Before the United States Senate Committee on the Judiciary
Subcommittee on Intellectual Property
116th Congress

Hearing on Copyright Law in Foreign Jurisdictions:
How Are Other Countries Handling Digital Piracy?

March 10, 2020

Statement of Pamela Samuelson
Richard M. Sherman Distinguished Professor of Law
Berkeley Law School

Chairman Tillis, Ranking Member Coons, and Members of the Subcommittee:

Thank you for the opportunity to appear at this hearing to offer testimony about how other
countries have been dealing with online copyright infringements. I have been teaching, writing,
and speaking about copyright and digital technologies for nearly forty years.

In this testimony, I will make three main points. First, the international norm concerning liability
of Internet Service Providers (ISPs) for hosting content on behalf of users was established in
1996 during the negotiations that led to the WIPO Copyright Treaty (WCT). The United States
implemented this norm through the notice-and-takedown rules of the Digital Millennium
Copyright Act (DMCA) in 1998. It has also encouraged numerous other countries to adopt this
regulatory approach. US-based copyright industries and ISPs have thrived over the past twenty-
some years under these rules. Second, the strict liability rules for certain online content sharing
services, which are mandated by Article 17 of the EU’s recently adopted Directive on Copyright
and Related Rights in the Digital Single Market (DSM Directive), should not serve as a model
for any Congressional reconsideration of the DMCA safe harbor provisions. Article 17 is
internally contradictory, deeply ambiguous, harmful to small and medium-sized companies as
well as to user freedoms of expression, and may well be invalid for violating the European
Charter of Fundamental Rights. Third, adoption of an Article 17-like strict liability rule, which
significantly deviates from the DMCA approach to ISP liability, is not advisable. Insofar as
Congress contemplates any change to the DMCA safe harbors, it should take a balanced
approach, taking into account the vitality and success of American Internet platforms, the
interests of startups and small to medium-sized firms, and the interests of the many millions of
Internet users who share their own creations through these platforms, as well as the interests of
major copyright industries and individual creators for whom the DMCA safe harbor rules have
been frustrating. The United States should maintain its international leadership in copyright law
and policy in the regulation of ISPs.
I. ISP Safe Harbors for User Infringements Became an International Norm in the Aftermath of the Adoption of the WCT

When considering international norms regarding limitations on ISP liability for user infringements of which the ISPs were unaware and over which they had no control, a useful starting point is the Agreed Statement to Article 8 of the WCT.¹ Prior to the diplomatic conference that culminated in the adoption of the WCT, the Clinton Administration’s White Paper on Intellectual Property and the National Information Infrastructure had taken the position that ISPs were and should be liable for user infringements on their sites.² US officials initially proposed this approach for consideration at the WIPO diplomatic conference.³ This position did not meet with favor among the delegates to the diplomatic conference because it was unbalanced and unfair as to ISPs insofar as they were unaware of infringing uploads.⁴

Instead, the WIPO diplomatic conference adopted the following statement to accompany the WCT: “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.”⁵ This Agreed Statement was the normative foundation for subsequent legislative limitations on ISP 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 1998.⁶ The DMCA created a new § 512 of US copyright law, which sets forth four ISP safe harbors from monetary and injunctive relief. The US legislative debate over ISP liability standards was also influenced by a court ruling in Religious Technology Center v. Netcom Online Communication Services, Inc.,⁷ which held that an Internet access provider, Netcom, should not be held directly liable for a subscriber’s infringement of which it was unaware.⁸ However, once RTC notified Netcom about the presence of infringing materials on its network, the court thought that Netcom should have a duty to investigate and to take down infringing materials if the claim was valid. The court ruled

³ See, e.g., Pamela Samuelson, Big Media Beaten Back, 5.03 WIRED 64 (March 1997). 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 (1997).
⁵ WIPO Copyright Treaty, Agreed Statement Concerning Art. 8.
⁸ Id. at 1369-70.
that Netcom could be held contributorily liable for subscriber infringements if it failed to do this because that would materially contribute to the infringement.\(^9\)

In keeping with the *Netcom* decision, § 512 (a) exempts Internet access providers from liability for unmodified transitory digital network communications. Subsection (b) of § 512 limits ISP liability for network system caching. Subsection (c) limits liability for ISP storage of contents at the direction of users on the system. Subsection (d) provides a safe harbor to information locating tools, such as search engines, that may be used to link or refer to infringing materials. Subsections (b) through (d) are subject to notice-and-takedown rules, also in keeping with the *Netcom* ruling, under which ISPs are obliged, after receiving valid notices from copyright owners about the location of specific allegedly infringing materials, to remove or disable access to the infringing materials.\(^10\)

Eligibility of the § 512 safe harbors are subject to certain conditions: ISPs must adopt and reasonably implement a termination of repeat infringer policy, and in the case of § 512(c) and (d), they must inform the Copyright Office about the designated agent to whom notices about infringement should be sent.\(^11\) Section 512(g) provides for a counternotice procedure for users who contest a copyright infringement claim.\(^12\) Section 512(m) clarifies that the safe harbors do not impose a duty on ISPs to monitor for or affirmatively seek facts about possible infringing activities.\(^13\)

The EU adopted a somewhat similar set of safe harbors in 2000 through its adoption of Articles 12 to 15 of its E-Commerce Directive.\(^14\) Numerous other countries have followed the US’s and EU’s leads in adopting similar safe harbor rules in their national laws.\(^15\) Even without legislation,

---

9 Id. at 1374.
11 17 U.S.C. §§ 512(c)(2)-(3), 512(d)(3), 512(i)(1)(A). Subsection (i) also conditions safe harbors on the ISP’s accommodation of standard technical measures; however, no standard technical measures within the statutory definition have been agreed upon. See id. § 512(i)(1)-(2).
12 Id. § 512(g).
13 Id. § 512(m)(1). However, “red flag” knowledge of infringement will defeat eligibility for § 512(c)’s safe harbor.
14 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, Art. 14, 2000 O.J. (L 178) 1, 13 [hereinafter E-Commerce Directive]. 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 a 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.
courts in some countries have interpreted their national copyright laws in a manner consistent with the DMCA safe harbors.\textsuperscript{16}

The United States has exported DMCA-like ISP safe harbor rules through Free Trade Agreements with numerous other nations in Asia, the Middle East, and South America.\textsuperscript{17} The most recent example was the United States-Mexico-Canada Agreement (USMCA), which updated the North American Free Trade Agreement (NAFTA) so that it includes a DMCA-like safe harbor for ISPs provision.\textsuperscript{18}

Canada has taken a somewhat different approach by adopting a notice-and-notice regime for ISP liability.\textsuperscript{19} As with the DMCA safe harbors, a first step 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 which they have a good faith belief those contents are infringing.\textsuperscript{20} The second step calls for the ISP to forward this notice to the subscriber 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 the copyrighted content from the ISP’s site, although a failure to take down contents, if the copyright claim is valid, may give rise to liability on the part of the subscriber.\textsuperscript{21} The stated goal of the notice-and-notice regime is to discourage infringement and raise awareness of Internet users about copyrights.\textsuperscript{22} Canada has decided to maintain its notice-and-notice ISP liability rules, even though they are less strict than the US DMCA provisions.\textsuperscript{23}

Major content industry groups were never supportive of DMCA-like notice-and-takedown regimes, and they have become more dissatisfied with them over time. Through litigation, these groups have tested the boundaries of the DMCA safe harbors.\textsuperscript{24} While they have not won all of the lawsuits they filed, they have achieved notable successes against peer-to-peer file-sharing.


\textsuperscript{19} Copyright Act, R.S.C. 1985, c. C-42 §§ 41.25, 41.26 (Can.).

\textsuperscript{20} The process is explained on a Government of Canada website. See \textit{GOVERNMENT OF CANADA, NOTICE AND NOTICE REGIME}, https://ic.gc.ca/eic/site/oca-bc.nsf/eng/ca02920.html.

\textsuperscript{21} \textit{Id.}

\textsuperscript{22} \textit{Id.}


\textsuperscript{24} See, e.g., Viacom Int’l, Inc. v. YouTube, Inc., 676 F.3d 19 (2d Cir. 2012).
firms and providers of torrent files who induced copyright infringement.\textsuperscript{25} Also notable was a $1 billion jury award against Cox Communications for willful blindness to copyright infringement by its users.\textsuperscript{26} Failures to adopt or enforce repeat infringer policies have also exposed some ISPs to copyright liability.\textsuperscript{27} Several additional major copyright industry lawsuits against ISPs are pending.\textsuperscript{28} Even after successfully defending itself under a DMCA safe harbor, one video sharing site was forced into bankruptcy.\textsuperscript{29} Moreover, high costs of litigation and the potential liability for statutory damages of up to $150,000 per infringed work has had a chilling effect on the development and deployment of some online platforms.\textsuperscript{30}

To respond to major copyright industry concerns about infringing uploads by users, very large platforms such as YouTube and Facebook have developed or are licensing automated content recognition technologies that enable detection of copyrighted files at the time of user uploads. Copyright owners can choose to allow such YouTube uploads subject to revenue sharing or to disallow infringing uploads.\textsuperscript{31}

Because many sites that provide access to infringing materials are off-shore, copyright industry groups supported the Stop Online Piracy Act (SOPA) and PROTECT IP Act (PIPA) which would have enabled copyright owners to obtain injunctive relief against US-based sites that provided links to these off-shore websites or enabled payment-processing.\textsuperscript{32} Strong public opposition arose to SOPA and PIPA, both of which failed in Congress.\textsuperscript{33} Private initiatives with payment processors have alleviated some of the problem with the off-shore sites.\textsuperscript{34}

\textsuperscript{25} See, e.g., Metro-Goldwyn-Mayer Studios, Inc. v. Grokster, Ltd., 545 U.S. 913 (2005); In re Aimster Copyright Litig., 334 F.3d 643 (7th Cir. 2003); A&M Records, Inc. v. Napster, Inc., 239 F.3d 1004 (9th Cir. 2001); Columbia Pictures Indus., Inc. v. Fung, 710 F.3d 1020 (9th Cir. 2013).


\textsuperscript{27} See, e.g., BMG Rights Mgmt. v. Cox Commc’ns, 881 F.3d 293, 299, 304 (4th Cir. 2018).


\textsuperscript{29} See, e.g., Eliot van Buskirk, Veoh Files for Bankruptcy After Fending Off Infringement Charges, WIRED (Feb. 12, 2010), https://www.wired.com/2010/02/veoh-files-for-bankruptcy-after-fending-off-infringement-charges/.

From a societal standpoint, it is unfortunate that this innovative firm was not able to survive given that it had been operating lawfully.

\textsuperscript{30} See, e.g., Michael A. Carrier, Copyright and Innovation: The Untold Story, 2012 WIS. L. REV. 891.

\textsuperscript{31} See, e.g., Perel & Elkin-Koren, supra note 15, at 512.


\textsuperscript{33} Id. at 204-05.

\textsuperscript{34} 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 with these firms 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.
The failure of SOPA and PIPA notwithstanding, there is an immensely greater availability of online content today via legitimate online streaming and download services, as compared with 1998. These services have drawn large audiences of subscribers in the US and abroad, and copyright industries are generally thriving as never before. 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. Spotify, Pandora, and TIDAL are among the entities that have subsequently obtained licenses to popular recorded music. Spotify, for example, touts 271 million active monthly users, of whom 124 million pay for the service. Amazon and SiriusXM 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 through these licensed services.

As Professor Rebecca Tushnet pointed out in her written testimony for this Subcommittee’s first hearing on the DMCA:

Looking at almost any area of the entertainment industry, new content is growing at a tremendous rate. The number of books published is increasing; book revenues are increasing; the number of Americans working as writers is increasing; and print sales are increasing, largely as the result of online sales. Full-time authors saw their median income increase 13% since 2013. There were 1700 films produced worldwide in 1995; now it’s 7000, with an increase from 466 in 2009 to 821 in 2017 coming from the US. Revenues from video content, including box office returns, keep increasing, as do the number of scripted shows produced for television, along with new sources of revenue for video such as YouTube and Twitch streaming. Music industry revenues have also been increasing since 2014, spurred by streaming music. The amount and variety of music available to consumers keeps growing. The number of Americans who report that their primary occupation is “musician” has grown to 60,000, with 45% more independent musicians in 2014 than there were in 2005. The video game industry is booming.

---

35 See, e.g., JOEL WALDFOGEL, DIGITAL RENAISSANCE (2019).
39 See, e.g., IFPI GLOBAL MUSIC REPORT 2019, https://www.ifpi.org/news/IFPI-GLOBAL-MUSIC-REPORT-2019 (global recorded music revenues up 9.7% over the previous year, streaming revenues up 34%, and paid subscription revenues up almost 33%).
40 See, e.g., IFPI GLOBAL MUSIC REPORT 2019, https://www.ifpi.org/news/IFPI-GLOBAL-MUSIC-REPORT-2019 (global recorded music revenues up 9.7% over the previous year, streaming revenues up 34%, and paid subscription revenues up almost 33%).
This good news for major copyright industries has happened during the period of years since the DMCA safe harbor regime was enacted.

II. Article 17 of the EU’s DSM Directive Deviates from the Notice-and-Takedown International Norm and Offers a Deeply Flawed Model for This Deviation

Despite the good news about copyright industry rising revenues, online infringement remains a thorn in the side of major copyright firms. An opportunity to press for stronger legislative regulation of ISPs arose when the European Union undertook a proposed Directive on Copyright and Related Rights in the Digital Single Market (DSM). The proposed Directive was hugely controversial in the EU, largely because of the Article 13 (now 17) strict liability rule for online content sharing services.

More than 145 civil society organizations expressed opposition to adoption of the precursor to Article 17, and more than 5 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 of the financial and operational burdens necessary to implement filtering systems, inaccuracies of current technologies, and the lack of protection for small and medium-sized enterprises. These criticisms sufficiently resonated with EU policymakers to induce them to amend the Directive to add numerous limitations on what

---

44 For a range of critical perspectives on the new strict liability rule, see Article 13 Research: Studies, Opinions and Sources of Data, CREATE (UK Copyright and Creative Economy Centre: Univ. of Glasgow), https://www.create.ac.uk/policy-responses/eu-copyright-reform/article-13-research/.

After setting forth the main liability rules established by Article 17, I will discuss eight limitations on its scope that were adopted to respond to these criticisms, as well as explaining the contradictory mandates it embodies and the most troublesome ambiguities in that Article. Based on my analysis of Article 17, I have concluded that the US Congress should not consider adopting an Article 17-like amendment to US copyright law because of these contradictions and ambiguities of that Article and the profoundly negative impacts such rules would have on small and medium-sized platforms as well as on freedom of expression interests of millions of US Internet users.

Article 17 directs member states of the EU to pass legislation to make for-profit online content sharing services directly liable for communicating to the public any infringing copies of content uploaded by users unless the services have obtained, or made best efforts to obtain, licenses from rights holders as well as to ensure the unavailability of specific works for which rights holders have provided relevant information.\footnote{DSM Directive, Art. 17(1), (4).} Online content sharing services must also act expeditiously to disable access or remove infringing works after receiving notice from rights holders and use best efforts to prevent future uploads.\footnote{\textit{Id.}, Art. 17(4).}

\textbf{A. Internal Limits to Article 17 to Allay Various Criticisms}

The following new limits on Article 17’s scope were necessary to garner enough political support for the adoption of this controversial part of the DSM Directive. Some of these limits are more significant than others. The narrowing of the categories of online services to which this Article would apply is among the most significant, as are the limits seemingly aimed at guaranteeing that Article 17 will not interfere with fundamental freedoms of expression and information or freedom to conduct business.

\footnote{\textit{Id.}, Art. 17(4).}
The first noteworthy limitation on the scope of Article 17 is its implicit retention of the E-Commerce Directive’s safe harbors for ISPs that do not constitute online content sharing services within the DSM Directive definition. For example, ISPs that do not host “large” amounts of user-uploaded content or that 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 17.54

Second, nonprofit online encyclopedias, educational and scientific repositories, and open source software developing and sharing sites are explicitly excluded from Article 17’s reach, as 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.55 These exclusions recognize that the notice-and-takedown regime is working well enough to preserve it for most ISPs, and that Article 17 has the potential to harm entities that do not pose the risks of infringement that Article 17 was intended to address. As initially proposed, the DSM Directive had no such limitation. It would have applied to all ISPs that enable members of the public to have access to “large amounts” of contents uploaded by users.56

Third, startup online content sites have a lower set of responsibilities towards rights holders than other such sites. This limitation applies to companies less than three years old if they have an annual turnover below 10 million euros. Startup service providers must, however, still make “best efforts” to obtain licenses and to disable access or remove infringing content expeditiously after receiving notice.57 If the average number of its unique monthly visitors exceeds 5 million, startups will bear an extra burden of “best efforts” to prevent further uploads of infringing materials.58 This is a such a narrow safe harbor that very few, if any, ISPs will be able to benefit from it.

Fourth and most important, the Directive states that it “shall in no way affect legitimate uses [of copyrighted works], such as uses under exceptions and limitations” under EU law.59 Article 17 further 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.”60 Indeed, the Directive explicitly requires member states to ensure that users can rely on exceptions that enable quotation, criticism, and review as well as caricature, parody, or pastiche.61

55 Id., Art. 2(6).
57 DSM Directive, Art. 17(6).
58 Id.
59 Id., Art. 17(9).
60 Id., Art. 17 (7).
61 Id. But see infra note 102 and accompanying text (French and Dutch proposed implementing legislations omit user rights provisions).
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.\textsuperscript{62} There was no
counterpart to this provision in the initially proposed DSM Directive. The Commission
previously opined that the new strict liability rule would have only a “limited impact” on
freedom of expression and information.\textsuperscript{63} The revisions to Article 17 reflects the Commission’s
recognition that these new rules pose a greater risk to fundamental rights than it previously
acknowledged.

Fifth, Article 17 requires that member states must ensure that online content sites have 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{64} This is a further acknowledgement of the
risks that Article 17 poses for the ability of users to exercise their freedom of expression rights
under these exceptions and limitations. When users contest takedowns, rights holders must
justify their assertions that the exceptions or limitations do not apply, and human review of the
disputed contents is required.\textsuperscript{65} Users are entitled to seek judicial review of their claims.\textsuperscript{66} The
initial version of the DSM Directive made a general statement about service providers putting in
place complaint and redress mechanisms,\textsuperscript{67} but Article 17 is much more detailed about what is
expected.

Sixth, the DSM Directive asserts that Article 17 does not create a general monitoring obligation
on online content sharing sites.\textsuperscript{68} This provision is in stark contrast to the initially proposed DSM
Directive that explicitly called for the use of automated content recognition technologies to
prevent copyright infringements on ISP sites, which requires monitoring every upload to an
ISP’s site. As finalized, Article 17 has, at least on its face, acknowledged that general monitoring
of user uploads should not be required.

Seventh, online sharing sites are obliged to prevent infringing uploads and reuploads of
infringing contents 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{69} No
similar limitation was contained in the earlier version of this Article.

\textsuperscript{62} 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., \textit{Safeguarding User
2019/5042. In keeping with the CJEU’s Deckmyn decision, these exceptions are likely to have autonomous (that is, uniform) meanings in all EU member states. See Deckmyn v. Vandersteen, C-201/13 [2014].
\textsuperscript{63} Proposed DSM Directive § 3.
\textsuperscript{64} DSM Directive, Art. 17(9).
\textsuperscript{65} Id.
\textsuperscript{66} Id.
\textsuperscript{67} Proposed DSM Directive, Art. 13(2).
\textsuperscript{68} DSM Directive, Art. 17(8).
\textsuperscript{69} Id., Art. 17(4).
Eighth, there is a proportionality limit on the scope of Article 17. In determining whether an online content service has complied with Article 17, 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, the Recitals of the Directive do not provide guidance about how the proportionality principle should be interpreted in relation to service providers. As originally proposed, the DSM Directive vaguely mentioned proportionality, although it provided even less guidance about the substance of this principle than Article 17 now does. How would the proportionality rules apply, for instance, to Ravelry, a website on which users can share knitting patterns?

In accordance with Article 17, the European Commission has hosted six stakeholder dialogues in recent months with the goal of discussing best practices for fostering cooperation between online content sharing sites 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 has emerged from the stakeholder meetings about key issues such as how to ensure users should be able to exercise exceptions. The Commission intends to publish guidelines about Article 17 implementations in coming months, after which there may be more stakeholder dialogue meetings. But given how deeply divided the stakeholders are about Article 17, it is unclear that the Commission will be able to issue satisfactory guidelines, especially given four internal contradictions that Article 17 embodies.

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 these limitations, in keeping with the legislative compromises necessary to get sufficient support for the DSM Directive, as well as to resolve the inherent contradictions embodied in Article 17, to which I now turn.

B. Inherent Contradictions in Article 17

Article 17 is inherently contradictory in four respects: about user freedoms, general monitoring, licensing obligations, and personal data protection. It is difficult to imagine how these contradictions could possibly be resolved through EU member state legislation.

70 Id., Art. 17(5).
1. Automated Recognition Technologies Are Unable to Assess Context Which Is Essential for Protecting Lawful Uses of Copyrighted Works

A first serious contradiction in Article 17 is its implicit requirement that online content sites must adopt automated content recognition technologies to prevent infringing uploads and re-uploads 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. Automated content recognition technologies are much better and more sophisticated today than they were in 1998 or 2000, when the US and EU adopted their notice-and-takedown regimes. But what these technologies do well is pattern-matching. They cannot take context into account. It is, however, necessary to understand the context of a use to determine if it is lawful under copyright exceptions. EU policymakers and legislators have not acknowledged this significant limitation on automated content recognition technologies.

The inability of these technologies to understand context was made clear during two of the stakeholder dialogue meetings that featured presentations and discussions about filtering technologies, including by representatives of YouTube and Facebook, among others. 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.” Other speakers at these dialogue sessions also attested that their technologies did not consider context. Yet “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.” 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. The statement offers suggestions for how to limit the use of preventive measures such as filtering technologies so that these measures will not interfere with user rights. It also recommends that only exact or equivalent copies of the whole or substantial parts should be subject to preventive measures, and human review should be

---

75 DSM Directive, Art. 17(4), (7).
78 Id.
required to determine if user-generated content such as remixes and mashups are covered by quotation or parody exceptions.  

2. Automated Content Recognition Technologies Will Defeat the No-General-Monitoring Mandate

A second contradiction built into Article 17 lies in subsection 8’s no-general-monitoring obligation, which is at odds with subsection 4’s 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.”  

High industry standards of professional diligence to achieve such a result would seem to require intensive use of automated content recognition technology, and this kind of review would be general. Thus, although the online content service regulation no longer expressly requires use of “effective content recognition technologies,” as in earlier drafts, it is unclear how such services could satisfy this “best efforts” requirement except through the use of such technologies. One European commentator has characterized Article 17(8) as a “political statement.” But the fact remains that Article 17 is internally inconsistent in this respect.

The CJEU has recognized the incompatibility of general filtering technology mandates 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 network, for copyright infringement because some of its tens of millions of daily users had exchanged recorded music in which SABAM’s members held copyrights. As a remedy, SABAM asked for an injunction to require Netlog to install a filtering technology to detect copyright infringements. The CJEU declared that such an obligation was inconsistent with the E-Commerce Directive’s no-general-monitoring rule. While the CJEU has recently moved slightly away from this standard in the defamation context in Glawischnig-Piesczek v. Facebook Ireland, the standard established in that case would limit monitoring to specific legal violations identified by a court.

It is, moreover, notable that Article 17 of the DSM Directive states its intent to override the limit on ISP liability set forth in Article 14 of the E-Commerce Directive as applied to online sharing

80 See Quintais et al., supra note 62, at 3-5. Communia has created a flowchart depicting how the user rights safeguards could work. 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/.  
81 DSM Directive, Art. 17(8), (4).  
84 C-360/10 [2012].  
85 Id., ¶¶ 33, 52.  
86 C-18/18 [2019].
sites, but it says nothing whatsoever 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, Article 17 conflicts with Article 15 of the E-Commerce Directive.

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 contents through licensing. 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 service providers 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? Would a website such as Ravelry have to obtain a license from major copyright owners of recorded music or audiovisual contents if the only music and videos on its site were created by the users that uploaded them? How could small to medium-sized American platforms know from whom and how to obtain licenses? The Commission failed to recognize the impossibility of obtaining licenses from all creators or to give guidance about which types of licenses a site would have to try to secure.

4. Automated Content Recognition Technologies Require Processing of Personal Data, Notwithstanding Article 17’s Denial of This Kind of Impact on Users

A fourth contradiction implicitly 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 generally monitor user contents on ISP hosting sites, which “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 about why Article 17 is compatible with the General Data Protection Regulation.

C. Ambiguities in Article 17

Article 17 also contains serious and consequential ambiguities, beginning with the DSM Directive’s definition of the online sharing services that will be subject to Article 17’s requirements. 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.”

However, Directive Recitals do not have the force of law and the Directive’s actual definition is much fuzzier: “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 uploaded by its users, which it organises and promotes for profit-making purposes.” The DSM Directive contemplates that decisions about whether an ISP falls within the online content sharing service definition are to be made on a case-by-case basis. This puts ISPs that enable some content-sharing at risk if they cannot reasonably predict if they will be subject to Article 17’s burdens. It is also unclear what “large” means in this context.

As applied to US companies, it is hard to know whether the Article 17 mandates would apply to 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.com, or personal profile and influencer blog sites such as Tumblr.

Also unclear is what actions online sharing sites must do to satisfy the “best efforts” to get licenses from rights holders. How can license terms successfully be negotiated with the billions of creators whose content is on the open Internet? Collecting societies in the EU, as well as large EU-based rights holders, may be eager to grant licenses to ISPs. Article 17 certainly provides them with leverage to make sure that licenses are granted only on their preferred terms. However, the stakeholder dialogue meetings have made clear that not all rights holders want to grant licenses. Moreover, it will be exceedingly expensive for ISPs to negotiate licenses with all prospective licensees 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 societies (except in certain Nordic countries) represents only those rights holders who are members, not those creators who have chosen not to join.

Google and Facebook may be able to enter into licensing arrangements with all of these societies and with major content industry firms who are not represented by collecting societies. However, small and medium-sized enterprises are unlikely to be able to negotiate licenses with all of these rights holders. Civil society groups have suggested the use of compulsory or statutory licenses to

91 DSM Directive, Recital 62.
92 Id., Art. 2(6) (emphasis added).
93 Id., Recital 63.
ease the burden on online sharing sites and benefit users, but major content industry groups have rejected these suggestions.96

The proportionality standard of Article 17(5) is similarly vague about how this principle will apply depending on the size of the service, the type of content it serves, and its audience. 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 will be held to a higher standard, but it has already deployed Content ID. Neither the text of Article 17 nor the DSM Recitals provides meaningful guidance about how this standard would be assessed.

The so-called startup exception is, moreover, pathetically narrow. If in the second year of its operation, some user uploads go viral, causing monthly visitors to exceed 5 million, the result would be that this limitation on ISP liability would no longer apply,97 even if the viral content was perfectly legal. An ISP would also 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 expenses of filtering and licensing will automatically kick in before the startup has a chance to prove its worth in the marketplace.

D. Article 17 Harms Small and Medium-Sized Enterprises

Two hundred forty EU-based online companies 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 related expenses.98 These technologies are expensive to develop and operate, as new reference files about digital content must be constantly added and system upgrades will be necessary. ISPs may end up locked-in to a particular technology provider, even if the technology turns out to be flawed. The 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 problems that Article 17 poses for these firms.

Google has reportedly spent about $100 million to develop Content ID,99 but it does not license that technology to other ISPs. Some firms such as Audible Magic do license their automated content recognition technologies,100 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.

96 See, e.g., Paul Keller, Article 17 Stakeholder Dialogue (Day 1), COMMUNIA (Oct. 23, 2019).
97 DSM Directive, Art. 17(6).
98 See Poortvliet, supra note 48.
99 See Bridy, supra note 49, at 128.
100 See id.
Article 17 may have created incentives for creation of new automated content recognition technologies, but it remains to be seen whether any of the existing technologies will satisfy the vague “best efforts” requirement or whether the emergence of competitive filtering systems will be impeded by patents or difficulties in acquiring the necessary reference files of digital contents on which its automated content recognition engine needs to do pattern-matching.  

While Content ID and Audible Magic have large databases of reference files, these files overwhelmingly identify sound recordings and audiovisual works. Article 17 does not restrict its indirect filtering mandate to only these types of copyrighted content. Many ISPs 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. The State of Play on Article 17 Is Up in the Air

No member state of the EU has yet transposed Article 17 in its national copyright law. Only France and the Netherlands have floated proposals for implementing this complex regulation. Each takes a different approach. Neither proposal has meaningfully addressed the preservation of user rights, the no-general-monitoring rule, or personal data rights issues raised above.

Because there have been no implementations, it is premature to assess whether Article 17 will achieve the objectives of getting substantial revenues to EU rights holders or lessening the amount of online infringement on content sharing sites, let alone whether it would be a useful model for reconsideration of the DMCA safe harbor provisions.

The government of Poland, moreover, has filed a complaint with the CJEU that contends that Article 17—as “preventive censorship”—is incompatible with the EU Charter of Fundamental Rights. This is far from a frivolous complaint, in view of the CJEU’s Netlog decision, among others. As noted earlier, SABAM asked the Belgian court to issue an injunction

101 Id.
103 Id.
105 SABAM v. Netlog NV, C-360/10 [2012].  
106 See, e.g., Scarlet Extended SA v. SABAM, C-70/10 (2011) (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).
requiring Netlog to install filters to prevent the availability of infringing music on its network. That court referred the case to the CJEU.107

The CJEU held that the requested injunction would impose a general monitoring obligation on Netlog, which would violate not only Article 15 of the E-Commerce Directive, but also fundamental freedoms under the European Charter of Fundamental Rights.108 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.”109 Moreover, the CJEU noted that filtering technologies cannot distinguish between lawful and unlawful uses of contents and so could block lawful communications under copyright exceptions.110 Leading scholars in the EU have criticized the DSM’s upload filter requirement for ISPs on similar fundamental freedom grounds.111

Under Article 17, online content services may be able to avoid having to adopt automated content recognition technologies insofar as they are able to obtain licenses to cover user uploads of copyrighted content. This may be at least partially feasible in the EU because of the many collecting societies which have the capacity to grant licenses to a wide variety of works on behalf of large numbers of specific categories of creators.112 The US, by contrast, has almost no well-established and well-functioning collecting societies akin to those that are prevalent in the EU to enable broad licensing copyrighted works (except as to music).113 Because of this, licensing would not be available as an alternative way for content sharing platforms to avoid having to adopt automated content recognition technologies if the US adopted 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 also has a very different and much more paternalistic and regulatory legal culture than the US. With the adoption of Article 17, the EU has adopted a complex regulation that will make it very difficult, and perhaps impossible, for most user-generated content (UGC) platforms to continue to operate and offer culturally diverse contents to EU residents. There is a reason why US-based Internet platforms are so much more successful than EU-based firms: The US legal culture is less paternalistic and more hospitable to entrepreneurship and innovation.

107 Netlog, C-360/10, ¶¶ 15-25.
108 Id., ¶¶ 34, 46-50.
109 Id., ¶ 48.
110 Id., ¶ 50.
111 See, e.g., Angelopoulos, supra note 47, at 35-40.
112 See, e.g., COLLECTIVE MANAGEMENT OF COPYRIGHT AND RELATED RIGHTS ch. 4-8 (Daniel Gervais ed., 3d ed. 2015).
113 Id.
III. Congress Should Take a Balanced Approach in Regulating ISPs That Host User-Uploaded Content

Having made in Part II a strong case that this Subcommittee should not look to Article 17 as a model for any new regulations of online hosting services, let me say that I am agnostic about whether Congress should consider some changes to the DMCA safe harbors. I will wait to see what changes are proposed before offering my thoughts about them.

However, I do strongly urge this Subcommittee to strive for a balanced approach in whatever alternative rules it might decide to consider. As important as are the interests of the individual creators and copyright industry groups who support stronger copyright regulations to protect their legitimate interests, there are other important industry, individual creator, and public interests at stake in the regulations that affect online content hosting services. As some relatively small US-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.”

Internet-based companies, including online platforms, constitute one of the most vibrant and successful sectors of the US economy. A study conducted for the Internet Association reported that this sector contributed more than $2 trillion to the US gross domestic product (GDP) in 2018, said to represent about 10% of GDP. The study also reported that this sector directly created 6 million jobs and supported an additional 13 million indirect jobs in the US. The Bureau of Economic Analysis study of the US digital economy for the US Department of Commerce estimated that this sector contributed $1.35 trillion to the economy in 2017, or 6.9% of GDP. In the Forbes 2019 ranking of the world’s top 100 digital companies, US-based firms dominated the top 10 and comprised nearly half of the top 25. ISPs, including platforms that enable users to upload contents, 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 US-based firms.

---

114 Letter from Online Creator Platforms on Article 13, ENGINE (Sept. 10, 2018), [https://www.engine.is/news/category/creatorplatformsarticle13](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).


According to a recent report, almost 312 million US residents are Internet users.\textsuperscript{119} Almost 70% of these people use social networks of various kinds.\textsuperscript{120} UGC on these networks and other platforms in the US is a hallmark of the digital age.\textsuperscript{121} To illustrate this, it is common to cite to the staggering number of videos uploaded to YouTube each hour or the 95 million photographs uploaded to Instagram daily. However, I agree with Professor Tushnet that many less well-known UGC sites contain large quantities of contents, the overwhelming majority of which are non-infringing. Her testimony offered some useful statistics about 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.\textsuperscript{122} Automattic offered these data when submitting its comments to the Copyright Office for its § 512 study: In one month in 2016, Wordpress.com users created more than one million new websites, made 17 million blog posts, and uploaded more than 34 million individual media files.\textsuperscript{123} The creators of these UGC works are authors within the meaning of US copyright law, and a great many of them have decided to share their works with others under Creative Commons or similar licenses.\textsuperscript{124} Indeed, Creative Commons, in its \textit{State of the Commons 2017} report, claimed 1.4 billion works of authorship were covered by CC licenses.\textsuperscript{125}

As members of Congress consider the possibility of revisiting the DMCA safe harbors for online hosting ISPs, I urge them to give due consideration to the interests of these creators, the audiences these UGC creators are reaching, and US 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.

In its Comment to the Copyright Office in connection with its Section 512 study by one US-based online hosting platform, Automattic observed:

\footnotesize

\begin{itemize}
  \item \textsuperscript{121} See, e.g., DEPT. OF COMMERCE, INTERNET POLICY TASK FORCE, WHITE PAPER ON REMIXES, FIRST SALE, AND STATUTORY DAMAGES 6 (2016), \url{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.
  \item \textsuperscript{122} Tushnet Testimony, supra note 41, at 1.
  \item \textsuperscript{123} U.S. Copyright Office Section 512 Study: Comments of Automattic Inc. at 2 (Apr. 7, 2016), \url{http://copyright.gov/policy/section512/} [hereinafter Automattic Comments]. In that period, Wordpress.com received 541 notices of claimed infringement, to which it strived to respond within 48 hours. Id.
  \item \textsuperscript{124} See, e.g., LAWRENCE LESSIG, REMIX: MAKING ART AND COMMERCE THRIVE IN THE HYBRID ECONOMY 277 (2009).
  \item \textsuperscript{125} Ryan Merkley, \textit{A Transformative Year: State of the Commons 2017}, CREATIVE COMMONS (May 8, 2018), \url{https://creativecommons.org/2018/05/08/state-of-the-commons-2017/}.
\end{itemize}
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:

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.126

Mega-platforms such as YouTube and Facebook will almost certainly be able to adapt with whatever content hosting rules are adopted. In fact, their dominance would be further entrenched if new regulations put small and medium-sized platforms at a disadvantage or cause them to fold.127

YouTube and Facebook greatly benefited in their early years from the existence of the DMCA and the EU’s E-Commerce safe harbors to become dominant platforms. Now that they are dominant players, they could benefit further from Congress changing the rules in a way that would pull the ladder up behind them. Imposing Article 17-like obligations on US-based ISPs would create the very kinds of entry barriers that Congress sought to avoid in 1998.

EU policymakers are either unworried about erecting these kinds of entry barriers or oblivious to the impacts that Article 17 and similar rules will have on competition and innovation in online content hosting markets. The goal of Article 17 seems to be for EU rights holders to extract rents from existing US-based mega-platforms, not to provide incentives for new EU-based platforms to compete with the mega-platforms or innovate around them. US Internet policy is and should be more pro-competitive and pro-innovation. The US should also retain its leadership in the global arena in the development of sound copyright law and policy, not cede it to EU policymakers who have formulated such a flawed regime as Article 17.

The importance of the DMCA safe harbors for small and medium-sized US-based ISPs was documented in the seminal empirical study entitled *Notice and Takedown in Everyday Practice*.128 This study distinguished three common patterns of responses to claims of

---

126 *Automattic Comments, supra* note 123, at 1.
128 *JENNIFER URBAN ET AL., NOTICE AND TAKEDOWN IN EVERYDAY PRACTICE* (2016). The report’s findings were also published in digested, updated versions. *See Jennifer M. Urban et al., Notice and Takedown: Online Service*
infringement by ISPs that host user contents. The majority fit what the study’s authors characterize as “DMCA Classic” platforms. These ISPs follow the protocol that § 512(c) anticipates: after receiving notices from copyright owners about specific claimed infringements on the ISP’s site, the ISPs then investigate and take down or disable access to infringing materials on their sites.\textsuperscript{129} For small and medium-sized companies, this notice-and-takedown process is a burden, but humans working for these firms dutifully review the notices individually and comply with takedowns, as the law requires.\textsuperscript{130} That study characterized a second smaller type of DMCA-compliant ISP as “DMCA Auto,” under which ISPs have automated handling of thousands or even millions of notices sent to the platforms by bots and takedowns for unlawful uploads.\textsuperscript{131} A third even smaller category of ISP, overlapping somewhat with “DMCA Auto,” are the “DMCA Plus” providers such as YouTube. These firms go beyond what the DMCA requires by developing “filtering systems, direct takedown procedures for trusted rightsholders, hash-matching based “stay down” systems”, as well as agreeing to contractual terms that place additional obligations on these ISPs.\textsuperscript{132}

DMCA Classic ISPs depend heavily on the § 512(c) safe harbor for their very existence; they are not the sources of massive infringement, and they take very seriously their responsibilities to process takedown notices in the manner that Congress expected with adopting the DMCA.\textsuperscript{133} Congress should be wary of any changes to this safe harbor rule that would have substantial negative impacts on these providers, as well as the millions of US-based Internet creators of online contents that are widely enjoyed by the hundreds of millions of Internet users who are constituents of every member of Congress.

\textsuperscript{129} Urban et al., Notice and Takedown, supra note 128, at 381. These ISPs report that many of the takedown notices they get are unsound. \textit{Id.} at 381, 385-88.

\textsuperscript{130} \textit{Id.} at 398.

\textsuperscript{131} \textit{Id.} at 382.

\textsuperscript{132} \textit{Id.} at 382-83.

\textsuperscript{133} \textit{Id.} at 402-03. \textit{See also} Hinze, supra note 17, ch. 8.