conducting fact-bound inquiry of whether student workers met statutory definition of "employee"); *Johnson v. Wabash National Trailer Centers, Inc.*, No. 06-1688-KI, 2007 WL 539496, at *3 (D. Or. Feb. 15, 2007) (denying motion to dismiss FMLA complaint, and deferring resolution pending more complete evidentiary record, where defendant-employer contended it did not employ enough people and sought to invoke "small employer" exception).

[28] For example, it can cost $500,000 to defend an intermediary liability case through discovery (i.e., to complete discovery, before being able to move for summary judgment that safe harbors apply). *Content Moderation, & Section 230*, *supra* note 12. By contrast, the average seed-stage startup has about $1.2 million dollars—a sum that is expected to cover all of its expenses for 22 months—and most startups have far less funding than that. *Startup Ecosystem*, *supra* note 11.

[29] *E.g.*, 13 CFR 121.301(f) (affiliation rule); Kathryn L. Hickey & Erin M. Estevez, *Affiliation in the Context of SBA Loans – Guidance for Venture Capital Investor*s, NVCA (Mar. 27, 2020), *available at* https://nvca.org/wp-content/uploads/2020/03/VC-SBA-Lending-and-Affiliation-Guidance-for-SBA-Loan-Programs.pdf (four page document explaining affiliation rule for startups, specifically as it pertains to investors and access to COVID relief programs); *Grace v. USCAR*, 521 F.3d 655, 662-3 (6th Cir. 2008) (explaining Department of Labor regulations for evaluating employment relationships to assess whether an employer has to provide FMLA leave).

different regulations and legal tests. These are also fact-intensive tests, and if similar thresholds were implemented in § 512, companies seeking to prove they were below the threshold would also have to develop the facts and litigate their size according to the regulatory or court-developed tests that will have to be developed to evaluate company size.

Europe's experience with Article 17, and the current effort of member states to implement it, sheds further light on these challenges. Article 17 includes a carve-out for smaller, younger companies that, under certain circumstances, do not have to adopt the filtering technologies and licensing efforts required under the EU's Directive on Copyright in the Digital Single Market.[30] Specifically, OSPs that are less than three years old and have less than 10 million Euro revenue (cumulative) may be exempt from the Directive's requirements, but once they surpass five million unique monthly visitors the Directive's requirements kick-in.[31] Companies that qualify for the carve-out would have to be very small, are not likely to compete with large (or "big tech") OSPs, and are "presumably not . . . even an established [OSP]."[32] As such, in practice the carve-out in Article 17 will "rarely apply and generally not be helpful to start-up companies or to help increase competition amongst [OSPs] in the EU market."[33] And while there are numerous other flaws with Article 17, the needs of Europe's startups and the problems with the thresholds-based carve-out are likely part of the reason "countries are struggling to implement [the] new, imbalanced legal regime that disregards technological realities."[34]

Relatedly, much of the case law, to-date, that shapes our understanding of the DMCA was litigated by (now) larger, established service providers and previous generations of startups.[35] And while those cases provided clarity in the law, they did not always have good practical outcomes, from the perspective of innovation, competition, and economic opportunity. For example, in one case a video streaming startup spent several years in court proving it was operating within § 512's safe harbor, but it also had to file for bankruptcy in the midst of that legal battle.[36]

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[30] Directive (EU) 2019/790, Article 17(6).
[31] *Id.*; Spoerri, *supra* note 20, at 179.
[32] Spoerri, *supra* note 20, at 179.
[33] *Id.*
[34] Evan Engstrom, Opinion, *Lawmakers Should Use Extreme Caution When Considering Any Changes to Resilient DMCA*, InsideSources (Mar. 12, 2020), https://www.insidesources.com/lawmakers-should-use-extreme-caution-when-considering-any-changes-to-resilient-dmca/.
[35] Engine has written about similar issues and responded to related questions in the past. These comments and this response draw on, and in some portions reiterate, those earlier statements. *E.g.*, March 5 Letter, *supra* note 8 (quoting Rives, *supra* note 7, at 20; December 1 Letter, *supra* note 13, at 6-7).
[36] *See, e.g.*, Emily Chasan, *Web Video Service Veoh to Liquidate, Founder Says*, Reuters (Feb. 12, 2010), https://www.reuters.com/article/veoh-bankruptcyidCNN1216366120100212 (quoting founder saying "[t]he distraction of the legal [copyright] battles, and the challenges of the broader macro-economic climate have led to our Chapter 7 bankruptcy"). Veoh launched in 2005, and was sued by Universal Music Group in 2007, based on alleged copyright infringement by Veoh's customers. That case was not resolved until 2013. *UMG Recordings, Inc. v. Shelter Capital Partners LLC*, 718 F.3d 1006 (9th Cir. 2013). UMG eventually lost the suit, with the Ninth Circuit affirming that Veoh was operating within the protection of 17 U.S.C. § 512 safe harbors. But while the suit was pending, Veoh filed for

Today's startups have the benefit of following in the footsteps of litigants who took the time and money to seek clarity in the law. If the law that applies to larger companies is no longer the same law that applies to all service providers, startups and smaller tech companies would have to defend each individual case on their own. Larger service providers would still be able to afford to adopt enhanced measures and litigate lengthy cases to prove they are doing "enough," but startups and smaller service providers would no longer be able to seek certainty and protection within those decisions.[37]

Finally, size metrics may not be a good proxy for the volume of potential infringement on a platform.[38] A service provider may be large by some standard, because it reaches a large audience and hosts large volumes of content, but can still see very little infringement.[39] Yet, as we understand from conversations with certain rightsholder organizations (including those convened by the Copyright Office), there may be small service providers that do (or could) experience significant infringement.[40] As such, size would be irrelevant to whether imposing different technical measures on companies based on size would stop or help resolve infringement—because the former platform might seem large but have no infringement and the latter might be small and experience more.

9. Definition: How could the existing definition of STMs in section 512 of Title 17 be improved?

Lawmakers should not change the existing definition of standard technical measures. Oftentimes, changes to § 512 are proposed—changes that would favor certain (mostly large, traditional) rightsholders—based on the incorrect perception that service providers uniformly see the DMCA as a success and rightsholders have uniform concerns about it. That is not true, misses necessary context, and sets up a false dichotomy. Here we are faced with an even-narrower question about whether changes to § 512(i) are warranted, which further removes the discussion from the absolutely essential context of the balance in the entire law. Considering such changes to copyright law in isolation is misguided and any discussion about statutory amendments should be done in a way that factors in the balances and compromises of the DMCA as well as imbalances found in copyright law more broadly.

10. Obligations: Currently, section 512(i)(1) conditions the safe harbors established in section 512 on an internet service provider accommodating and not interfering with STMs.
(a) Is the loss of the section 512 safe harbors an appropriate remedy for interfering with or failing to accommodate STMs? If not, what would be an appropriate remedy?

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bankruptcy. *See also, e.g.*, *Io Grp., Inc. v. Veoh Networks, Inc.*, 586 F. Supp. 2d 1132 (N.D. Cal. 2008) (in another case filed by adult film producer, court held that Veoh met its burden of proving its entitlement to the safe harbor).

[37] QFR Responses, *supra* note 25, at 6 (response to QFR No. 6 from Senator Thom Tillis to Abigail Rives).

[38] QFR Responses, *supra* note 25, at 7 (response to QFR No. 4 from Senator Patrick Leahy to Abigail Rives).

[39] *See* Rives Testimony, *supra* note 7, at 8-9 (listing OSPs that receive relatively small numbers of takedown notices relative to the amount of content they host).

[40] We do not personally know of any such platforms but understand they have been mentioned. For example, during a recent Copyright Office plenary, one participant asked "[n]ow, let's talk about all those small enterprises that are riddled with piracy." Plenary Session Recording (Feb. 22, 2022) (quoting Jennifer Pariser, Motion Picture Association), *available at* https://www.copyright.gov/policy/technical-measures/recordings/.

(b) Are there other obligations concerning STMs that ought to be required of internet service providers? (c) What obligations should rightsholders have regarding the use of STMs?

On the topic of remedies and other obligations, at the very least, we are deeply concerned about recent proposals to create additional, free-standing obligations and/or penalties around deployment of technical measures.[41]

For example, creating a new cause of action for lawsuits against startups based on alleged failures to use the right technical measures would multiply litigation.[42] A startup that never experienced a single (allegedly) infringing upload would (a) have to implement designated technical measures and (b) could be sued if it failed to. This could be ruinous for the company. But it would also create an even higher barrier to entry for startup service providers—all of whom would need to either have enough cash on hand to pay damages and cover legal fees for every such litigation or they would have to spend whatever it takes to implement the designated technical measure. This would also influence investors to avoid startup service providers.[43] All of this would entrench incumbents and make it harder for new companies to launch and compete. And, again, all of this would be independent of whether the service provider ever experienced a single instance of alleged infringement.

Litigation, or threats of litigation, could become an even more troubling tool against innovation and competition. We have seen how large, wealthy rightsholder organizations have already been able to use § 512 litigation to influence (or restrict) competition and innovation among service providers.[44] The ease with which anyone could file a technical measures case and stunt a startup's growth is a serious concern—as it would give certain rightsholders another avenue to litigation that dictates which online services exist.

Creating new or additional penalties around technical measures would also exacerbate problems with damages in copyright litigation. As we have noted elsewhere, statutory damages in copyright infringement should be revisited. We have encouraged Congress to eliminate, modify, and/or reduce them, at least for alleged online infringement.[45] Any proposal to create a new cause of action or additional damages around technical measures is a step in the wrong direction.

11. Adoption through rulemaking: (a) What role could a rulemaking play in identifying STMs for adoption under 512(i)? (b) What entity or entities would be best positioned to administer such a rulemaking? (c) What factors should be considered when conducting such a rulemaking, and how

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[41] S.3880 - SMART Copyright Act of 2022.
[42] *Comments on 512(i) and 514*, *supra* note 9.
[43] *See generally* Matthew C. LeMerle et al., *The Impact of Internet Regulation on Early Stage Investment* 5 (Nov. 2014), https://static1.squarespace.com/static/571681753c44d835a440c8b5/t/572a35e0b6aa60fe011dec28/1462384101881/%20EngineFifthEraCopyrightReport.pdf (survey of investors where majority reported they would be deterred from investing in companies that hosted user-generated music or video if the laws changed to increase the risk investments would be exposed to liability in IP infringement lawsuits).
[44] *Supra* note 36.
[45] *Engine Responses to DMCA Reform Bill Questions from Senator Tillis for Stakeholders*, Engine 15-18 (Dec. 1, 2020), https://www.recreatecoalition.org/wp-content/uploads/2020/12/2020.12.01_Engine-Responses-to-DMCA-Questions-for-Stakeholders.pdf.

> *should they be weighted? (d) What should be the frequency of such a rulemaking? (e) What would be the benefits of such a rulemaking? What would be the drawbacks of such a rulemaking?*

On the topic of rulemaking, we are deeply concerned about recent proposals to create additional, free-standing technical measures requirements developed through rulemaking. As we have previously noted, a recent bill would authorize the Library of Congress to conduct a new rulemaking to designate technical measures—and it creates a situation where startups could easily (and almost certainly) be at an inherent disadvantage.[46]

> People who know to participate in rulemakings, and can regularly afford the time and money and lawyers it takes, would be able to share their thoughts. And ensure their circumstances were accommodated in any rule. But these processes are a big lift.[47] Wealthy organizations like the Recording Industry Association of America and the Motion Picture Association (that spend millions in a year just on lobbying)[48] are already repeat players in Copyright Office rulemakings, while it often falls to pro bono lawyers and public interest groups to bring opposing perspectives to the Office's attention.[49] This bill would expect startups to show up at these rulemakings, or else they would be subject to the same rules and technology requirements as much larger competitors (who can, and would, participate in rulemaking).

In addition,[50] there's an apparent tension between the need for government transparency in any rulemaking and the value of protecting information on how companies find and remove potential infringement. For one, if bad actors intent on infringing know how the technology works, they can

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[46] Abby Rives, *The So-Called "SMART Copyright Act of 2022," and What it Means for Startups*, Engine (Mar. 25, 2022), https://www.engine.is/news/category/the-so-called-smart-copyright-act-of-2022-and-what-it-means-for-startups.

[47] Sarah Jeong, *Why DMCA Rulemaking Is an Unsustainable Garbage Train*, Vice (Nov. 3, 2015), https://www.vice.com/en/article/9a33wv/why-dmca-rulemaking-is-an-unsustainable-garbage-train.

[48] Registrations & Quarterly Activity, United States Senate Lobbying Disclosure https://lda.senate.gov/filings/public/filing/search/?registrant=&registrant_country=&registrant_ppb_country=&client=recording+industry+association&client_state=&client_country=&client_ppb_country=&lobbyist=&lobbyist_covered_position=&lobbyist_conviction_disclosure=&lobbyist_conviction_date_range_from=&lobbyist_conviction_date_range_to=&report_period=&report_year=2020&report_dt_posted_from=&report_dt_posted_to=&report_amount_reported_min=&report_amount_reported_max=&report_filing_uuid=&report_house_doc_id=&report_issue_area_description=&affiliated_organization=&affiliated_organization_country=&foreign_entity=&foreign_entity_country=&foreign_entity_ppb_country=&foreign_entity_ownership_percentage_min=&foreign_entity_ownership_percentage_max=&search=search#js_searchFormTitle (last visited May 27, 2022) (search of 2020 reports for Recording Industry Assoc. Of Am.); Registrations & Quarterly Activity, United States Senate Lobbying Disclosure https://lda.senate.gov/filings/public/filing/search/?registrant=&registrant_country=&registrant_ppb_country=&client=motion+picture+association&client_state=&client_country=&client_ppb_country=&lobbyist=&lobbyist_covered_position=&lobbyist_conviction_disclosure=&lobbyist_conviction_date_range_from=&lobbyist_conviction_date_range_to=&report_period=&report_year=2020&report_dt_posted_from=&report_dt_posted_to=&report_amount_reported_min=&report_amount_reported_max=&report_filing_uuid=&report_house_doc_id=&report_issue_area_description=&affiliated_organization=&affiliated_organization_country=&foreign_entity=&foreign_entity_country=&foreign_entity_ppb_country=&foreign_entity_ownership_percentage_min=&foreign_entity_ownership_percentage_max=&search=search#js_searchFormTitle (last visited May 27, 2022) (search of 2020 reports for Motion Picture Assoc. of Am.)

[49] Arthur H. Neill, *Fixing Section 1201: Legislative and Regulatory Reforms for the Digital Millennium Copyright Act Anti-Circumvention Provisions*, California Western School of Law Research Paper No. 16-09 (Sept. 2, 2016), *available at* https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2791198.

[50] *Comments on 512(i) and 514*, *supra* note 9.

figure out how to evade it. But, depending on the technical details, a public process around technology that all (or many) service providers have to adopt could also expose security vulnerabilities.

Finally, rulemakings are subject to time limitations—any new rule would be in effect for some amount of time and need to be updated (perhaps periodically).[51] This would ensure that the regulations would routinely become outdated, and result in conflicting technology expectations being imposed on service providers. Because technology can and should be allowed to advance. Yet with a periodic technical measures rulemaking, companies would be expected to comply with those regulations but also keep up to date on technology and evolve to respond to the changing behavior of users (and/or bad actors intent on infringement). Startups are particularly ill-equipped to comply with inconsistent requirements, as they typically have far-fewer resources than their more established competitors. Yet, a regulatory process would likely evolve to a requirement for service providers to comply with practices that will likely be out-of-step with technical realities that will evolve more quickly than a regulation could keep up with.

> *13. Please identify and describe any pertinent issues not referenced above that the Copyright Office should consider.*

Misguided to focus on upload filters. Many of the conversations around standard technical measures seem to quickly hone in on upload filters (or other technology that would involve proactive screening of all user posts). As we have previously noted though,[52] it does not make sense to think of upload filters as a viable or reasonable standard technical measure:[53] As the Copyright Office embarks on this work, we urge you to keep this in mind. It is reflected throughout our response to this Federal Register Notice. But we would like to offer a few further reflections on the problems with required use of upload filters, and are happy to provide further information if that would be helpful.

> [A] cursory review of existing tools . . . reveals inherent hurdles to adopting any as standard. The when, how, and what of developing these tools depends heavily on the [service provider]: what works for video streaming where users monetize creations through ad revenue cannot translate to a multimedia platform where users sell creative works directly to fans. Indeed, given how ubiquitous and diverse content is, one tool cannot be expected to identify the many types of potential infringement in and of the many types of content on the many types of platforms.
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> Moreover, some [service providers] will be able to tolerate the inherent limitations of each tool, but others cannot. For example, tools that seek to detect infringement in music works are more accurate for certain types of music than others. Automated

[51] March 5 Letter, *supra* note 8.
[52] March 5 Letter, *supra* note 8.
[53] December 1 Letter, *supra* note 13, at 20 (quoting QFR Responses, *supra* note 25, at 8 (response to QFR No. 1 from Senator Christopher Coons to Abigail Rives)).

> detection of infringement has shown substantial failures in classical music.[54] This is, at least in part, a function of differences in the underlying creative works, because for classical music "the bulk of the repertoire [is] in the public domain, [and] the differences between particular performances are much more subtle."[55] Forcing platforms that serve the classical music community to adopt a standard screening technology that was built to suit all types of music would put those creators and fans at a distinct and unfair disadvantage.
>
> [In addition], "there is already an incentive for OSPs to 'over-takedown.'"[56] And "[t]he existing inclination to over-takedown would be exacerbated if OSPs faced more liability for user-generated posts (i.e., if Congress . . . imposed an affirmative duty to monitor). And if OSPs were forced to deploy technology to conduct review and removal, it would likewise result in more problematic takedowns."[57]

As such, proposals to define standard technical measures would force especially small companies, in the interest of self-preservation, to remove even more non-infringing content.[58]

Moreover, the high costs of monitoring technology and the ability to cover legal risks associated with user-generated content are already seen to confer a competitive advantage.[59] Creating either a mandate or expectation that startups be able to do what larger incumbents already do (or are expected to do in the future) would further frustrate their ability to fundraise, launch, and succeed.[60]

How companies currently adapt content moderation (including copyright) as they scale. Attached as Appendix A is a recent Engine report looking at content moderation more broadly

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[54] *See, e.g.*, Michael Andor Brodeur, *Copyright Bots and Classical Musicians Are Fighting Online. The Bots are Winning.*, Wash. Post (May 21, 2020), https://www.washingtonpost.com/entertainment/music/copyright-bots-and-classical-musicians-are-fighting-online-the-bots-are-winning/2020/05/20/a11e349c-98ae-11ea-89fd-28fb313d1886_story.html (describing copyright identification algorithms removing live classical music performances performed remotely and online due to COVID-19 pandemic).

[55] Vance R. Koven, *Fair Use of Flickers*, The Boston Musical Intelligencer (May 30, 2020) https://www.classical-scene.com/2020/05/30/fair-flickers/.

[56] Rives, *supra* note 7, at 18-19 (citing Jennifer M. Urban et al., *Notice and Takedown: Online Service Provider and Rightsholder Accounts of Everyday Practice*, 64 J. Copyright Soc'y U.S.A. 371, 384 (2017)).

[57] QFR Responses, *supra* note 25, at 5 (response to QFR No. 5 from Senator Thom Tillis to Abigail Rives).

[58] *See, e.g.*, Martin Husovec, *The Promises of Algorithmic Copyright Enforcement: Takedown or Staydown? Which is Superior? And Why?*, 42 Colum. J.L. & the Arts, 53, 59, 70 (2018) (describing over-blocking harm, and addition over-blocking errors caused by automation).

[59] Engine has written about similar issues and responded to related questions in the past. These comments and this response draw on, and in some portions reiterate, those earlier statements. *E.g.*, *Statement of Interest of Engine Advocacy Regarding Technical Measures: Public Consultations*, Engine (Feb. 8, 2022), https://static1.squarespace.com/static/571681753c44d835a440c8b5/t/6204213229413c15060d51c3/1644437810823/2022.02.08_Engine+Submission+re+Copyright+Office+Consultation.pdf (citing *e.g.*, Urban, *supra* note 56, at 397-402 (noting that shifts to DMCA-plus are viewed as a competitive advantage for established platforms, and that can affect market entry and startup success)).

[60] *Cf.* LeMerle, *supra* note 42 (investors report reluctance in funding emerging startups that host user generated content if legal changes indicate money would go to cover legal fees or liability for user posts); Amanda Reid, *Copyright Policy as Catalyst and Barrier to Innovation and Free Expression*, 68 Catholic Univ. L. Rev. 33, 43-44 (2019) (arguing that "allowing incumbents to dictate copyright policy, Congress has entrenched a preference for extant technologies").

(including but not limited to copyright).[61] Most of the startups surveyed reported that they did not yet "use technology as part of their moderation process, because moderation technologies were unwarranted due to scale, were prohibitively expensive, and [] ultimately imperfect." One founder surveyed explained that if the use of "filtering technology were required by law, '*it would put us out of business*.'"[62]

However, as detailed in the Appendix, as companies scale, the amount of content they experience grows and they develop standard processes, dedicate staff, and license proprietary technologies to help moderate content on their sites Any legal or policy changes need to account for the realities—and the large amounts of money and time—that companies are spending on managing potentially problematic content as they grow.

Importance of the Internet user, Internet-enable creator, and digital entrepreneur perspectives. In many of these conversations around alleged infringement online, startups and other service providers are expected to take up the mantle of representing the interests of their users.[63] Of course, startups care about and depend on their users and customers.[64] But we urge the Copyright Office to ensure that it also receives ample input directly about how technical measures affect these public interests. Merely by way of example, experience has signaled how broad, forced adoption of filtering technology could easily harm users, Internet-enabled creators, and digital entrepreneurs who have their non-infringing work improperly removed from the Internet.[65] And how overzealous rightsholders, sometimes relying on technology, adopt incorrect definitions of what infringes their copyrights to remove things that are unequivocally fair use or public domain. Experience with improper copyright takedowns has to be a part of any consideration of technical measures, because it not only results in removal of non-infringing works but it has broader chilling effects that can deter individuals from online engagement generally.[66]

* * *

Thank you for the opportunity to submit these perspectives, and we look forward to continued engagement with the Copyright Office on these and other issues critical to startup innovation and success.

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[61] *Content Moderation, & Section 230*, *supra* note 12.
[62] *Id.* (emphasis added).
[63] Statement of Interest, *supra* note 59.
[64] *E.g.*, Paul Sieminski, Opinion, *Corporations Abusing Copyright Laws Are Ruining the Web for Everyone*, Wired (Jan. 17, 2014), https://www.wired.com/2014/01/internet-companies-care-fair-use/ (noting role of Internet companies as the first line of defense in protecting fair use on platforms).
[65] *See, e.g.*, Rives, *supra* note 7, at 12-14 (collecting examples); Comments of Engine Advocacy in re: *Secondary Trademark Infringement Liability in the E-Commerce Setting*, Docket No. PTO-T-2020-0035, at 6-7 (Dec. 28, 2020), https://static1.squarespace.com/static/571681753c44d835a440c8b5/t/5ff37a915abd827cadbf968f/1609792145348/2020.12.28_Comments+to+Docket+PTO+T+2020+0035.pdf (similar).
[66] *E.g.*, Wendy Seltzer, *Free Speech Unmoored in Copyright's Safe Harbor: Chilling Effects of the DMCA on the First Amendment*, 24 Harv. J.L. & Tech. 171 (2010); Jonathon W. Penney, *Privacy and Legal Automation: The DMCA as a Case Study*, 22 Stan. Tech. L. Rev. 412 (2019).