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Pushing Back on Stricter Copyright ISP Liability Rules

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PUSHING BACK ON STRICTER COPYRIGHT ISP LIABILITY RULES

Pamela Samuelson*

ABSTRACT

For more than two decades, internet service providers (ISPs) in the United States, the European Union (EU), and many other countries have been shielded from copyright liability under “safe harbor” rules. These rules apply to ISPs who did not know about or participate in user-uploaded infringements and who take infringing content down after receiving notice from rights holders. Major copyright industry groups were never satisfied with these safe harbors, and their dissatisfaction has become more strident over time as online infringements have grown to scale.

Responding to copyright industry complaints, the EU in 2019 adopted its Directive on Copyright and Related Rights in the Digital Single Market. In particular, the Directive’s Article 17 places much stricter obligations on for-profit ISPs that host large amounts of user contents. Article 17 is internally contradictory, deeply ambiguous, and harmful to small and medium-sized companies as well as to user freedoms of expression. Moreover, Article 17 may well violate the European Charter of Fundamental Rights.

In the United States, Congress commenced a series of hearings in 2020 on the safe harbor rules now codified as 17 U.S.C. § 512 of the Digital Millennium Copyright Act (DMCA). In May 2020, the U.S. Copyright Office issued its long-awaited study on Section 512, which recommended several significant changes to existing safe harbor rules. The Study’s almost exclusively pro–copyright industry stances on reform of virtually every aspect of the rules notably shortchanges other stakeholder interests.

Congress should take a balanced approach in considering any changes to the DMCA safe harbor rules. Any meaningful reform of ISP

* Richard M. Sherman Distinguished Professor of Law, Berkeley Law School. This Article is adapted from my written testimony to the Senate Judiciary Committee’s Intellectual Property Subcommittee on March 10, 2020, available at https://www.judiciary.senate.gov/imo/media/doc/Samuelson%20Testimony.pdf. It has been substantially revised to comment on the May 2020 Copyright Office’s Section 512 Study. I wish to thank Kathryn Hashimoto for excellent research support for that testimony and this Article, as well as Annemarie Bridy, Gwen Hinze, Martin Husovec, Daphne Keller, Paul Keller, Corynne McSherry, João Pedro Quintais, Julia Reda, Erik Stallman, and Rebecca Tushnet for their comments on drafts of my testimony and/or this Article.
liability rules should consider the interests of a wide range of stakeholders. This includes U.S.-based Internet platforms, smaller and medium-sized ISPs, startups, and the hundreds of millions of Internet users who create and enjoy user-generated content (UGC) uploaded to these platforms, as well as the interests of major copyright industries and individual creators who have been dissatisfied with the DMCA safe harbor rules.

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INTRODUCTION

For more than two decades, the United States and EU have had compatible “safe harbor” rules limiting the liability of internet service providers (ISPs), such as Facebook and YouTube, that host content uploaded by their users. As long as these ISPs were neither complicit in their users’ copyright-infringing activities nor aware that user-uploaded content was infringing, the safe harbor rules relieved them from liability for user infringements. Under these rules, ISPs would become liable for user infringement if they failed to remove or disable access to infringing materials after receiving detailed notices from copyright owners or their agents about the location of specific infringing materials. In the United States, this “notice-and-takedown” regime was adopted as part of the Digital Millennium Copyright Act (DMCA) of 1998. In the EU, this was accomplished as part of its Directive on E-Commerce in 2000. Many other countries have followed the U.S.-and-EU-led approach to ISP liability.

Major copyright industry groups would have preferred stronger ISP liability rules in national laws back in the late 1990s and early 2000s. But they reluctantly went along with the safe harbor rules as part of legislative compromises about updating copyright rules for the digital age. Over time, the scale and scope of online copyright-related activity, both legitimate (for example, user-generated content such as remix parodies) and illegitimate (online piracy), has far surpassed what policymakers in the United States and EU could have imagined. Although ISPs have sometimes been held indirectly liable for contributing to user infringement, the safe harbor rules

1. Online Copyright Infringement Liability Limitation Act, Title II of Digital Millennium Copyright Act, Pub. L. No. 105-304, §§ 201–02, 112 Stat. 2860, 2877 (1998) (codified as amended at 17 U.S.C. § 512).
2. Directive 2000/31/EC of the European Parliament and of the Council of 8 June 2000 on Certain Legal Aspects of Information Society Services, in Particular Electronic Commerce, in the Internal Market, 2000 O.J. (L 178) 1 [hereinafter E-Commerce Directive].
3. See, e.g., Copyright Law in Foreign Jurisdictions: How Are Other Countries Handling Digital Piracy?: Hearing Before the Subcomm. on Intellectual Prop. of the S. Comm. on the Judiciary, 116th Cong. 1–2 (2020) [hereinafter Copyright in Foreign Jurisdictions Hearing] (statement of Justin Hughes, Professor of Law, Loyola Marymount University); id. at 4 (statement of Matt Schruers, President, Computer & Communications Industry Association).
4. See JESSICA LITMAN, DIGITAL COPYRIGHT 135 (2006) (describing content owner groups as favoring strict liability rules against ISPs). The long, complicated bargaining process leading to passage of the DMCA is recounted in detail by Professor Litman. See id. at 122–45.
5. See id. at 135 (“It soon became clear to content owners, however, that the legislation could not move without a solution to the problem of Internet service provider liability.”).
6. See, e.g., Metro-Goldwyn-Mayer Studios Inc. v. Grokster, Ltd., 545 U.S. 913, 929–30 (2005) (holding peer-to-peer file-sharing service liable for inducing user infringements).
have protected ISPs even when they were generally aware of some user infringement on their sites. Dissatisfaction with the safe harbors has caused copyright industry groups and some individual creators to urge legislators to stiffen the existing rules.

Copyright industry complaints about online piracy contributed to the European Commission’s 2016 decision to propose a new directive that, among other things, would place much stricter obligations on for-profit ISPs that host large amounts of user content, even if these sites host lawful user-generated content (UGC). The Commission hoped these new rules would induce ISPs to engage in more licensing of EU copyrights and reduce user-uploaded infringements by creating incentives for these ISPs to adopt automated content recognition tools. In April 2019, the EU finalized its Directive on Copyright and Related Rights in the Digital Single Market (DSM Directive). The revised and renumbered Article 17 directs EU member states to adopt strict liability rules for a subset of ISPs referred to in the directive as “online content-sharing service providers.” Under the new rules, these services will be directly liable for any infringing files that users upload to their sites. The services must make “best efforts” to obtain licenses from copyright owners and to ensure that protected works for which copyright owners have provided relevant information cannot be uploaded to the service’s sites; moreover, the services must make best efforts to keep the materials from being reuploaded after they are taken down. (This is commonly referred to as a “notice-and-staydown” procedure.) Article 17 was highly

7. See, e.g., Viacom Int’l, Inc. v. YouTube, Inc., 676 F.3d 19, 32–33 (2d Cir. 2012) (hosting service not liable for infringing uploads of users despite general knowledge of some infringements on its site).

8. See, e.g., Niva Elkin-Koren et al., Is It Time to Abolish Safe Harbor? When Rhetoric Clouds Policy Goals, 31 STAN. L. & POL’Y REV. 1, 10 (2020).

9. Commission 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) [hereinafter Proposed DSM Directive]. The Proposed DSM Directive largely ignored that a substantial proportion of user-uploaded content hosted by ISPs is UGC. See discussion of UGC infra notes 76–77, 193–203 and accompanying text.

10. See, e.g., Annemarie Bridy, The Price of Closing the “Value Gap”: How the Music Industry Hacked EU Copyright Reform, 22 VAND. J. ENT. & TECH. L. 323, 326–33 (2020) (explaining and critiquing the “value gap” rationale for the adoption of Article 17).

11. Council 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, 2019 O.J. (L 130) [hereinafter DSM Directive]. My focus in this Article is on the copyright implications of Article 17; the rules it establishes also apply to the online hosting of contents that are subject to related rights protections (such as the exclusive rights EU law provides in broadcasts and sound recordings) and sui generis database rights.

12. Id. art. 2(6) (defining this term).

13. Id. art. 17(4). For an excellent comparative analysis of notice-and-takedown and notice-and-staydown regimes, see Martin Husovec, The Promises of Algorithmic Copyright Enforcement: Takedown or Staydown? Which is Superior? And Why?, 42 COLUM. J.L. & ARTS 53 (2018).
controversial in the EU, barely garnering a majority vote in support at the EU Parliament, even after adoption of key amendments to protect user interests to address critics’ concerns. EU member states have until June 2021 to transpose Article 17 into their national laws.

Copyright industry criticisms of the DMCA safe harbors also contributed to the U.S. Copyright Office’s decision in late 2015 to initiate a policy study of these rules. In May 2020, the Office published a study recommending several significant changes to these rules, although it did not endorse an Article 17-like notice-and-staydown regime, as some copyright industry representatives had urged. Even before the Office’s Study became public, the Senate Judiciary Committee’s Intellectual Property Subcommittee commenced a series of hearings about the DMCA safe harbors. On March 10, this Subcommittee heard from two panels of experts on how other jurisdictions are dealing with online piracy. My testimony at this hearing explained why Article 17 of the DSM Directive should not serve as a model for any Congressional reconsideration of the DMCA safe harbors.

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14. See Section 512 Study: Notice and Request for Public Comment, 80 Fed. Reg. 81862, 81862 (Dec. 31, 2015). Following two Notices of Inquiry that sought public comments and several public roundtables, the Office issued its Report. See U.S. COPYRIGHT OFFICE, SECTION 512 OF TITLE 17: A REPORT OF THE REGISTER OF COPYRIGHTS 1 (May 2020) [hereinafter SECTION 512 STUDY].

15. See SECTION 512 STUDY, supra note 14, at 186–93; see, e.g., U.S. Copyright Office, Transcript, Section 512 Study Roundtable (Apr. 8, 2019) (comments of Mary Rasenberger, Authors Guild; and Eric Cady, Independent Film and Television Alliance), https://www.copyright.gov/policy/section512/public-roundtable/transcript_04-08-2019.pdf (urging adoption of notice-and-staydown rules).

16. See, e.g., Eileen McDermott, Senate IP Subcommittee Kicks Off Year-Long Review of Digital Millennium Copyright Act, IP WATCHDOG (Feb. 13, 2020), https://www.ipwatchdog.com/2020/02/13/senate-ip-subcommittee-kicks-off-year-long-review-digital-millennium-copyright-act/id=118866. The first hearing was held on February 11, 2020. See The Digital Millennium Copyright Act at 22: What Is It, Why Was It Enacted, and Where Are We Now?: Hearing Before the Subcomm. on Intellectual Prop. of the S. Comm. on the Judiciary, 116th Cong. (2020) [hereinafter DMCA at 22 Hearing]. On June 2, 2020, a third hearing occurred. See Is the DMCA’s Notice-and-Takedown System Working in the 21st Century?: Hearing Before the Subcomm. on Intel. Prop. of the S. Comm. on the Judiciary, 116th Cong. (2020) [hereinafter DMCA’s Notice-and-Takedown Hearing]. These were followed by two more Senate hearings held on July 28, 2020 and December 15, 2020, respectively. See How Does the DMCA Contemplate Limitations and Exceptions Like Fair Use?: Hearing Before the Subcomm. on Intel. Prop. of the S. Comm. on the Judiciary, 116th Cong. (2020); The Role of Private Agreements and Existing Technology in Curbing Online Piracy: Hearing Before the Subcomm. on Intellectual Prop. of the S. Comm. on the Judiciary, 116th Cong. (2020). The House also held a hearing after the Copyright Office issued its § 512 Report. See Copyright and the Internet in 2020: Reactions to the Copyright Office’s Report on the Efficacy of 17 U.S.C. § 512 After Two Decades: Hearing Before the H. Comm. on the Judiciary, 116th Cong. (2020).

17. Copyright in Foreign Jurisdictions Hearing, supra note 3 (statement of Pamela Samuelson, Professor of Law, University of California, Berkeley). On December 22, 2020, Sen. Thom Tillis, then-Chair of the Senate Judiciary Committee’s Subcommittee on Intellectual Property, released the first discussion draft of legislation to reform the DMCA, soliciting
This Article revisits and expands upon key points from that testimony and offers a critique of the Copyright Office’s recently issued Section 512 Study. Part I reviews the circumstances that led to the creation of these safe harbors and the role the United States has played in making the notice-and-takedown regime an international standard. Part II shows that Article 17 of the DSM is internally contradictory, deeply ambiguous, and harmful to small and medium-sized companies as well as to user freedoms of expression. It also discusses why Article 17 may well violate the European Charter of Fundamental Rights.

Part III recommends that Congress take a balanced approach in considering any changes to the DMCA notice-and-takedown rules. It critiques key recommendations for changes to the DMCA safe harbors in the Copyright Office’s Section 512 Study. Any meaningful reform of ISP liability rules should consider the interests of a wide range of stakeholders, including highly successful U.S.-based internet platforms, smaller and medium-sized ISPs, startups, the many millions of internet users who share their own creations through these platforms, hundreds of millions of internet users who enjoy these creations, as well as the interests of major copyright industries and individual creators who have been dissatisfied with the DMCA safe harbor rules. The Copyright Office’s Section 512 Study purports to take a comprehensive and balanced view in presenting its analysis and recommendations, but on closer reading its almost exclusively pro–copyright industry stances on reform of virtually every aspect of § 512 shortchanges several other types of stakeholder interests. The Office does not even recognize that UGC creators are copyright owners too, whose interests may be adversely affected by numerous changes the Section 512 Study would make to ISP liability rules.

I. ISP Safe Harbors for User Infringements Became an International Norm After Adoption of the WCT

In the mid-1990s, when the internet was much less widely used than it is today, stakeholders and policymakers engaged in long and complex negotiations to consider the future of copyright law in the digital environment. One contentious issue was what, if any, legal liability ISPs should incur for copyright-infringing content posted by their users. Prior to the diplomatic conference that culminated in the adoption of the WIPO Copyright Treaty (WCT), the Clinton Administration published its White Paper on Intellectual-
al Property and the National Information Infrastructure stating that ISPs were and should be liable for user infringements on their sites, a position with which ISPs took issue. U.S. officials also proposed this rule for consideration at the WIPO diplomatic conference scheduled in late 1996 to consider a possible treaty on digital copyright issues. The strict liability position initially proposed by the United States was not met with favor among the delegates to the diplomatic conference, however, because it was unbalanced and unfair to ISPs insofar as they were unaware of infringing materials on their sites.

An Agreed Statement to Article 8 of the WCT became the international norm regarding ISP liability for user infringements of which the ISPs were unaware and over which they had no control. It stated that “the mere provision of physical facilities for enabling or making a communication does not in itself amount to communication within the meaning of this Treaty or the Berne Convention.” Consistent with this position were subsequent legislative limitations on ISPs’ liability for infringing acts of their users about which they lacked knowledge and over which they had no control.

The United States implemented this norm as part of the DMCA in 1998, creating a new § 512 of U.S. copyright law to establish four ISP safe harbors from monetary and injunctive relief. The U.S. legislative debate over ISP liability rules was influenced by a court ruling in Religious Technology Center v. Netcom Online Communication Services, Inc. It held that an in-

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18. BRUCE A. LEHMAN, INFORMATION INFRASTRUCTURE TASK FORCE, INTELLECTUAL PROPERTY AND THE NATIONAL INFORMATION INFRASTRUCTURE: THE REPORT OF THE WORKING GROUP ON INTELLECTUAL PROPERTY RIGHTS 117 (1995).
19. See, e.g., Pamela Samuelson, Big Media Beaten Back, WIRED (Mar. 01, 1997, 12:00 PM) [hereinafter Samuelson, Big Media], https://www.wired.com/1997/03/netizen-4. For a fuller discussion about the differences between the proposed and final treaties on digital copyright law, see, e.g., Pamela Samuelson, The U.S. Digital Agenda at WIPO, 37 VA. J. INT’L L. 369, 370 (1997) [hereinafter Samuelson, U.S. Digital Agenda].
20. See, e.g., Samuelson, U.S. Digital Agenda, supra note 19, at 387–88.
21. World Intellectual Property Organization [WIPO], Agreed Statement Concerning the WIPO Copyright Treaty, at 3, CRNR/DC/96 (Dec. 23, 1996), https://www.wipo.int/meetings/en/doc_details.jsp?doc_id=2464.
22. Id.
23. Online Copyright Infringement Liability Limitation Act, Title II of Digital Millennium Copyright Act, Pub. L. No. 105-304, §§ 201–02, 112 Stat. 2860, 2877 (1998) (codified as amended at 17 U.S.C. § 512); see, e.g., Jesse Helms, WIPO COPYRIGHT TREATY AND WIPO PERFORMANCES AND PHONOGRAMS TREATY REPORT TO ACCOMPANY TREATY DOC. 106-17, S. EXEC. DOC. No. 105-25, at 17 (2d Sess. 1998) (referring to the compromise on ISP liability at WIPO diplomatic conference that resulted in the Agreed Statement and provisions in implementing legislation that set forth “a clear legal framework for rights and responsibilities of ISPs, telephone companies, and copyright holders”). In the United States, ISPs are immune from liability for other tortious acts by users under 47 U.S.C. § 230. See, e.g., JEFF KOSSEFF, THE TWENTY-SIX WORDS THAT CREATED THE INTERNET 9–10 (2019).
24. Religious Tech. Ctr. v. Netcom On-line Commc’n Serv., Inc., 907 F. Supp. 1361 (N.D. Cal. 1995), cited in H.R. REP. NO. 105-551, at 11 (1998) (“Thus, the bill essentially codifies the result in the leading and most thoughtful judicial decision to date [i.e., Netcom].”).
ternet access provider, Netcom, was not directly liable for a subscriber’s infringement of which it was unaware.\(^{25}\) Regarding secondary liability, specifically contributory liability, however, the court thought that once RTC notified Netcom about the presence of infringing content on its network, Netcom had a duty to investigate and take down infringing materials if the claim was valid. The court thus denied Netcom’s motion for summary judgment, ruling that Netcom could be held contributorily liable for subscriber infringements if its failure to act on RTC’s notice materially contributed to the subscriber’s infringement.\(^{26}\)

In keeping with the Netcom decision, the first safe harbor in § 512 exempts internet access providers from liability for unmodified transitory digital network communications.\(^{27}\) The second limits ISP liability for network system caching.\(^{28}\) The third limits liability for ISP storage of contents at the direction of the system’s users.\(^{29}\) The fourth provides a safe harbor to information locating tools, such as search engines, that may link or refer to infringing materials.\(^{30}\) The latter three safe harbors are subject to notice-and-takedown rules under which ISPs are obliged, after receiving specific notices from copyright owners or their agents about the location of specific infringing materials, to remove or disable access to those materials.\(^{31}\)

Eligibility for the § 512 safe harbors is subject to certain conditions. One is that ISPs must adopt and reasonably implement a policy for terminating the accounts of repeat infringers in appropriate circumstances. Another is that ISPs must inform the Copyright Office of the agent the ISPs have designated to be the recipients of infringement takedown notices in order to be eligible for the § 512(b), (c), and (d) safe harbors.\(^{31}\)

Among the significant safeguards in § 512 for ISPs and their users is § 512(m), which clarifies that ISPs do not have a duty to monitor for or affirmatively seek out facts about possible infringing activities. This rule protects users’ privacy as well as limiting the extent to which ISPs have to be

\(^{25}\) Id. at 1369–70.

\(^{26}\) Id. at 1381.

\(^{27}\) 17 U.S.C. § 512(a).

\(^{28}\) Id. § 512(b).

\(^{29}\) Id. § 512(c).

\(^{30}\) Id. § 512(d).

\(^{31}\) Id. § 512(b)(2)(E), (c)(1)(C), (d)(3).

\(^{32}\) Id. § 512(c)(2)–(3), 512(i)(1)(A). The designated agent requirement appears to be incorporated in § 512(b) and (d) by reference to § 512(c)(3). Subsection (i) also conditions safe harbors on the ISP’s accommodation of standard technical measures. See id. § 512(i)(1)–(2). This condition has yet to be activated because there has been no stakeholder consensus about standard technical measures. The Copyright Office intends to initiate discussions with stakeholders in an effort to build consensus on such measures in coming years. See SECTION 512 STUDY, supra note 14, at 176–80.
on the lookout for infringements.\textsuperscript{33} Two further user safeguards are § 512(f), which provides a compensatory remedy for users victimized by wrongful takedowns, and § 512(g), which obligates ISPs to notify users of takedowns done in response to copyright owner demands and establishes a counternotice procedure if users want to contest a copyright infringement claim.\textsuperscript{34}

The EU adopted a similar set of safe harbors in 2000 through adoption of Articles 12 through 15 of its E-Commerce Directive.\textsuperscript{35} Numerous other countries have followed the United States’ and EU’s leads in adopting similar safe harbor rules in their national laws.\textsuperscript{36} Even without legislation, courts in some countries have interpreted their national copyright laws in a manner consistent with the DMCA safe harbors.\textsuperscript{37}

The United States has, moreover, exported DMCA-like ISP safe harbor rules through its Free Trade Agreements with numerous nations in Asia, the Middle East, and South America.\textsuperscript{38} The most recent example is the United States-Mexico-Canada Agreement (USMCA), which updated the North

\begin{footnotesize}
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\item[33.] 17 U.S.C. § 512(m)(1). However, “red flag” knowledge of infringement will defeat eligibility for § 512(c)’s safe harbor. See infra notes 154–57 and accompanying text for a discussion of the § 512 “red flag” knowledge rule.
\item[34.] 17 U.S.C. § 512(f), (g).
\item[35.] E-Commerce Directive, supra note 2. Article 12 is similar to the § 512(a) safe harbor; Article 13 is similar to the § 512(b) safe harbor, and Article 14 is similar to § 512(c). The E-Commerce Directive does not have safe harbor for search engines or other information locating tools. Article 15 of the E-Commerce Directive established a no-general-obligation-to-monitor rule. Under the E-Commerce Directive, ISPs are subject to the same notice and takedown obligations for tortious acts of their users. Id.
\item[36.] See, e.g., Maayan Perel & Niva Elkin-Koren, Accountability in Algorithmic Copyright Enforcement, 19 STAN. TECH. L. REV. 473, 477 (2016) (describing notice and takedown regimes as “ubiquitous and embedded in the system design of all major intermediaries”). For a country-by-country account of laws governing online intermediaries, see Stanford Law School Center for Internet and Society, World Intermediary Liability Map (WILMap), CTR. FOR INTERNET & SOC’Y, https://wilmap.law.stanford.edu; see also Daphne Keller, Build Your Own Intermediary Liability Law: A Kit for Policy Wonks of All Ages, CTR. FOR INTERNET & SOC’Y (June 11, 2019), http://cyberlaw.stanford.edu/publications/build-your-own-intermediary-liability-law-kit-policy-wonks-all-ages.
\item[37.] See, e.g., Joan Barata, Court Holds That Users’ Uploading, Storing, and Downloading Activities Do Not in Themselves Constitute Dissemination of Information, CTR. FOR INTERNET & SOC’Y (June 11, 2019), https://wilmap.law.stanford.edu/entries/court-holds-users-uploading-storing-downloading-activities-do-not-themselves-constitute (reporting on Sohu v. Baidu decision by Singapore court).
\item[38.] See, e.g., Free Trade Agreement (FTA) Between Morocco and the United States (MUSFTA), CTR. FOR INTERNET & SOC’Y (June 15, 2004), https://wilmap.law.stanford.edu/entries/free-trade-agreement-fa-between-morocco-and-united-states-musfta; see section 512 study, supra note 14, at 50–51 n.269; see also Gwenith Hinze, A Tale of Two Legal Regimes: An Empirical Investigation into How Copyright Law Shapes Online Service Providers’ Practices and How Online Service Providers Navigate Differences in US and EU Copyright Liability 153–54 (Spring 2019) (S.J.D. dissertation, University of California, Berkeley) (on file with UC Berkeley Electronic Theses and Dissertations).
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American Free Trade Agreement (NAFTA) and includes a DMCA-like ISP safe harbor provision.  

Some countries have adopted less strict ISP liability rules than the DMCA notice-and-takedown regime. Canada, for instance, has adopted a “notice-and-notice” regime to deal with user infringements. As with the DMCA takedown safe harbors, the first step of the notice-and-notice procedure directs copyright owners to notify an ISP when they have detected the presence and location on the ISP’s site of digital contents in which they own rights and in which they have a good faith belief the contents are infringing. The second step calls for the ISP to forward this notice to its subscriber, thereby alerting that person that its internet account was linked to an alleged infringement. Beyond this, neither the ISP nor the subscriber has a statutory obligation to take down any content from the ISP’s site, although a failure to take down infringing contents may result in the subscriber being liable in money damages for the infringement. The stated goal of the notice-and-notice regime is to discourage infringement and raise internet users’ awareness about copyrights. Canada has decided to maintain its notice-and-notice ISP regulations, even though these rules are less strict than the DMCA and the USMCA provisions.

Major content industry groups were never supportive of DMCA-like notice-and-takedown safe harbors. These groups have become ever more dissatisfied with the safe harbors over time because the number of online infringements has become staggeringly large. The entertainment industry

39. See, e.g., Ross Bagley, USMCA Set to Export U.S. Copyright Law to North American Neighbors, IP WATCHDOG (Jan. 29, 2020), https://www.ipwatchdog.com/2020/01/29/usmca-set-export-u-s-copyright-law-north-american-neighbors/id=118269.

40. Copyright Act, R.S.C. 1985, c C-42 §§ 41.25, 41.26 (Can.). Some countries do not require ISPs to take down infringing materials without a court order. See Copyright in Foreign Jurisdictions Hearing, supra note 3, at 5 (statement of Daphne Keller, Professor of Law, Stanford University).

41. The process is explained on a Government of Canada website. See Notice and Notice Regime, GOV’T OF CANADA, https://ic.gc.ca/eic/site/oca-bc.nsf/eng/ca02920.html.

42. Id.

43. Id. In December 2018, the Canadian Parliament amended the Copyright Act to clarify that notices of user infringement sent to ISPs should not include a demand for payment or an offer to settle a claim of infringement, as this is incompatible with the notice-and-notice regime. Id. The U.S. Copyright Office’s Section 512 Study incorrectly stated that Canadian notices could ask for license payments. SECTION 512 STUDY, supra note 14, at 52.

44. See, e.g., Michael Geist, USMCA Sends Canada Back to the Drawing Board on Copyright Law, CTR. FOR INT’L GOVERNANCE INNOVATION (Oct. 3, 2018), https://www.cigionline.org/articles/usmca-sends-canada-back-drawing-board-copyright-law.

45. See, e.g., SECTION 512 STUDY, supra note 14, at 77–83. The Copyright Office has one-sidedly accepted anecdotal evidence from copyright industry groups on harms from copyright infringement while discounting evidence from ISPs about the scale and repercussions of takedown abuses. Compare id. at 78, with id. at 147 (accepting copyright owners’ reliance on data from Google’s Transparency Report on the substantial number of takedown requests to support the claim that “the system is not working,” but dismissing ISPs’ reliance on an empir-
has tested the boundaries of the DMCA safe harbors through litigation.\textsuperscript{46} While they have not won all of the lawsuits filed, they have achieved notable successes against peer-to-peer file-sharing firms and providers of torrent files who induced copyright infringement.\textsuperscript{47} Also notable was a $1 billion jury award against Cox Communications for being willfully blind to copyright infringement by its users.\textsuperscript{48} Failure to adopt or enforce repeat infringer policies can result in an ISP losing DMCA safe harbor protections, exposing it to copyright liability.\textsuperscript{49} Several major copyright industry lawsuits against ISPs are pending under secondary liability theories asserting, among other things, that the ISPs failed to respond adequately to claims that their users’ activities were infringing.\textsuperscript{50} The high costs of defending lawsuits and the potential for gargantuan statutory damage awards has had an additional chilling effect on the development and deployment of online platforms.\textsuperscript{51}

Under pressure from major copyright industry groups, very large platforms such as YouTube and Facebook have developed or licensed automated content recognition technologies that enable the detection of copyrighted files at the time of user uploads. Copyright owners can choose whether to
allow YouTube to enable these uploads subject to revenue sharing or to block infringing uploads.\footnote{See, e.g., Perel & Elkin-Koren, supra note 36, at 512; see also Katherine Oyama, Continuing to Create Value While Fighting Piracy: An Update, GOOGLE (July 13, 2016), https://blog.google/outreach-initiatives/public-policy/continuing-to-create-value-while (reporting that more than 90 percent of Content ID claims result in monetization for copyright owners).
}

Because many sites that provide access to infringing materials are offshore, copyright industry groups strongly supported the Stop Online Piracy Act (SOPA) and PROTECT IP Act (PIPA), which would have enabled copyright owners to obtain injunctions requiring U.S.-based ISPs and payment processors to block offshore “rogue” websites.\footnote{Stop Online Piracy Act, H.R. 3261, 112th Cong. (2011); PROTECT IP Act of 2011, S. 968, 112th Cong. (2011); see, e.g., Yafit Lev-Aretz, Copyright Lawmaking and Public Choice: From Legislative Battles to Private Ordering, 27 Harv. J.L. & Tech. 203, 220–26 (2013) (discussing SOPA and PIPA legislative controversy).} After strong public opposition arose to SOPA and PIPA, these bills failed in Congress.\footnote{Lev-Aretz, supra note 53, at 204–05. Copyright industry representatives have expressed renewed interest in site-blocking injunctions. See, e.g., Copyright in Foreign Jurisdictions Hearing, supra note 3 (statement of Stan McCoy, President and Managing Director, Motion Picture Association). The Copyright Office considered, but did not recommend, Congressional authorization of site-blocking injunctions. See SECTION 512 STUDY, supra note 14, at 193–96. Courts have in the past refused to grant injunctive relief against defendants unless they have been found to have engaged in copyright infringement. See, e.g., Bryant v. Gordon, 503 F. Supp. 2d 1060, 1066 (N.D. Ill. 2007); see also Paramount Pictures Corp. v. Carol Publ’g Grp., 25 F. Supp. 2d 372, 374, 376 (S.D.N.Y. 1998) (refusing to issue an injunction against nonparty distributors of copies of infringing books); 4 Melville B. Nimmer & David Nimmer, Nimmer on Copyright §14.06 [C][2][b] (rev. ed. 2019). Congress may not be able to authorize no-fault site-blocking injunctions, for this may be beyond the equitable powers of courts. See, e.g., Gen. Bldg. Contractors Ass’n v. Pennsylvania, 458 U.S. 375, 398–402 (1982) (holding that injunctive relief is not available against an entity that had not violated the law).} Private initiatives with payment processors have alleviated some problems that the copyright industries have with these offshore sites.\footnote{Litigation against payment processors as indirect infringers of copyrights failed in Perfect 10, Inc. v. Visa Int’l Serv. Ass’n, 494 F.3d 788 (9th Cir. 2007). However, negotiations between copyright industry groups and payment processors led to the development of best practices. See Payment Processor Best Practices for Online Copyright Infringement: What It Means for Musicians, FUTURE OF MUSIC COALITION (Oct. 24, 2011), https://futureofmusic.org/article/article/payment-processor-best-practices-online-copyright-infringement.} However, copyright industry groups believe these and other private initiatives do not go far enough. They want new legislation to put more responsibility on ISPs to thwart infringements.
II. Article 17 of the EU’s DSM Directive Is a Deeply Flawed Model for Regulating ISPs That Host User-Uploaded Content

An opportunity to press for stronger legislative regulation of ISPs arose when the European Union undertook its proposed Directive on Copyright and Related Rights in the Digital Single Market. The proposed Directive was hugely controversial in the EU, largely because of its Article 13 (now Article 17) strict liability rule for certain ISPs that host user-uploaded content.

More than 145 civil society organizations opposed the adoption of the precursor to Article 17. More than five million individuals signed a petition against it. Many European scholars criticized the proposed provision because, among other things, this new strict liability regime would undermine fundamental freedoms of expression and access to knowledge and culture. A coalition of 240 EU-based online businesses wrote a letter asking members of the EU Parliament to reject this strict liability rule because small and medium-sized enterprises would suffer undue financial and operational burdens if forced to develop or utilize automated content recognition tools and because current technologies are too inaccurate.

56. See Proposed DSM Directive, supra note 9 (providing in Article 13 that “information society service providers storing and giving access to large amounts of works and other subject-matter uploaded by their users” would be strictly liable for user uploads that infringed copyrights).

57. For a range of critical perspectives on the proposed strict liability rule, see Article 13 Research: Studies, Opinions and Sources of Data, CREATE, https://www.create.ac.uk/policy-responses/eu-copyright-reform/article-13-research (last visited Mar. 07, 2021). The European Commission initially tried to justify this new regulation by claiming it was consistent with existing EU law, which some scholars contested. See, e.g., Bridy, supra note 10, at 333–46.

58. See Open Letter to Member of the European Parliament (July 2018), https://copybuzz.com/wp-content/uploads/2018/07/Copyright-Open-Letter-on-EP-Plenary-Vote-on-Negotiation-Mandate.pdf. Later signatories brought the final total to 167 organizations opposed to Article 13.

59. See SAVE THE INTERNET, https://www.savetheinternet.info (last visited Mar. 07, 2021).

60. See, e.g., Christina Angelopoulos, On Online Platforms and the Commission’s New Proposal for a Directive on Copyright in the Digital Single Market (Jan. 2017) (unpublished manuscript) (https://ssrn.com/abstract=2947800) (concluding that the proposed Article 13 of the DSM Directive was incompatible with the Charter of Fundamental Rights of the EU, as interpreted by the Court of Justice of the EU); see also David Kaye, Mandate of the Special Rapporteur on the Promotion and Protection of the Right to Freedom of Opinion and Expression, 7–8, U.N. Doc. OL OTH 41/2018 (June 13, 2018), https://www.ohchr.org/Documents/Issues/Opinion/Legislation/OL-OTH-41-2018.pdf (raising specific concerns and concluding that he was “very seriously concerned that the proposed Directive would establish a regime of active monitoring and prior censorship of user-generated content that is inconsistent with Article 19(3) of the ICCPR.”).

61. E.g., Jos Poortvliet, 240 EU Businesses Sign Open Letter Against Copyright Directive Art. 11 & 13, NEXTCLOUD (Mar. 19, 2019), https://nextcloud.com/blog/130-eu-businesses-sign-open-letter-against-copyright-directive-art-11-13.
These criticisms from multiple sectors sufficiently resonated with EU policymakers to persuade them to amend the Directive to add numerous limitations on the liability rules of what became Article 17 of the DSM Directive. Without the numerous concessions aimed at addressing concerns raised by the critics, the DSM Directive would likely have failed in the final EU Parliament vote, as it just barely garnered a majority when put to a vote. The much-amended DSM Directive became final in April 2019. Member states have until June 2021 to implement the Directive in their national copyright laws, but only one country has thus far transposed Article 17 into its national law. Clearly, the controversy over Article 17 is far from over.

Before discussing the many flaws of DSM Directive Article 17, it is important to understand its core norm. Article 17 directs member states of the EU to pass legislation with regard to for-profit online content sharing services that provide public access to large amounts of user-uploaded content. EU member states must make these services directly liable for communicating to the public any infringing copies uploaded by their users unless the services have obtained, or made best efforts to obtain, licenses from rights holders. These services must also ensure the unavailability of specific works on their sites for which rights holders have provided relevant information (such as a digital fingerprint). Under such legislation, online content sharing services must also act expeditiously to disable access or remove

62. See Bridy, supra note 10, 351–57 (discussing differences between proposed Article 13 and the adopted Article 17); see also infra Part II.A.
63. Article 13 (now 17) survived a last-minute bid for its removal by only five votes. See James Vincent, Europe’s Controversial Overhaul of Online Copyright Receives Final Approval, VERGE (Mar. 26, 2019), https://www.theverge.com/2019/3/26/18280726/europe-copyright-directive; see also João Pedro Quintais, The New Copyright in the Digital Single Market Directive: A Critical Look, 42 EUR. INTELL. PROP. REV. 28 (2020). Some scholars have a more positive view of Article 17. See, e.g., Jane C. Ginsburg, A United States Perspective on Digital Single Market Directive Art. 17 (Colum. L. Sch. Working Paper, Paper No. 14-654, 2020), https://scholarship.law.columbia.edu/cgi/viewcontent.cgi?article=3682&context=faculty_scholarship.
64. DSM Directive, supra note 11; see SECTION 512 STUDY, supra note 14, at 61–63 (discussing Article 17). The Copyright Office Study did not discuss the user freedom protections that Article 17 aims to preserve.
65. See, e.g., Paul Keller, Article 17 Stakeholder Dialogue (Day 6), COMMUNIA (Feb. 13, 2020), https://www.communia-association.org/2020/02/13/article-17-stakeholder-dialogue-day-6-hitting-brick-wall. Thirteen IP scholars are signatories to the European Copyright Society’s recommendations for implementing Article 17 in national laws in a manner that provides a pragmatic and balanced approach. Axel Metzger & Martin Senftleben, Comment of the European Copyright Society on Selected Aspects of Implementing Article 17 of the Directive on Copyright in the Digital Single Market into National Law, EUR. COPYRIGHT Soc’y (Apr. 27, 2020), https://europeancopyrightsocietydotorg.files.wordpress.com/2020/04/ecs-comment-article-17-cdsm.pdf.
66. DSM Directive, supra note 11, art. 17(1), (4).
infringing copies after receiving notice of infringement from rights holders and must use best efforts to prevent future uploads.67

My criticisms of Article 17 are set forth in the remainder of this Part. Section A explains that because of several amendments that partially limited its scope, Article 17 is more balanced than its precursor in the proposed DSM Directive. Section B explains that several of these changes have made Article 17 internally inconsistent. Section C discusses ambiguities in Article 17 that will make it difficult for profit-making ISPs who host user content to predict whether they will be subject to Article 17’s strictures or remain within the much less strict notice-and-takedown regime that has prevailed for the past two decades. Section D suggests that small and medium-sized platforms are unlikely to achieve either the licensing or preventive measures obligations established by Article 17. Section E considers the Polish government’s challenge to Article 17 under the European Charter of Fundamental Rights as that Charter has been interpreted by the Court of Justice of the EU (CJEU).

A. Internal Limits to Article 17 That Respond to Earlier Criticisms

In response to intense criticisms of Article 17’s precursor in the proposed DSM Directive, EU policymakers made several changes that limit the scope of Article 17. Without these changes, the DSM Directive would not have garnered enough political support to be adopted. Some of these limits are more significant than others. It is noteworthy, however, that Article 17 implicitly retains the E-Commerce Directive’s safe harbors for ISPs that do not fall within the DSM definition of online content sharing services. In other words, ISPs that do not host “large” amounts of user-uploaded content or do not organize and promote user-uploaded content, but merely store some such content, along with internet access providers, are exempt from the reach of Article 17, although they remain subject to the notice-and-takedown rules of the E-Commerce Directive.68

One of the most significant changes to Article 17 is that it does not apply at all to nonprofit online encyclopedias, educational and scientific repositories, and open source software developing and sharing sites. Also excluded are providers of electronic communication services, online marketplaces, business-to-business cloud services, and cloud services that allow users to upload content for their own use.69 These exclusions recognize that the no-

67. Id. art. 17(4).
68. See id. art. 2(6). The EU is, however, moving ahead with new strict ISP notice-and-takedown regulations for terrorist content. See, e.g., Colin Lecher, Aggressive New Terrorist Content Regulation Passes EU Vote, VERGE (Apr. 17, 2019), https://www.theverge.com/2019/4/17/18412278/eu-terrorist-content-law-parliament-takedown. In addition, the EU is contemplating a review and revision of the E-Commerce Directive, which governs ISPs that are outside the reach of Article 17. See infra note 106 and accompanying text.
69. DSM Directive, supra note 11, art. 2(6).
tice-and-takedown regime is working well enough to preserve safe harbors for these types of online services. It also implicitly recognizes that Article 17 has the potential to be unduly burdensome for entities that do not pose the high risks of infringement that Article 17 was intended to address. The strict liability rule in the proposed DSM Directive had no such exclusions. It would have applied to all ISPs that enable members of the public to have access to “large” amounts of content uploaded by users.

Much less significant is the Article 17 provision that lessens the responsibilities of startup online content sharing sites towards rights holders. It applies to companies that are less than three years old if they have an annual turnover below ten million euros. These startup service providers must still make “best efforts” to obtain licenses and to disable access or remove infringing content expeditiously after receiving notice. If the average number of unique monthly visitors exceeds five million, startups will bear an extra burden of “best efforts” to prevent further uploads of infringing materials. This is such a narrow safe harbor that very few, if any, ISPs will be able to benefit from it.

Among the most significant limits in Article 17 are a trio of provisions aimed at protecting user freedoms. One states that Article 17 “shall in no way affect legitimate uses of copyrighted works, such as uses under exceptions and limitations” under EU law. A second mandates that cooperation between rights holders and online content sites “shall not result in the prevention of the availability of works or other subject matter uploaded by users, which do not infringe copyright and related rights, including where such works or other subject matter are covered by an exception or limitation.” A third explicitly requires member states to ensure that users can rely on copyright exceptions that enable quotation, criticism, and review as well as caricature, parody, or pastiche.

These provisions of the DSM Directive implicitly recognize that many online content sites host significant quantities of user-generated works, such as remixes and mashups, that are lawful as a matter of EU copyright law under the quotation or parody exceptions. There was no counterpart to

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70. Proposed DSM Directive, supra note 9, art. 13(1).
71. DSM Directive, supra note 11, art. 17(6).
72. Id.
73. Id. art. 17(9). See Bridy, supra note 10, at 345–47 (discussing user freedom issues).
74. DSM Directive, supra note 11, art. 17(7).
75. Id. But see infra note 129 and accompanying text (French and Dutch proposals for implementing Article 17 omit user rights provisions).
76. The adoption of Article 17(7) means that the quotation and parody exceptions are now mandatory throughout the EU, even if member states had not previously adopted them. See, e.g., João Pedro Quintais et al., Safeguarding User Freedoms in Implementing Article 17 of the Copyright in the Digital Single Market Directive: Recommendations from European Academics, 10 (3) JIPIEC 277 ¶ 10-13 (2019), https://www.jipitec.eu/issues/jipitec-10-3-2019/5042. In keeping with the CJEU’s Deckmyn decision, these exceptions are likely to have
these provisions in the initially proposed DSM Directive, which the Commission at the time said would have only a “limited impact” on freedom of expression and information.\textsuperscript{77} The user freedom–related revisions to Article 17 reflect the Commission’s acceptance that the new strict liability rules pose a much greater risk to fundamental rights than it previously acknowledged.

In addition, Article 17 requires member states to ensure that online content sharing sites put in place an “effective and expeditious complaint and redress mechanism” for users to dispute the removal or disabling of access to uploaded contents.\textsuperscript{78} This is a further acknowledgement of the risks that Article 17 poses for the ability of users to exercise their right to freedom of expression under exceptions and limitations. When users do contest takedowns, rights holders must justify their assertions that the exceptions or limitations do not apply; human review of the disputed content is required.\textsuperscript{79} Users are additionally entitled to seek judicial review of their claims.\textsuperscript{80} The initial version of the DSM Directive made a general statement about the need for service providers to provide complaint and redress mechanisms,\textsuperscript{81} but Article 17 is much more detailed about what is required.

The DSM Directive also expressly declares that Article 17 does not create a general monitoring obligation on online content sharing sites.\textsuperscript{82} This is in stark contrast to the initially proposed DSM Directive, which explicitly called for the use of automated content recognition technologies designed to monitor every upload to an ISP’s site to prevent copyright infringement.\textsuperscript{83} As finalized, Article 17 has, at least on its face, acknowledged that general monitoring of user uploads should not be required.

Article 17’s obligation for online content sharing sites to prevent infringing uploads and reuploads of infringing content applies only as to works whose rights holders have provided the sites with “the relevant and necessary information” to enable filtering technologies to detect that content.\textsuperscript{84} No similar limitation was contained in the precursor to Article 17.

\begin{flushleft}
\textsuperscript{77} Proposed DSM Directive, supra note 9, Explanatory Memorandum § 3.
\textsuperscript{78} DSM Directive, supra note 11, art. 17(9).
\textsuperscript{79} Id.
\textsuperscript{80} Id.
\textsuperscript{81} Proposed DSM Directive, supra note 9, art. 13(2).
\textsuperscript{82} DSM Directive, supra note 11, art. 17(8). The European Copyright Society has warned that to be consistent with the no-general-monitoring rule of the DSM’s Article 17, the E-Commerce Directive’s Article 15, and the European Charter of Fundamental Rights, ISP hosting sites should not have to proactively monitor for infringements, and warned against the “danger of overblocking” if national implementations adopt extreme views of the “best efforts” provisions of Article 17. Metzger & Senftleben, supra note 65, at 5.
\textsuperscript{83} Proposed DSM Directive, supra note 9, art. 13(1).
\textsuperscript{84} DSM Directive, supra note 11, art. 17(4).
\end{flushleft}
Finally, there is a proportionality limit on the scope of Article 17. In determining whether an online content service is in compliance, legal decisionmakers are supposed to consider (1) the type, audience, and size of the service, as well as the types of works uploaded by users to the sites; and (2) the availability of “suitable and effective means” for compliance and their cost for service providers. Unfortunately, neither the text nor the Recitals of the DSM Directive provide guidance about how the proportionality principle should be interpreted in relation to service providers. As originally proposed, the Directive vaguely mentioned proportionality, although it provided even less guidance about the substance of this principle than Article 17 now does.

The European Commission hosted six stakeholder dialogues in late 2019 and early 2020 to get input for its development of best practices guidelines for fostering cooperation between online content sharing services and rights holders. At the first meeting, one Commissioner expressed the hope that now that the Directive was in place, stakeholders would put aside past divisions on the issues and work together to make the new paradigm of Article 17 a success. However, no consensus emerged from these stakeholder meetings about key issues, such as how to ensure that practicable measures are put into place to safeguard user freedoms. After the Commission publishes its guidelines about Article 17 implementations, it may host additional stakeholder dialogue meetings. Yet, given how deeply divided stakeholders are about Article 17, it is unclear that the Commission will be able to issue guidelines that will satisfy all stakeholders.

The Commission has left to EU member states the dilemma of trying to transpose Article 17 into their national laws in a manner that meaningfully accommodates the limitations on Article 17’s scope and is consistent with
the legislative compromises necessary to get sufficient political support for the DSM Directive. Also left to member state legislators is the puzzle of how to resolve the inherent contradictions embodied in Article 17, to which we now turn.

B. Inherent Contradictions in Article 17

Article 17 contains inherently contradictory provisions on four types of rules: those concerning user freedoms, general monitoring, licensing obligations, and personal data protection. It is difficult to imagine how these contradictions could be resolved through EU member state legislation. It will not be surprising if some member states simply transpose the text of Article 17 into their laws, leaving many practical implementation issues to be negotiated between dominant players in the online services and copyright industries. Most of the tricky legal interpretation issues will be left to the courts.

1. Automated Content Recognition Technologies Are Inconsistent with User Freedoms

The first serious internal contradiction in Article 17 is its implicit requirement that online content sharing sites must adopt automated content recognition technologies to prevent infringing uploads and reuploads of infringing contents, while at the same time insisting that Article 17 should not interfere with legitimate uses of copyrighted content, such as user creations that are covered by copyright exceptions and limitations. 90

Automated content recognition technologies are much more sophisticated today than they were in 1998 or 2000 when the United States and EU adopted their notice-and-takedown regimes. What these technologies do well, however, is pattern-matching. They cannot take context into account. Unfortunately, it is necessary to comprehend the context of a use to determine whether it is lawful under copyright exceptions. 91 If content recognition technologies cannot assess context, they will make mistakes and block uploads that should have been permitted. It is well-documented that several types of common errors result from the use of automated content recognition technologies, including their inability to detect fair uses. 92

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90. DSM Directive, supra note 11, art. 17(4), (7).
91. See, e.g., Paul Keller, Article 17 Stakeholder Dialogue (Day 4), COMMUNIA (Jan. 2, 2020), https://www.communia-association.org/2020/01/02/article-17-stakeholder-dialogue-day-4-transparency; see also DMCA’s Notice-and-Takedown Hearing, supra note 16, at 6–9 (statement of Meredith Rose, Policy Counsel, Public Knowledge) (discussing “bad” copyright takedown notices due to algorithmic errors).
92. See, e.g., Matthew Sag, Internet Safe Harbors and the Transformation of Copyright Law, 93 NOTRE DAME L. REV. 499, 543–54 (2017) (giving numerous examples of automated content recognition technology errors); see also Sharon Bar-Ziv & Niva Elkin-Koren, Behind the Scenes of Online Copyright Enforcement: Empirical Evidence on Notice & Takedown, 30 CONN. L. REV. 339, 344, 376 (2018) (discussing examples of automated content recognition
makers and legislators have not acknowledged this significant limitation of automated content recognition technologies.

During some of the Commission’s stakeholder dialogue meetings, representatives of filtering technology firms admitted that their technologies cannot understand context. As an Audible Magic representative stated, “Copyright exceptions require a high degree of intellectual judgment and an understanding and appreciation of context. We do not represent that any technology can solve this problem in an automated fashion. Ultimately these types of determinations must be handled by human judgment.”93 Others at these dialogue sessions likewise attested that their technologies did not consider context.94 But, as one participant observed in a blog about these dialogues, “as long as filtering technology cannot determine if a use is covered by an exception or not then it does not meet the requirements established by Article 17 of the Directive.”95 This contradiction is baked into Article 17. A user upload of a parodic video that used a clip from a movie to make fun of one of its characters, for instance, would be blocked by automated content recognition technologies, even if the parody was lawful under EU law.

Sixty European intellectual property scholars have endorsed a statement, Safeguarding User Freedoms in Implementing Article 17 of the Copyright in the Digital Single Market Directive: Recommendations from European Academics, which represents a valiant effort to offer at least a partial resolution of this contradiction of Article 17.96 The statement discusses ways to limit the use of preventive measures such as filtering technologies so that these measures will not interfere with user rights. It recommends that only exact or equivalent copies of the whole or substantial parts of protected works should be subject to preventive measures. In addition, it suggests that human review should be required to determine if user-generated content

technology errors); Bridy, supra note 10, at 345–47; Dan L. Burk, Algorithmic Fair Use, 86 U. Chi. L. Rev. 283, 290 (2019) (noting inability of filtering algorithms to assess fair uses); Perel & Elkin-Koren, supra note 36, at 478, 506; 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/a11c349c-98ae-11ea-89fd-28fb313d1886_story.html (describing filtering algorithms as incapable of distinguishing different performances of the same piece of classical music).

93. Keller, supra note 91 (ellipsis omitted).

94. Paul Keller, Article 17 Stakeholder Dialogue (Day 3), COMMUNIA (Dec. 3, 2019), https://www.communia-association.org/2019/12/03/article-17-stakeholder-dialogue-day-3-filters-not-meet-requirements-directive.

95. Id.

96. Quintais et al., supra note 76. Numerous other commentators have offered recommendations on how the EC can draft its implementing guidelines to mitigate the potential harms of Article 17 for user freedoms. See, e.g., Krzysztof Garstka, Guiding the Blind Bloodhounds: How to Mitigate the Risks Article 17 of Directive 2019/790 Poses to the Freedom of Expression, in INTELLECTUAL PROPERTY LAW AND HUMAN RIGHTS (Paul L.C. Torremans ed., 4th ed. 2020); Keller, supra note 87; Metzger & Senffleben, supra note 65, at 9–14.
such as remixes and mashups are covered by quotation or parody exceptions. It remains to be seen whether some of the EU member states will follow such recommendations in their implementing legislation.

2. Automated Content Recognition Technologies Are Incompatible with the No-General-Monitoring Mandate

A second contradiction built into Article 17 lies in its no-general-monitoring rule, which is at odds with the requirement that online sharing sites make “in accordance with high industry standards of professional diligence, best efforts to ensure the unavailability of specific works and other subject matter for which the rightsholders have provided the service providers with the relevant and necessary information.” By “high industry standards of professional diligence,” the Commission seems to mean that these services must make intensive use of automated content recognition technologies. These technologies cannot be effective without being general, because by design they scan every file uploaded onto the service’s site. Thus, even though Article 17 no longer expressly requires use of “effective content recognition technologies,” as its precursor did, it is doubtful that online sharing services could satisfy this “best efforts” requirement without adopting such technologies. One European commentator has characterized the no-general-monitoring provision of Article 17 as a “political statement.” Yet, it makes Article 17 internally inconsistent.

The CJEU recognized the incompatibility of a general filtering technology mandate with the E-Commerce Directive’s no-general-monitoring rule in its SABAM v. Netlog NV decision. SABAM, a Belgian music royalty collecting society, sued Netlog, a social media network, for copyright infringement because some of its tens of millions of daily users had used the site to exchange recorded music in which SABAM’s members held copyrights. As a remedy, SABAM asked for an injunction requiring Netlog to install a filtering technology to detect copyright infringements. The CJEU

97. See Quintais et al., supra note 76, ¶¶ 20, 27. Communia has created a flowchart depicting how the Article 17 user rights safeguards could work. Keller, supra note 65.

98. DSM Directive, supra note 11, art. 17(4)(b); cf. id. art. 17(8) (no general monitoring obligation).

99. Proposed DSM Directive, supra note 9, art. 13(1).

100. Miquel Peguera, The New Copyright Directive: Online Content-Sharing Service Providers Lose eCommerce Directive Immunity and Are Forced to Monitor Content Uploaded by Users (Article 17), KLUWER COPYRIGHT BLOG (Sept. 26, 2019), http://copyrightblog.kluweriplaw.com/2019/09/26/the-new-copyright-directive-online-content-sharing-service-providers-loseecommerce-directive-immunity-and-are-forced-to-monitor-content-uploaded-by-users-article-17.

101. Case C-360/10, SABAM v. Netlog NV, ECLI:EU:C:2012:85 ¶¶ 33–34 (Feb. 16, 2012).
declared that such an obligation was inconsistent with the E-Commerce Directive’s no-general-monitoring rule.\footnote{Id. ¶¶ 33, 52.}

The CJEU has somewhat qualified this standard in the context of a defamation claim in \textit{Glawischng-Piesczek v. Facebook Ireland}.\footnote{Case C-18/18, Glawischng-Piesczek v. Facebook Ireland Ltd., ECLI:EU:C:2019:458, ¶¶ 12, 46 (Oct. 3, 2019). For critical commentary on this decision, see, e.g., Daphne Keller, \textit{Facebook Filters, Fundamental Rights, and the CJEU’s Glawischng-Piesczek Ruling}, 69 GRUR INT’L 1 (2020).} The CJEU decision approved an Austrian national court’s injunction requiring Facebook to remove defamatory comments about the plaintiff, an Austrian politician, and to prevent reuploads of the same or equivalent content.\footnote{Glawischng-Piesczek, ECLI:EU:C:2019:458, ¶¶ 37–41. Like Article 17(8) of the DSM Directive and Article 15 of the E-Commerce Directive, § 512(m) of the DMCA provides that ISPs do not have a duty to monitor their sites for infringing materials. 17 U.S.C. § 512(m)(1). The Copyright Office’s Section 512 Study asserted that § 512(m) notwithstanding, ISPs should engage in more monitoring when they have reason to believe infringing materials exist on their sites. It urged Congress to revisit § 512(c) and (d) ISP-knowledge-of-infringement requirements, as well as the willful blindness doctrine, to incentivize ISPs to do more to thwart infringements on their sites. See \textit{SECTION 512 STUDY, supra} note 14, at 3–4, 123, 127.} The standard established in \textit{Glawischng-Piesczek} limits service provider monitoring to the specific content that a court has found to be unlawful. The CJEU did not provide guidance about how this should be accomplished.

Although Article 17 of the DSM Directive explicitly overrides the safe harbor set forth in Article 14 of the E-Commerce Directive as applied to the online content sharing sites it will regulate,\footnote{DSM Directive, \textit{supra} note 11, art. 17(3).} it says nothing about overriding the Article 15 no-general-monitoring rule of the E-Commerce Directive. Hence, that part of the E-Commerce Directive should still be in force, and insofar as Article 17 requires the use of automated content recognition technologies to process all user uploads, Article 17 conflicts with Article 15 of the E-Commerce Directive as well as Article 17(8).\footnote{The European Commission has, however, begun a consultation concerning the Digital Services Act, which contemplates a review and revision of the E-Commerce Directive, including its intermediary liability rules. See, e.g., Natasha Lomas, \textit{Europe Asks for Views on Platform Governance and Competition Tools}, \textit{TechCrunch} (June 2, 2020), https://techcrunch.com/2020/06/02/europe-asks-for-views-on-platform-governance-and-competition-tools. On December 15, 2020, the EC issued first drafts of the Digital Services Act along with the Digital Markets Act. See \textit{Proposal for a Regulation of the European Parliament and of the Council on a Single Market for Digital Services (Digital Services Act) and amending Directive 2000/31/EC}, COM (2020) 825 final (Dec. 15, 2020); \textit{Proposal for a Regulation of the European Parliament and of the Council on Contestable and Fair Markets in the Digital Sector (Digital Markets Act)}, COM (2020) 842 final (Dec. 15, 2020).}
3. The Licensing Objectives of Article 17 Cannot Be Achieved

A third contradiction arises from Article 17’s unrealistic requirement that online sharing sites make “best efforts” to get authorization for user-uploaded content through licensing. As acknowledged in the Directive’s preamble, the market for online content is complex and involves “a large amount” of content. Indeed, there are literally billions of in-copyright works of all kinds on the internet and billions of creators who own rights in those works. It is simply impossible for online sharing sites to get authorization from all of the creators of these works. How could such services plausibly satisfy a “best efforts” requirement for these billions of works and their creators?

Photographs are one type of copyrighted work that people share widely through social media. It is not realistically possible for the operator of a social media site to identify and make sure to have a license for every photograph that its users share. Given how ubiquitous user-authored digital photographs are, which no established collecting societies could license, it is virtually impossible for the service to identify each photograph’s copyright owner and get a license for each one. For a service to take a license from a collecting society that represents professional photographers when it hosts user-authored photographs would mean paying them for works their members did not create. There is, moreover, no standard content recognition identification system (such as fingerprinting) for photographs to enable a service to detect infringing photographs.

The Commission has failed to recognize the impossibility of obtaining licenses from all creators or to give guidance about what types of licenses a site would have to try to secure. It also failed to consider the complexities of the licensing market and the various business models and selective licensing preferences of different copyright owners. Even though an important goal of the DSM Directive is to support the existence of a “digital single market” for EU content, there is, in fact, no one-stop-shop at which one can get EU-wide licenses.

107. DSM Directive, supra note 11, recital 62.
108. See, e.g., Husovec, supra note 13, at 72 (“It is clear that obtaining such consent [from all rights holders] is practically impossible, as transaction costs would be prohibitively high.”); see also Metzger & Senftleben, supra note 65, at 5–6 (suggesting guidelines for implementing the licensing norm). Variations in translations of the DSM Directive will give rise to disagreements about the “best efforts” requirement. 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), IPKAT (May 22, 2019), http://ipkitten.blogspot.com/2019/05/dsm-directive-series-5-does-dsm.html (explaining that some countries have translated “best” as “greater,” “greatest,” or “all” in their respective languages).
4. Automated Content Recognition Technologies Require Processing of Personal Data, Notwithstanding Article 17’s Assurance That User Privacy Would Be Unaffected

A fourth contradiction embedded in Article 17 concerns personal data. Article 17 states that it “shall not lead to any identification of individual users nor to the processing of personal data” except in accordance with EU law. However, as the CJEU recognized in Netlog, automated content recognition technologies are designed to monitor all user-uploaded content on ISP hosting sites. This “involve[s] the identification, systematic analysis and processing of information connected with [user] profiles . . . [which] is protected personal data because, in principle, it allows those users to be identified.” Interference with users’ personal data rights was one of the bases on which the CJEU denied SABAM’s requested filtering injunction in Netlog. The Commission has yet to explain its theory that Article 17 is compatible with the General Data Protection Regulation (GDPR), the EU’s framework for digital privacy laws.

C. Ambiguities in Article 17

The most significant and consequential ambiguity in Article 17 is its vague definition of the online content sharing services that will be subject to its strict rules. Recital 62 of the Directive says that the definition “should target only online services that play an important role on the online content market by competing with other online content services, such as online audio and video streaming services for the same audiences.” Recitals do not have the force of law in the EU, and the Directive’s actual definition is much fuzzier:

“online content-sharing service provider” means a provider of an information society service of which the main or one of the main purposes is to store and give the public access to a large amount of copyright-protected works or other protected subject matter up-

109. DSM Directive, supra note 11, art. 17(9).
110. C-360/10, SABAM v. Netlog NV, ECLI:EU:C:2012:85, ¶ 49 (Feb. 16, 2012).
111. Id. ¶ 51; see also Case C-70/10, Scarlet Extended SA v. SABAM, 2011 E.C.R. I-11959, ¶ 53 (holding that an injunction to install filtering system would infringe users’ rights to protection of personal data and freedom of expression under the EU Charter of Fundamental Rights); Felipe Romero Moreno, ‘Upload Filters’ and Human Rights: Implementing Article 17 of the Directive on Copyright in the Digital Single Market, 34 INT’L REV. L. COMPUTS. & TECH. 153, 162 (2020) (arguing that deep packet inspection of upload filters would invade user privacy, personal data, and confidential communications).
112. See, e.g., Moreno, supra note 111, at 164–65 (discussing how Article 17 might run afoul of GDPR’s requirements). The Copyright Office’s Section 512 Study reports that copyright owners are frustrated by the GDPR, as it makes the task of identifying infringers more difficult. See SECTION 512 STUDY, supra note 14, at 34.
113. DSM Directive, supra note 11, recital 62.
loaded by its users, which it organises and promotes for profit-making purposes.\footnote{114} This definition would seem to encompass ISPs that host UGC content that is overwhelmingly created by the users who uploaded their works to the ISP’s site (e.g., TikTok). The DSM Directive states that decisions about whether an ISP falls within the online content sharing service definition should be made on a case-by-case basis.\footnote{115} ISPs that enable some content-sharing are at risk if they cannot reasonably predict whether they will be subject to Article 17’s burdens. It is also unclear what “large” means in this context.\footnote{116}

With such vague terminology at the outset, it will be difficult for many U.S. companies to know whether the Article 17 mandates apply to them. Does the DSM Directive’s definition of an online content sharing service include, for example, dating services such as Tinder, image-sharing services such as Imgur, commentary sites such as Reddit, news sites that allow user comments such as TechDirt, knitting share sites such as Ravelry, real estate sites such as Zillow, website hosts such as WordPress, personal profile and influencer blog sites such as Tumblr, or other new types of ISP yet to emerge in the digital economy? A photography site, for example, might host a large quantity of works whose copyrights are owned by the users who post them, yet also host a small but non-trivial portion of works that are not. Such legal uncertainty and attendant financial burdens are undesirable.

Also unclear is what actions online sharing sites must do to satisfy the “best efforts” obligation to get licenses from rights holders.\footnote{117} Collecting societies in the EU, as well as large EU-based rights holders, may be eager to grant licenses to online content sharing services. Article 17 certainly provides them with leverage so that licenses are granted on their preferred terms. However, during the stakeholder dialogue meetings, some rights holders have made clear that they do not want to grant licenses. Movie studios, for example, are far more concerned with blocking any form of distri-

\footnote{114. DSM Directive, \textit{supra} note 11, art. 2(6) (emphasis added). National implementations of the DSM Directive could refine the definition of “online content-sharing service provider” to make that term less ambiguous. See Metzger & Senftleben, \textit{supra} note 65, at 2–3.}

\footnote{115. DSM Directive, \textit{supra} note 11, recital 63.}

\footnote{116. \textit{See}, e.g., Sophie Stalla-Bourdillon et al., \textit{A Brief Exegesis of the Proposed Copyright Directive 4} (Nov. 24, 2016) (unpublished manuscript) (https://ssrn.com/abstract=2875296).}

\footnote{117. \textit{See} João Pedro Quintais & Martin Husovec, \textit{How to License Article 17 of the Copyright in the Digital Single Market Directive? Exploring the Implementation Options for the New EU Rules on Content-Sharing Platforms}, 70 \textit{GRUR INT’L} (forthcoming 2021); see also Matthias Leistner, \textit{European Copyright Licensing and Infringement Liability Under Art. 17 DSM-Directive}, 2020 \textit{ZEITSCHRIFT FÜR GEISTIGES EIGENTUM/INTELL. PROP. J.} 123 (discussing the need for collective blanket licenses for many categories of works and uses).}
bution or performance of their works, compared to their music industry counterparts who enthusiastically seek licensing deals.\textsuperscript{118}

Moreover, it will be exceedingly expensive to negotiate licenses with even the most obvious EU-based licensors because in virtually every member state of the EU there are specialized collecting societies that represent different types of rights holders (e.g., composers, photographers, text authors). Each of these collecting societies (except in certain Nordic countries) represents only those rights holders who are members, not other creators who have chosen not to join the society. Furthermore, Article 17 applies to all types of copyrighted works, some of which may not be represented by collecting societies. Civil society groups have suggested the use of compulsory or statutory licenses to ease the burden on online sharing sites and benefit users, but major content industry groups have been unreceptive to these suggestions.\textsuperscript{119}

The proportionality standard of Article 17(5) is similarly vague about how it would affect an online content sharing service’s licensing and infringement prevention obligations under Article 17(4). Article 17(5) directs consideration of the size and type of the service, the type of content it serves, and its audience, as well as the availability of relevant means and costs to the service provider. Yet there is no guidance about how these factors are to be weighed and how this would affect obligations. An ISP that arguably falls within the DSM definition of online content sharing sites cannot reasonably determine its compliance obligations given the vagueness of this standard. Obviously, YouTube would be held to a high standard, but it has already deployed Content ID, which some copyright owners nevertheless complain does not block enough content.\textsuperscript{120} Neither the text of Article 17 nor the DSM preamble provides meaningful guidance about how this standard would be assessed.

The so-called startup exception set forth in Article 17(6), moreover, is woefully narrow. It offers very little protection to these nascent businesses. If in the second year of a startup’s operation, for example, some user uploads go viral, causing monthly visitors to exceed five million, then this limitation on the service provider’s liability would no longer apply,\textsuperscript{121} even if the viral content was perfectly legal. An eligible service would, moreover, lose this limitation on liability at the start of its third year, even though it might remain as small in that third year as in the first two years of its operations. Investors will be reluctant to provide seed funding if the very high ex-

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118. Paul Keller, \textit{Article 17 Stakeholder Dialogue: What Have We Learned So Far}, COMMUNIA (Jan. 16, 2020), https://www.communia-association.org/2020/01/16/article-17-stakeholder-dialogue-learned-far.
119. See, e.g., Keller, \textit{supra} note 88.
120. See, e.g., \textit{SECTION 512 STUDY, supra note 14}, at 44.
121. DSM Directive, \textit{supra note 11}, art. 17(6).
\end{flushright}
penses of filtering and licensing will automatically kick in before the startup has a chance to prove its worth in the marketplace.

D. Article 17 Will Harm Small and Medium-Sized ISPs

Recall that prior to the final vote on the Directive, 240 EU-based online service providers explained in a letter to the European Parliament that small and medium-sized enterprises cannot afford to develop or deploy automated content recognition technologies and take on other related expenses. These technologies are expensive to develop and operate, as new reference files about digital content must be constantly added and system upgrades will be an ongoing necessity. Service providers may end up locked-in to a particular technology provider, even if the technology turns out to be flawed.

The “best efforts” licensing burden of Article 17 will also put small and medium-sized firms at a significant disadvantage, especially if they have to negotiate with numerous collecting societies on a member-state-by-member-state basis. Moreover, the startup limitation on Article 17 is so narrow, it cannot overcome the obstacles that Article 17 poses for these firms. One would hope that EU competition authorities might be able to help to mitigate these problems, but those authorities did not weigh in on the competitive impacts of the DSM Directive as the Directive was being finalized.

Google has reportedly spent about $100 million to develop Content ID, but it does not license that technology to other ISPs. Because its development of this technology gives Google a competitive edge, it is unlikely that this policy will change. Other firms, including Audible Magic, do license their automated content recognition technologies, but Article 17-like mandates may cause prices for these licenses to skyrocket beyond what would prevail if firms were free to choose whether to take such licenses. Article 17 may have created incentives for developing new automated content recognition technologies, but it remains to be seen whether existing or future technologies will satisfy the vague “best efforts” requirement or whether the emergence of competitive filtering systems will be impeded by pa-

122. See Bridy, supra note 10, at 349–50; Poortvliet, supra note 61. But see Metzger & Senftleben, supra note 65, at 6–8 (suggesting some accommodations for small and medium-sized online content sharing services).
123. See Bridy, supra note 10, at 350.
124. See id. at 341.
125. Martin Husovec has questioned this incentives story and persuasively argued that “demand for [filtering] technologies is actually likely to shrink under [notice-and-staydown] compared to [notice-and-takedown], where both intermediaries and right holders are interested in the services.” Husovec, supra note 13, at 76. Mandating use of filtering technologies would likely, he argues, cause fewer ISPs to enter or remain in the market. Larger ISPs are more likely to build their own technologies to gain a competitive advantage over other ISPs, so they too may be less likely to license independent filtering systems. Id. at 75–76.
Competition authorities should monitor the impact of Article 17 on entry into online services markets.

EU policymakers also appear to have misapprehended the formidable technical challenges of developing a massive filtering system, such as difficulties in acquiring the necessary reference files of digital content necessary for an automated content recognition engine to do pattern-matching. While Content ID and Audible Magic have large databases of reference files, these files overwhelmingly identify sound recordings and motion pictures. However, Article 17 does not restrict its implicit filtering mandate to only these types of copyrighted content. Many online content sharing services that would arguably be subject to Article 17 host other types of contents, such as fan fiction stories, photographs, and mixed media works, for which automated content recognition technologies, as well as entities capable of licensing rights in these types of content, are unavailable.

E. Article 17 May Violate the European Charter of Fundamental Rights

In December 2020, Netherlands became the first member state to transpose Article 17 into its national copyright law, while France adopted a law authorizing implementation by decree. In addition, as this Article is going to press, Germany, Austria, and Finland are considering proposals for implementing this complex regulation. France and the Netherlands appear to have taken different approaches in their respective transpositions, but neither meaningfully addresses the preservation of user rights, the no-general-

126. See Bridy, supra note 10, at 351; see also Husovec, supra note 13, at 74 (“Collecting and verifying meta-data constitutes large transaction costs, so their lack could easily impede use of [filtering] tools.”).

127. Paul Keller, Divergence Instead of Guidance: The Article 17 Implementation Discussion in 2020—Part 2, KLUWER COPYRIGHT BLOG (Jan. 22, 2021), http://copyrightblog.kluweriplaw.com/2021/01/22/divergence-instead-of-guidance-the-article-17-implementation-discussion-in-2020-part-2.

128. See id.; Paul Keller, DSM Directive Implementation Update: More Proposals to Protect Users’ Rights, COMMUNIA (Jan. 7, 2021), https://www.communia-association.org/2021/01/07/dsm-directive-implementation-update-more-proposals-to-protect-users-rights. Denmark has announced that it will not conclude its implementation process until after the June deadline. Id. CREATe is maintaining a webpage tracking each member state’s implementation process. See Copyright in the Digital Single Market Directive – Implementation, CREATe, https://www.create.ac.uk/cdsm-implementation-resource-page/#consultations-transpositions. According to the CREATe site, Croatia and Hungary appear to have published draft legislation, but with little or no English-language commentary. Id. The European Copyright Society has asserted that most terms of Article 17 are subject to the CJEU’s review as autonomous interpretations of the Directive. Metzger & Senftleben, supra note 65, at 9. This may mean that national deviations from key terms may be struck down by the CJEU. The United Kingdom, which is no longer a member of the EU, announced that it would not implement the DSM Directive. See Copyright: EU Action, Written Question 4371, UK PARLIAMENT, https://www.parliament.uk/business/publications/written-questions-answers-statements/written-question/Commons/2020-01-16/4371.
monitoring, or personal data rights issues raised above. The draft implementation proposals of Germany, Austria, and Finland, on the other hand, attempt to balance the interests of rights holders and users along with providing some clarity to content sharing services, though they are not entirely free of blemishes. Because there has been little actual implementation of Article 17, it is premature to assess whether member states will be able to resolve its internal contradictions. Additionally, we cannot know whether Article 17 implementations will achieve the Directive’s objectives of getting substantial revenues to EU rights holders, lessening the amount of online infringement on content sharing sites, and harmonizing the laws of EU member states to create a digital single market.

The government of Poland has mounted a challenge to the legality of Article 17 before the CJEU. It has asked that court to annul Article 17(4)(b) and 17(4)(c) or, in the alternative, to annul Article 17 entirely. Poland contends that Article 17 makes it necessary for content sharing services to employ upload filters as “preventive control mechanisms,” which is incompatible with the right to freedom of expression and information guaranteed by the European Charter of Fundamental Rights.

Whether the CJEU will

129. Paul Keller, Article 17: Both French and Dutch Implementation Proposals Lack Key User Rights Safeguards, COMMUNIA (Jan. 10, 2020), https://www.communia-association.org/2020/01/10/article-17-implementation-french-dutch-implementation-proposals-lack-key-user-rights-safeguards.

130. See, e.g., Paul Keller, Austrian Article 17 Proposal: The High Road Towards Implementation?, COMMUNIA (Dec. 14, 2020), https://www.communia-association.org/2020/12/14/austrian-article-17-proposal-high-road-towards-implementation; Paul Keller, Finnish Article 17 Implementation Proposal Prohibits the Use of Automated Upload Filters, COMMUNIA (Dec. 23, 2020), https://www.communia-association.org/2020/12/23/finnish-article-17-implementation-proposal-prohibits-the-use-of-automated-upload-filters; Julia Reda, In Copyright Reform, Germany Wants to Avoid Over-Blocking, Not Rule Out Upload Filters—Part 1, KLUWER COPYRIGHT BLOG (July 9, 2020), http://copyrightblog.kluweriplaw.com/2020/07/09/in-copyright-reform-germany-wants-to-avoid-over-blocking-not-rule-out-upload-filters-part-1/?doing_wp_cron=1594746228.0162110328674316406250.

131. See also Copyright in Foreign Jurisdictions Hearing, supra note 3, at 8 (statement of Julia Reda, Former Member of the European Parliament & Fellow, Berkman Klein Center for Internet & Society, Harvard University) (“The adoption of the DSM Directive has plunged online businesses into legal uncertainty that is likely to stretch for years, if not decades.”).

132. Case C-401/19, Republic of Poland v. European Parliament and Council of the European Union (May 29, 2019). On November 10, 2020, the CJEU heard arguments in this case, which reportedly revealed inherent conflicts within Article 17. A ruling is expected in summer of 2021. See, e.g., Paul Keller, CJEU Hearing in the Polish Challenge to Article 17: Not Even the Supporters of the Provision Agree on How It Should Work, KLUWER COPYRIGHT BLOG (Nov. 11, 2020), http://copyrightblog.kluweriplaw.com/2020/11/11/cjeu-hearing-in-the-polish-challenge-to-article-17-not-even-the-supporters-of-the-provision-agree-on-how-it-should-work.

133. Case C-401/19, Republic of Poland; see, e.g., Christophe Geiger et al., Intermediary Liability and Fundamental Rights, in THE OXFORD HANDBOOK ON INTERMEDIARY LIABILITY ONLINE 139, 140–46 (Giancarlo Frosio ed., 2020), https://ssrn.com/abstract=3411633 (discussing fundamental freedoms and concerns about Article 17 undermining them); JULIA REDA ET AL., GESELLSCHAFT FÜR FREIHEITSRECHTE E.V., ARTICLE 17
rule Article 17 unconstitutional on its face remains to be seen. This is, however, far from a frivolous complaint given the CJEU’s *Netlog* decision, among others. Recall that SABAM was denied, on fundamental rights grounds, to get an injunction that would require Netlog to install filters to prevent the availability of infringing music on its network.

The recent *Glawischnig-Piesczek* decision might suggest that the CJEU has become more tolerant of injunctions that impose monitoring obligations, although the injunction in that case focused on blocking access to a specific instance of online content that had been adjudicated to be unlawful. It is important to note that this CJEU opinion did not analyze the impact of such a monitoring injunction on fundamental rights, as the CJEU’s *Netlog* decision did.

The CJEU in *Netlog* ruled that the injunction SABAM sought that would impose a general monitoring obligation on that ISP would violate Article 15 of the E-Commerce Directive and fundamental freedoms under the European Charter of Fundamental Rights. Such an injunction would not respect a fair balance between the interests of copyright owners, on the one hand, and the freedom to conduct one’s business on the other. In addition, the “contested filtering system may also infringe the fundamental rights of that hosting service provider’s service users, namely, their right to protection of their personal data and their freedom to receive or impart information.” The CJEU also observed that filtering technologies cannot distinguish between lawful and unlawful uses of content and so could block lawful communications under copyright exceptions. Leading scholars in

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134. *Case C-360/10, SABAM v. Netlog NV, ECLI:EU:C:2012:85, ¶¶ 33–34* (Feb. 16, 2012); *see supra* notes 101–02 and accompanying text (discussing *Netlog*); *see also* Bridy, *supra* note 10, at 344–46 (discussing the CJEU’s *Netlog* decision).

135. *See, e.g., Case C-70/10, Scarlet Extended SA v. SABAM, 2011 E.C.R. I-11959, ¶ 53* (holding that an injunction to require peer-to-peer filesharing service to install filtering system would violate EU Directives and fundamental rights under the EU Charter of Fundamental Rights); *see also* Bridy, *supra* note 10, at 343–44, 346 (discussing *Scarlet Extended*).

136. *Netlog, ECLI:EU:C:2012:85, ¶¶ 39–52.*

137. *Case C-18/18, Glawischnig-Piesczek v. Facebook Ireland Ltd., ECLI:EU:C:2019:458458, ¶ 53* (Oct. 3, 2019).

138. *Id.; see also Copyright in Foreign Jurisdictions Hearing, supra* note 3, at 7–9 (statement of Daphne Keller, Professor of Law, Stanford University) (noting that the “filtering requirement like the one imposed in Facebook’s Austrian case would be unconstitutional in the U.S.”).

139. *Netlog, ECLI:EU:C:2012:85, ¶¶ 38, 46–50.*

140. *Id.* ¶ 48.

141. *Id.* ¶ 50.
the EU have criticized the DSM’s upload filter requirement for ISPs on similar fundamental freedom grounds.142

Yet, even if Article 17 survives Poland’s challenge, national implementations and judicial interpretations of its provisions in particular cases will still be subject to judicial review. Several commentators have, therefore, focused on recommendations to ensure maximal compliance with user rights and freedoms.143

Fundamental freedoms could be preserved insofar as Article 17 would allow online content services to avoid having to adopt automated content recognition technologies if they obtain licenses to cover user uploads of copyrighted content. This may be somewhat feasible in the EU because many collecting societies have the capacity to grant licenses to a wide variety of works on behalf of large numbers of specific categories of creators.144

The United States, by contrast, has almost no well-established and well-functioning collecting societies—except as to music—akin to those prevalent in the EU that could enable licensing of millions of copyrighted works.145 Because of this, licensing is not a viable alternative for U.S.-based content sharing platforms to avoid having to adopt automated content recognition technologies under the EU Directive or under any U.S. adoption of an Article 17-like regime. This is yet another reason why Congress should not look to Article 17 as a model in any reconsideration of the § 512(c) DMCA safe harbor.

The EU has a very different and much more paternalistic regulatory legal culture than the United States.146 With the adoption of Article 17, the EU has created a complex new regulatory framework that will make it very difficult, and perhaps impossible, for most UGC platforms to continue to operate and offer culturally diverse contents to EU residents. There is a reason why U.S.-based internet platforms have been so much more successful than EU-based firms: the U.S. legal culture is less paternalistic and more hosp-

142. See, e.g., Angelopoulos, supra note 60; Garstka, supra note 96; Geiger et al., supra note 133; Moreno, supra note 111. A very recent assessment concludes that Article 17 is incompatible with fundamental rights. Christophe Geiger & Bernd Justin Jütte, Platform Liability Under Article 17 of the Copyright in the Digital Single Market Directive, Automated Filtering and Fundamental Rights: An Impossible Match, 70 GRUR INT’L (forthcoming 2021).

143. See DSM Directive, supra note 11, art. 17(10) (directing the EC to hold stakeholder dialogues to discuss best practices and that special account be taken “of the need to balance fundamental rights and of the use of exceptions and limitations.”); see, e.g., Quintais et al., supra note 76; Metzger & Senftleben, supra note 65; Moreno, supra note 111.

144. See, e.g., COLLECTIVE MANAGEMENT OF COPYRIGHT AND RELATED RIGHTS ch. 4–8 (Daniel Gervais ed., 3d ed. 2015) (discussing collective management in the EU and specific countries and sectors of Europe); Quintais & Husovec, supra note 117 (discussing licensing options).

145. See COLLECTIVE MANAGEMENT, supra note 144, ch. 11.

146. See, e.g., Pamela Samuelson, Regulating Technology Through Copyright Law: A Comparative Perspective, 42 EUR. INT’L PROP. REV. 214 (2020) (discussing differences in the copyright and legal cultures of the United States and the EU).
table to entrepreneurship and innovation. For the many reasons set forth in this Part, Article 17 should not serve as a model for any reconsideration of ISP safe harbors by the U.S. Congress.

III. Congress Should Take a Balanced Approach in Regulating ISPs That Host User-Uploaded Content

Insofar as the U.S. Congress reconsiders the DMCA safe harbors, it should strive for a balanced approach. As important as are the interests of the copyright industries and professional authors and artists who support stronger copyright rules, there are other important industry, individual creator, and public interests at stake in the regulations that affect online content hosting services. Many of these stakeholders would be adversely affected by U.S. adoption of Article 17-like rules or by changes to the DMCA safe harbors recommended in the Copyright Office’s Section 512 Study.

A. The U.S. Copyright Office Section 512 Study Does Not Fairly Balance Stakeholder Interests

To prepare for its Section 512 Study, the Copyright Office solicited comments from stakeholders and hosted a series of roundtables about how the DMCA safe harbors have been working over the past two decades. After nearly five years of work, the Office concluded that the DMCA notice-and-takedown regime is “unbalanced” and needs some “fine-tuning.” Unfortunately, the Study itself is imbalanced, premised, as it is, on an oversimplistic duality: even if ISPs think § 512 is working reasonably well, copyright industries do not, and “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.” The Study gave essentially no attention to the interests of the hundreds of millions of internet users and the many millions of user-creators who rely on content-sharing platforms to reach audiences, even though copyright law is supposed to promote the public interest, not just the interests of major copyright industry groups.

147. SECTION 512 STUDY, supra note 14, at 1. The Office received more than 92,000 written comments in response to its call for comments. Id. at 12–13.
148. SECTION 512 STUDY, supra note 14, at 72, 198.
149. Id. at 83. Perusing the public comments submitted to the Copyright Office for its 512 Study, https://copyright.gov/policy/section512/, it is worth noting that none of the major software or videogame companies, which are significant players in the copyright industries, took positions against the DMCA safe harbors. Nor were broadcast and cable companies on record as opposed to these rules.
150. See DMCA’s Notice-and-Takedown Hearing, supra note 16, at 3–5 (statement of Abigail Rives, IP Counsel, Engine); DMCA’s Notice-and Takedown Hearing, supra, 4–5 (statement of Jonathan Berroya, then-Interim President and CEO, Internet Association).
The Study criticized the courts for construing too broadly the types of services that Congress intended to qualify for the § 512 safe harbors, particularly § 512(c) for hosting user contents, on the theory that certain unforeseen activities were “related” to storage on behalf of users. The Study suggested that Congress intended for the § 512(c) safe harbor to apply only to services that passively store information on behalf of users. Under this interpretation, Wikipedia would probably qualify for this safe harbor, but virtually every other ISP that hosts user-uploaded contents would not. As one witness at a Senate IP Subcommittee hearing observed in written testimony, to restrict the safe harbors to the types of hosting services common in 1998 “would all but exclude every modern OSP from the scope of section 512(c), giving liability protections only to the bulletin board services from the 1990s.”

This witness pointed out that the Study ignored that “the DMCA was intended to incentivize innovation and the growth of the internet” and that “algorithmic recommendations—which benefit users by connecting them to their communities and information they are likely to be interested in—do not negate the principle that the underlying content is stored at the direction of the user.”

The Study was also highly critical of judicial decisions concerning what constitutes actual knowledge of infringement on an ISP’s site, “red flag” knowledge, willful blindness to infringement, and, by extension, judicial interpretations of § 512(m), which provides that ISPs have no duty to monitor for infringement. The Study faulted decisions that it thought had conflated the actual and “red flag” (that is, where facts and circumstances make infringing activity on the site apparent) knowledge standards, which in its estimation created an excessively narrow space in which to define an ISP’s obligation. The Study asserted that an ISP has “red flag” knowledge if it has more general knowledge of infringing materials on its site. Moreover, if an ISP received repeat takedown notices about one of its users, the Study would treat this as “red flag” knowledge.

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151. Section 512 Study, supra note 14, at 84–95. For instance, it criticized the Second Circuit’s ruling in Viacom Int’l, Inc. v. YouTube, Inc., 676 F.3d 19, 38–39 (2d Cir. 2012), that YouTube was eligible for the § 512(c) safe harbor insofar as it transcoded uploaded videos, enabled other users to view them, and provided automated recommendations because these activities were sufficiently related to hosting user contents.

152. Id.; see DMCA’s Notice-and-Takedown Hearing, supra note 16, at 7 (statement of Jonathan Berroya, then-Interim President and CEO, Internet Association) (adding “[s]imply because the internet experience in 1998 was not as rich as it is now does not mean that today’s OSPs should be excluded from the safe harbor.”)

153. DMCA’s Notice-and-Takedown Hearing, supra note 16 (statement of Jonathan Berroya, then-Interim President and CEO, Internet Association).

154. Section 512 Study, supra note 14, at 111–28.

155. Id. at 113–24.

156. Id. at 111–12 n.591.

157. Id. at 114.
Although § 512(m) provides that ISPs do not have a duty to monitor their sites for infringing materials, the Study concluded that ISPs should monitor their sites and have a duty to investigate further if its staff comes across material that may be infringing.\textsuperscript{158} Failure to do so, it suggests, may justify a finding of willful blindness to infringement.\textsuperscript{159} The Study suggested that larger ISPs that host user-uploaded audiovisual works “with a history of hosting infringing content may need to implement costly filtering technologies,” even if smaller sites “might just need to assign content review to an existing employee.”\textsuperscript{160}

The Study concluded that courts have also given ISPs too much leeway in formulating and carrying out repeat infringer policies.\textsuperscript{161} ISPs should, it suggests, be required to publicly disclose the terms on which they will terminate users charged with infringement.\textsuperscript{162} Many ISPs do not inform their users about the circumstances under which their accounts will be terminated. The Study asserted that users need to know what the ISP’s policy is and what will happen if they violate it.\textsuperscript{163} Moreover, it equates an ISP’s receipt of facially compliant takedown notices for particular users as evidence that the users actually are infringers, evidence that should count toward termination of the users’ accounts.\textsuperscript{164} This is analogous to thinking that filing a complaint in federal court is the same thing as getting a judgment on the merits.

The Study faulted ISPs for choosing not to remove or disable content after receiving a takedown notice in circumstances where the ISPs believe

\textsuperscript{158} Id. at 122–124.
\textsuperscript{159} Id. at 126–27.
\textsuperscript{160} Id. at 123–24.
\textsuperscript{161} Id. at 95–110.
\textsuperscript{162} Id. at 106. Meredith Rose, Policy Counsel of Public Knowledge, raised concerns in her Senate testimony about termination of Internet access as a penalty for repeat infringement as applied to customers of broadband services because the Internet has become an essential communications service in the modern era. (This has been abundantly clear during the coronavirus pandemic.) Many households depend on Internet access for its members to be able to work remotely, attend classes, access medical care, get news, and communicate with others. Misdeeds by one member of a household should not result in everyone in that household being completely cut off from the world. \textit{DMCA’s Notice-and-Takedown Hearing, supra} note 16, at 15–18 (statement of Meredith Rose, Policy Counsel, Public Knowledge). This is particularly true for the more than 100 million households that have access to only one broadband provider. \textit{Id.; see also} Geiger et al., \textit{supra} note 133, at 4–8 (arguing that Internet access has been evolving as a fundamental human right). The Study did at least recognize that a “different approach” should be taken toward university students because cutting off their Internet access would be “tantamount to expelling them from the university.” \textit{SECTION 512 STUDY, supra} note 14, at 109–10 (internal quotation marks omitted); \textit{see also DMCA’s Notice-and-Takedown Hearing, supra} note 16, at 6 (statement of David Hansen, Lead Copyright & Information Policy Officer, Duke University) (“I cannot overstate how critical network access has become for modern teaching and learning . . . .”).
\textsuperscript{163} \textit{SECTION 512 STUDY, supra} note 14, at 106.
\textsuperscript{164} Id. at 98–103.
that the challenged use is fair or otherwise non-infringing. In the Office’s view, this fails to honor the statutory requirement that ISPs act expeditiously to remove or disable access after getting facially compliant takedown notices. The Study failed to acknowledge that it is risky for an ISP to decide not to remove challenged content, as the safe harbor would no longer apply if its judgment about fair use was wrong. The Study also asserted that copyright owners should not have to consider whether someone’s use of their content was fair use before sending takedown notices to ISPs, a conclusion that directly contradicts a well-known Ninth Circuit decision. Without this check on copyright owner discretion, takedown notice abuse will become even more of a problem than it already is.

Although the Study claimed that it was not recommending “wholesale changes” to § 512, it invited Congress to “fine-tune” many aspects of the safe harbor provisions to tilt the balance in the direction that copyright industries have requested. In most respects, the proposed changes would, in fact, radically alter the DMCA safe harbors. Although the Study declined to recommend enactment of an Article 17-like notice-and-staydown rule, as some copyright industry players had urged, it recommended further study of notice-and-staydown rules as well as no-fault site-blocking injunctions.

In some respects, the Copyright Office Section 512 Study is actually worse for most ISPs than Article 17. After all, Article 17 only applies to for-profit online content sharing services that make available, organize, and promote “large” amounts of user-uploaded content. At least some smaller entities are exempt from Article 17, as are nonprofit online encyclopedias, educational and scientific repositories, and open source software developing and sharing sites, as well as providers of electronic communication services, online marketplaces, business-to-business cloud services, and cloud services that allow users to upload content for their own use. The Section 512 Study, by contrast, recommended imposing greater obligations on all ISPs,

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165. Id. at 152–55.
166. Id. at 148–52. The Study faults the Ninth Circuit for concluding otherwise in Lenz v. Universal Music Group, Inc., 815 F.3d 1145 (9th Cir. 2016). See SECTION 512 STUDY, supra note 14, at 148–49.
167. Id. at 7, 198.
168. The Study’s recommended changes to the standards of ISP knowledge about users’ infringements would profoundly change the safe harbors, as would its recommendations to contract the categories of ISPs eligible for safe harbors. Id. at 84–95, 111–26. As Jonathan Berroya of the Internet Association put the point, “the cumulative effect of the changes recommended by the [Study] would be to disrupt the balance established by Congress in Section 512 to the detriment of Internet users, including businesses and individual creators.” DMCA’s Notice-and-Takedown Hearing, supra note 16, at 7 (statement of Jonathan Berroya, then-Interim President and CEO, Internet Association).
169. SECTION 512 STUDY, supra note 14, at 186–96.
170. DSM Directive, supra note 11, art. 2(6).
although occasionally suggesting that smaller entities may have lesser burdens when it comes to monitoring user-uploaded content.\textsuperscript{171}

In contrast to the Section 512 Study’s quite dismissive treatment of fair uses,\textsuperscript{172} Article 17 requires member states to ensure that fundamental user freedoms will be respected even when a hosting service uses automated content recognition technologies. It directed members states to ensure the preservation of user-generated content that quotes from or parodies other works under copyright exceptions.\textsuperscript{173}

B. The DMCA Safe Harbors Have Enabled U.S.-Based ISPs to Thrive

The Section 512 Study understated the importance of the DMCA safe harbors for small and medium-sized U.S.-based ISPs, as documented in the seminal empirical study authored by Professor Jennifer Urban, et al., \textit{Notice and Takedown in Everyday Practice}.\textsuperscript{174} That report concluded that the majority of ISPs that host user contents are “DMCA Classic” platforms. These ISPs follow the protocol that § 512(c) establishes: after receiving notices from copyright owners about specific claimed infringements on the ISP’s site, the ISPs investigate and take down or disable access to infringing materials on their sites.\textsuperscript{175} For small and medium-sized companies, this notice-and-takedown process is a burden, but their staff members dutifully review the notices individually and comply with valid takedowns, as the law requires.\textsuperscript{176} The DMCA Classic ISPs depend heavily on the § 512(c) safe harbor for their very existence. These ISPs are, moreover, not the sources of significant infringements; they take very seriously their responsibilities to process takedown notices in the manner that Congress expected with adopting the DMCA.\textsuperscript{177} They do not automatically take down user-uploaded content if the takedown notice they receive from a rights holder or its agent is flawed, as often happens.

\textsuperscript{171} \textsc{Section 512 Study}, supra note 14, at 123–24.

\textsuperscript{172} The Study would relieve copyright owners of the responsibility to consider fair use before sending takedown notices and criticized ISPs that decide to allow a challenged use to remain on their sites because the use was fair and non-infringing. \textit{Id.} at 150–55.

\textsuperscript{173} DSM Directive, \textit{supra} note 11, art. 17(7). In its discussion of the DSM Directive, the Section 512 Study does not mention Article 17’s commitment to allowing users to exercise fundamental freedoms in creating works they upload to sharing service sites. \textsc{Section 512 Study}, \textit{supra} note 14, at 61–63.

\textsuperscript{174} \textsc{Jennifer Urban et al.}, \textit{Notice and Takedown in Everyday Practice} 73 (2016). The report’s findings were also published in digested, updated versions. See Jennifer M. Urban et al., \textit{Notice and Takedown: Online Service Provider and Rightsholder Accounts of Everyday Practice}, 64 J. COPYRIGHT SOC’Y USA 371 (2017) [hereinafter Urban et al., \textit{Notice and Takedown}]; Jennifer M. Urban et al., \textit{Takedown in Two Worlds: An Empirical Analysis}, 64 J. COPYRIGHT SOC’Y USA 483 (2017).

\textsuperscript{175} Urban et al., \textit{Notice and Takedown}, \textit{supra} note 174, at 381. ISPs report that many of the takedown notices they get are unsound. \textit{Id.} at 381, 385–88.

\textsuperscript{176} \textit{Id.} at 398.

\textsuperscript{177} \textit{Id.; see also} Hinze, \textit{supra} note 38, ch. 8.
The Urban Study analyzed a six-month sample of takedown notices and reported that a high proportion—nearly one-third—were flawed, either because the takedown notice was incomplete or fraudulent, the uploaded material was fair use, or the notice provider was not the owner of a copyright alleged to be infringed. Numerous other submissions to the Copyright Office during the Section 512 Study process also documented these abuses. The Study cited “a series of extensively researched articles” in the Wall Street Journal reporting on takedown abuses, one of which pointed out that Google had reinstated more than 50,000 wrongfully removed links. Nevertheless, the Study concluded that “[b]ecause 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.” It seemed to accept uncritically assertions of copyright industry representatives that abusive notices are “incredibly rare.”

Unlike their smaller counterparts, dominant platforms such as YouTube and Facebook will be able to adapt to whatever ISP liability rules Congress might choose to adopt. These platforms and other large ISPs have sought to be more than DMCA-compliant by automating their handling of thousands or even millions of notices sent to the platforms by bots and takedowns for unlawful uploads. Some large platforms (notably YouTube) go well beyond what the DMCA requires by developing or licensing filtering technologies, offering special takedown procedures for trusted rights holders, hash-matching based “stay down” systems, as well as agreeing to contractual terms that place additional obligations on these ISPs.

YouTube and Facebook greatly benefited in their early years from the existence of the DMCA and the EU’s E-Commerce safe harbors which enabled them to become dominant platforms. Now that they have achieved

178. Urban et al., supra note 174, at 88; see also DMCA’s Notice-and-Takedown Hearing, supra note 16, at 3–9 (statement of Meredith Rose, Policy Counsel, Public Knowledge).
179. SECTION 512 STUDY, supra note 14, at 146–47 nn.784–87.
180. Andrea Fuller et al., Google Hides News, Tricked by Fake Claims, WALL ST. J. (May 15, 2020), https://www.wsj.com/articles/googledmca-copyright-claims-takedown-online-reputation-11589557001, cited in SECTION 512 STUDY, supra note 14, at 148 n.790. The Office noted that “[s]uch abuses of the DMCA system do call for some enforcement mechanism,” but it offered no recommendations about this. See also DMCA’s Notice-and-Takedown Hearing, supra note 16, at 3–9 (statement of Meredith Rose, Policy Counsel, Public Knowledge) (criticizing the Study for its failure to give credence to ISP complaints about “bad” notices).
181. SECTION 512 STUDY, supra note 14, at 147.
182. Id. at 148.
183. Urban et al., Notice and Takedown, supra note 174, at 382.
184. Id. at 382–83 (describing “DMCA Plus” OSPs); see, e.g., Videos Removed or Blocked Due to YouTube’s Contractual Obligations, YOUTUBE HELP, https://support.google.com/youtube/answer/3045545 (describing YouTube agreements with certain music rights holders requiring specific takedown obligations).
dominance, they may benefit further if legislatures change the DMCA rules in a way that would, in effect, pull the ladder up behind them. Indeed, the dominance of these mega-platforms would be further entrenched if new regulations put small and medium-sized platforms at a disadvantage or even cause them to fold.\textsuperscript{185}

The Section 512 Study failed to acknowledge how important U.S.-based internet companies, including online platforms, have become to the U.S. economy. A study conducted for the Internet Association reported that this sector contributed more than $2 trillion to the U.S. gross domestic product (GDP) in 2018, said to represent about 10% of GDP.\textsuperscript{186} That study also reported that this sector directly created six million jobs and indirectly supported an additional 13 million jobs in the United States.\textsuperscript{187} A Bureau of Economic Analysis study of the U.S. digital economy for the U.S. Department of Commerce estimated that this sector contributed $1.35 trillion to the economy in 2017, or 6.9% of GDP.\textsuperscript{188} In the Forbes 2019 ranking of the world’s top 100 digital companies, U.S.-based firms dominated the top ten and comprised nearly half of the top 25.\textsuperscript{189} ISPs, including platforms that enable user uploads, are among the many types of information technology firms that make up this sector. All but five of the top 20 internet companies measured by market value are U.S.-based firms.\textsuperscript{190} The success of the U.S. internet economy is due in no small measure to the DMCA safe harbor regulations.\textsuperscript{191}

\begin{enumerate}
\item \textsuperscript{185} See, e.g., Hannah Bloch-Wehba, \textit{Automation in Moderation}, 53 CORNELL INT’L L.J. 41, 67, 71 (2020); see also DMCA at 22 Hearing, supra note 16, at 1–2 (statement of Rebecca Tushnet, Professor of Law, Harvard University).
\item \textsuperscript{186} Christopher Hooton, \textit{Measuring the US Internet Sector: 2019}, INTERNET ASS’N (Sept. 26, 2019), https://internetassociation.org/publications/measuring-us-internet-sector-2019. The Internet Association is a trade association representing leading global internet companies. Id. at 20 (listing member companies including major U.S.-based companies).
\item \textsuperscript{187} Id.
\item \textsuperscript{188} Digital Economy Accounted for 6.9 Percent of GDP in 2017, BUREAU OF ECON. ANALYSIS (Apr. 4, 2019), https://www.bea.gov/news/blog/2019-04-04/digital-economy-accounted-69-percent-gdp-2017.
\item \textsuperscript{189} See \textit{Top 100 Digital Companies: 2019 Ranking}, FORBES (Oct. 2019), https://www.forbes.com/top-digital-companies/list/#tab:rank. Only three of the top 25 were EU-based, the highest ranked at #19. See also \textit{Top 100 GLOBAL TECH LEADERS REPORT}, THOMSON REUTERS (Jan. 2018), https://www.thomsonreuters.com/content/dam/ewp-media/documents/thomsonreuters/en/pdf/reports/thomson-reuters-top-100-global-tech-leaders-report.pdf (showing 45 of the top technology companies worldwide are U.S.-based, while only 8 are EU-based).
\item \textsuperscript{190} J. Clement, \textit{Market Capitalization of the Biggest Internet Companies Worldwide as of June 2019}, STATISTA (June 23, 2020), https://www.statista.com/statistics/277483/ market-value-of-the-largest-internet-companies-worldwide/ [https://web.archive.org/web /20210129222447/https://www.statista.com/statistics/277483/market-value-of-the-largest- internet-companies-worldwide/]. Along with the U.S.-based companies listed are several companies based in China; none are EU-based. Id.
\item \textsuperscript{191} See, e.g., David Kravets, \textit{10 Years Later, Misunderstood DMCA Is the Law That Saved the Web}, WIRED (Oct. 27, 2000), https://www.wired.com/2008/10/ten-years-later ("To-
Few of the top internet companies are EU-based. When adopting Article 17, EU policymakers did not consider the likely competition and innovation consequences of the DSM Directive, especially the significant market entry barriers for EU-based ISPs it would erect. Perhaps EU policymakers have given up on being able to nurture European platforms to compete with successful U.S.-based firms. Either that or these policymakers were oblivious to the impacts that Article 17 and similar rules would have on competition and innovation in online content hosting markets. The Commission’s main goal with Article 17 seems to have been to enable EU rights holders to extract rents from existing U.S.-based mega-platforms, not to provide incentives for new EU-based platforms to compete with the mega-platforms or innovate around them.\footnote{\textit{}}

\section{C. The U.S. Safe Harbor Regime Has Fostered an Unprecedented Outpouring of Creative Content}

In considering any DMCA reforms, Congress should consider not only the implications for competition and innovation in the U.S.-based internet sector, but also the interests of scholars and other researchers who are now widely posting their research online on an open access basis and the millions of user-creators and their audiences who rely on the services that ISPs provide.\footnote{\textit{}}

In proposing to refashion the safe harbors to give much greater protection to copyright industries, the Section 512 Study gave essentially no weight to the interests of internet users or to the tremendous creative output of user-creators. According to a recent report, almost 312 million U.S. residents are internet users\footnote{\textit{}} and almost 70\% of them use social networks of
various kinds. UGC on these networks have prodigiously proliferated to become a hallmark of the digital age. Most of the UGC uploaded to social media sites are wholly original creations of the uploaders, including their photographs of sunsets and videos of cats and dogs. Remixes and mashups typically draw upon existing works, transforming them so as to convey a different message. Millions of user-creators have been able to commercialize their products with the aid of ISP hosting sites. In 2017, “nearly 17 million Americans earned a collective $6.8 billion in income by posting their personal creations on nine internet platforms.”

Etsy, for instance, at the end of 2019 had almost 65 million items for sale, with 2.5 million active sellers and 45.7 million active buyers. The authors of these works are every bit as deserving of copyright protection as the authors of Hollywood movies, top-selling sound recordings, and best-selling novels. The Copyright Office’s Section 512 Study did not even acknowledge that UGC creators’ interests in making their works available through online sharing platforms should be taken into account as part of the overall balance.

A staggering number of UGC videos are uploaded to YouTube and photographs to Instagram every day. However, many less-well-known UGC sites also host large quantities of such works. Consider, for instance, the Organization for Transformative Works. It has more than one million registered users, hosts more than four million works, and gets an average of 1.12 billion page-views per month. Another example is Automattic, the U.S.-based internet company behind WordPress, Tumblr, and other platforms, which offered the following data when submitting comments to the Copyright Office for its § 512 study: in one month in 2016, WordPress users created more than one million new websites, made 17 million blog posts,

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195. J. Clement, Number of Social Network Users in the United States from 2017 to 2023, STATISTA (Dec. 2, 2019), https://www.statista.com/statistics/278409/number-of-social-network-users-in-the-united-states (forecasting based on 2017–18 survey).

196. See, e.g., DEPT OF COMMERCE, INTERNET POLICY TASK FORCE, WHITE PAPER ON REMIXES, FIRST SALE, AND STATUTORY DAMAGES 6 (2016), https://www.ntia.doc.gov/files/ntia/publications/white_paper_remixes-first_sale-statutory_damages_jan_2016.pdf. Stakeholders have different perspectives on remixes and mashups. Id. at 6–9.

197. See, e.g., LAWRENCE LESSIG, REMIX: MAKING ART AND COMMERCE THRIVE IN THE HYBRID ECONOMY 14 (2008).

198. DMCA’s Notice-and-Takedown Hearing, supra note 16, at 4 (statement of Abigail Rives, IP Counsel, Engine).

199. See id.

200. See, e.g., Mitja Rutnik, YouTube in Numbers, ANDROID AUTHORITY (Aug. 11, 2019), https://www.androidauthority.com/youtube-stats-1016070 (reporting that more than 500 hours of content is uploaded to YouTube every minute); Instagram by the Numbers, OMNICORE (Feb. 10, 2020), https://www.omnicoreagency.com/instagram-statistics (reporting that more than 100 million photos and videos are uploaded to Instagram every day).

201. DMCA at 22 Hearing, supra note 16, at 1 (statement of Rebecca Tushnet, Professor of Law, Harvard University).
and uploaded more than 34 million individual media files.\(^{202}\) The creators of these works are authors within the meaning of U.S. copyright law, and a great many of them have decided to share their works with others under Creative Commons (CC) or similar licenses.\(^{203}\) Indeed, Creative Commons, in its *State of the Commons 2017* report, claimed 1.4 billion works of authorship were covered by CC licenses.\(^{204}\)

Insofar as members of Congress consider revisiting the DMCA safe harbors for online hosting ISPs, they should give due consideration to the interests of these creators, the audiences these creators are reaching, and U.S. leadership in the internet and technology industries, as well as the interests of major copyright industry firms. Maintaining a reasonable balance among these various interests is essential if any copyright reform is to be politically feasible, let alone wise.

Another failure of the Copyright Office’s Section 512 Study lies in its ignoring that U.S.-based copyright industries have been thriving in the internet age.\(^{205}\) The Study mostly sympathized with content industries’ characterization of the current state of copyright as primarily one of massive harm, without weighing the tremendous extent of creative innovation made possible in the digital age. While online infringement remains a real problem at scale, especially from offshore streaming sites, it is undeniable that there is an immensely greater availability of legitimate online content today via online streaming and download services as compared with 1998. These services have drawn large audiences of subscribers in the United States and abroad.

An important early step in this direction was Apple’s deal with the recording industry to license digital music for its iTunes service so that consumers who wanted to lawfully acquire music could do so conveniently and at a modest price-point.\(^{206}\) Spotify, Pandora, and TIDAL are among the enti-

\(^{202}\) Automattic Inc., Comment Letter on U.S. Copyright Office Section 512 Study at 2 (Apr. 7, 2016) [hereinafter Automattic Comments] http://copyright.gov/policy/section512. In that period, Wordpress.com received 541 notices of claimed infringement, to which it strives to respond within 48 hours. *Id.*

\(^{203}\) See, e.g., LESSIG, supra note 197, at 17, 227.

\(^{204}\) Ryan Merkley, *A Transformative Year: State of the Commons 2017*, CREATIVE COMMONS (May 8, 2018), https://creativecommons.org/2018/05/08/state-of-the-commons-2017.

\(^{205}\) See generally, JOEL WALDFOGEL, DIGITAL RENAISSANCE (2019). The book’s economic forecasts must be somewhat discounted, as they predate the onset of the coronavirus pandemic.

\(^{206}\) See, e.g., Steve Knopper, *iTunes’ 10th Anniversary: How Steve Jobs Turned the Industry Upside Down*, ROLLING STONE (Apr. 26, 2013), https://www.rollingstone.com/culture/culture-news/itunes-10th-anniversary-how-steve-jobs-turned-the-industry-upside-down-68985.
ties that have subsequently obtained licenses to popular recorded music. Spotify, for example, touts 271 million active monthly users, 124 million of whom pay for the service. Amazon and Sirius XM also provide members of the public with access to millions of songs for modest subscription fees. The upshot is that hundreds of millions of users now have lawful access to an almost unimaginably rich array of digital music and other content through these new digital services.

Several recent studies have charted the successes of creative industries that have adopted profitable new business models and ways of making content, both old and new, available on the internet, resulting in a new golden age of creativity. Indeed, a 2019 report on the state of the entertainment industry concluded that “the internet, as currently structured, has been a creative force. It has helped many more people become creators and to make money from their creations, and the many industry sectors around ‘copyright’ are all seeing the fruits of that now.” Even some content industries that once were struggling are presently thriving. Although newspapers, especially local news publications, may be an exception to the overall trend, their decline is not due to rampant copyright infringement.

Like the music industry, other entertainment sectors are experiencing success with new digital content in addition to traditional forms of production and distribution, with growing or steady employment in these sectors as well. For example, film, television, and streaming video, including UGC, are benefiting from significant expansions in investment, content creation, and consumer consumption and spending, particularly as the numbers of cord-cutting video streaming subscribers continues to grow. The market for books, e-books, and audiobooks has been growing at a steady pace,

\[207\] See, e.g., Craig Grannell, A History of Music Streaming, DYNAUDIO (May 16, 2018), https://www.dynaudio.com/dynaudio-academy/2018/may/a-history-of-music-streaming.
\[208\] Company Info, SPOTIFY, https://newsroom.spotify.com/company-info (last visited Mar. 07, 2021).
\[209\] See, e.g., Sarah Perez, Paid Streaming Music Subscriptions in US Top 60 Million, Says RIAA, TECHCRUNCH (Sept. 6, 2019), https://techcrunch.com/2019/09/06/paid-streaming-music-subscriptions-in-u-s-top-60m-says-riaa.
\[210\] See, e.g., IFPI Global Music Report 2019, IFPI (Apr. 2, 2019), https://www.ifpi.org/news/IFPI-GLOBAL-MUSIC-REPORT-2019 (reporting global recorded music revenues up 9.7% over the previous year, streaming revenues up 34%, and paid subscription revenues up almost 33%). See also Copyright in Foreign Jurisdictions Hearing, supra note 3, at 2–3 (statement of Matt Schruers, President, Computer & Communications Industry Association).
\[211\] Michael Masnick & Leigh Beadon, The Sky Is Rising: A Detailed Look at the State of the Entertainment Industry 41–42 (2019), https://skysrising.com/TheSkyIsRising2019.pdf; see also DMCA at 22 Hearing, supra note 16, at 4–5 (statement of Rebecca Tushnet, Professor of Law, Harvard University) (citing statistics from the Masnick & Beadon study, id.).
\[212\] Masnick & Beadon, supra note 211, at 13–24.
along with a big increase in self-publishing. The video game sector, which includes mobile gaming, live game streaming, and e-sports, is rapidly expanding with no signs of slowing.

Economist Joel Waldfogel’s study of the impact of digitization on creative industries looked at sales and other data from the previous decade. Waldfogel found that digital technology has enabled industries to reduce production costs for content and distribution while at the same time maintaining the quality of creative output.

Furthermore, a 2018 WIPO study on creators’ income in the digital age found that wage trends for creative workers generally outperformed other sectors, losing less or even gaining a better income position than other workers. It corroborates findings by Waldfogel and others that digitization has lowered content generation costs as well as market entry costs. The study concludes: “From a policy perspective, these results do not lend support to the idea that creators’ income situation has systematically worsened with the rise of the internet and its intermediaries, as argued by some commentators in ‘value gap’ discussions.”

This good news for major copyright industries has happened during the two-plus decades since the DMCA safe harbor regime was enacted.

D. The DMCA Safe Harbors Have Fostered First Amendment Freedoms

Another failing of the Section 512 Study is its dismissive attitude about ways in which the DMCA safe harbors have promoted freedom of speech and freedom of expression on the internet. Any reform of the DMCA safe harbors should weigh heavily the public interests in First Amendment freedoms that online hosting ISPs have enabled. In its Comment to the Copyright Office in connection with its § 512 study, Automattic observed:

Safe harbor from allegations of infringement arising out of materials posted by others is foundational to the Internet as we know it. As the Supreme Court explained in Reno v. American Civil Liberties Union, 521 U.S. 844 (1997), the Internet democratizes access to speech by allowing every user to speak to—and be heard by—every other connected user:

213. \textit{Id.} at 25–31.
214. \textit{Id.} at 32–40.
215. WALDFOELG, supra note 205.
216. \textit{Id.} at 252–53; see also MASNICK & BEADON, supra note 211, at 7, 12.
217. Alexander Cuntz, Creators’ Income Situation in the Digital Age 46 (WIPO, Economic Research Working Paper No. 49, 2018), http://www.lisdatacenter.org/wps/liswps/755.pdf.
218. \textit{Id.}
219. \textit{Id.}
Through the use of chat rooms, any person with a phone line can become a town crier with a voice that resonates farther than it could from any soapbox. Through the use of Web pages, mail exploders, and newsgroups, the same individual can become a pamphleteer.

Id. at 870 (citation omitted). That democratization would simply be impossible if all content had to be checked for copyright infringement before it was posted—which would be the ultimate result if there were no safe harbors.\(^{220}\)

Changes to the DMCA safe harbor rules should be crafted to promote, not to restrain or impede, freedom of speech, expression, and assembly, which are essential components of the democratic principles that define the United States as a nation.

CONCLUSION

Congress should be wary of any changes to the current DMCA safe harbor rule that could have substantial negative impacts on ISPs, whether small, medium-sized, or established mega-platforms, in addition to the millions of U.S.-based internet creators whose online content is widely enjoyed by the hundreds of millions of internet users who are constituents of every member of Congress. As some relatively small U.S.-based internet platforms stated in a letter to members of the EU Parliament about the DSM Directive’s proposals, “[a]ny reform of copyright laws must consider the impact it will have on small internet platforms like ours and the creators that depend on us.”\(^{221}\)

U.S. internet policy has been and should continue to be pro-competitive and pro-innovation. It has been the policy of every administration, both Republican and Democratic, that the DMCA notice-and-takedown rules promote the welfare of U.S. industries and internet users. This is why these administrations have also exported these rules to other countries. The United States should aim to retain its leadership in the global arena in the development of sound copyright law and policy in the digital era, not cede it to EU policymakers who have formulated such a flawed regime as Article 17.

The Copyright Office had the opportunity to present a neutral, well-balanced perspective on the current state of ISP copyright liability rules, but

\(^{220}\) Automattic Comments, supra note 202, at 1; see also Sag, supra note 92, at 518 (discussing the democratizing effect of an open internet on expression and creativity).

\(^{221}\) Letter from Online Creator Platforms on Article 13, ENGINE (Sept. 10, 2018), https://www.engine.is/news/category/creatorplatformsarticle13 (letter sent to Member of the European Parliament on behalf of Automattic, Bandcamp, Kickstarter, Medium, Patreon, and Shapeways regarding the precursor to Article 17).
it failed to do so. Instead, it focused too narrowly on the complaints of copyright industries about ISPs at the expense of user-creators and the greater public interest. Congress should not forget that only by retaining a balanced perspective including the interests of all relevant stakeholders and upholding fundamental freedoms can U.S. copyright legislation adhere to its constitutional mandate to promote the “progress of Science” in the digital age.
