RESPONSES OF THE ORGANIZATION FOR TRANSFORMATIVE WORKS
TO COPYRIGHT OFFICE NOTIFICATION OF INQUIRY, Docket No. 2022-2

The Organization for Transformative Works (“OTW”) is a nonprofit organization established in 2007 to protect and defend fans and fanworks from commercial exploitation and legal challenge. We represent both Internet users and the category of small, nonprofit platforms. Our members make and share works commenting on and transforming existing works, adding new meaning and insights—from reworking a film from the perspective of the “villain,” to using storytelling to explore racial dynamics in media, to retelling the story as if a woman, instead of a man, were the hero. The OTW’s nonprofit, volunteer-operated website hosting transformative noncommercial works, the Archive of Our Own, has over 4.2 million registered users, hosts over 8.5 million unique works, and receives approximately 440 million page views per week.

OTW submits the following answers to the Copyright Office’s Notification of Inquiry, Docket No. 2022-2.

1. Are there existing technologies that meet the current statutory definition of STMs in section 512(i)? If yes, please identify. If no, what aspects of the statutory definition do existing technologies fail to meet?

In the fields that OTW is concerned with, primarily text and video (and to our knowledge, also in all other fields), no such technologies exist. We note here that the definition of STMs in section 512(i) is specific, and explicitly demands a multi-stakeholder development process and availability conditions. There are no technologies that meet any of those requirements, much less all of them.

Crucially, this is distinct from technical protection measures and copyright management information as discussed in sections 1201 and 1202 of the DMCA, which do exist and which service providers are required by law not to interfere with. In other words, the fact that STMs have not developed does not mean that there is a lack of technological protection for copyrighted material online. Only that such technical protection is provided by other technologies and legal standards rather than by 512(i).

2. What has hindered the adoption of existing technologies as STMs? Are there solutions that could address those hindrances?

The term “hindered” is misleading in this situation, because it implies that particular forces or conditions have stood in the way of the development of technologies that would otherwise exist or develop. There are many reasons why STMs may not exist, and those reasons vary among types of works (e.g., textual, visual, audiovisual, choreographic, musical, auditory, interactive, etc.), and types of uses (adaptation, parody, commentary, criticism). It is crucial that discussions of STMs do not presume that the feasibility or existence of one kind of technical measure (say, YouTube’s ability to compare certain kinds of audiovisual files to a database) means that other kinds of technical measures are feasible or practical. The vast majority of work types and uses simply are not susceptible
to mechanical copyright infringement assessment, and we cannot presume that they will become so anytime soon.

For example, practically speaking, the current state of technology cannot create technical measures adequate to distinguish infringing materials from non-infringing materials on the Archive of Our Own and similar websites. For example, the name of a copyrighted work or an author is simply not enough to identify a work or determine whether a posted work infringes. This is particularly true for fair-use works like those hosted by the Archive of Our Own. When it comes to existing technologies for matching texts, Scribd’s website clearly explains some of the persisting problems.¹

BookID [Scribd’s solution for text-matching] relies upon computer-readable text in digital documents. Content scanned from paper sources may not contain computer-readable text data, making those sources unsuitable for use as references. Similarly, digital documents encoded with optical character recognition (OCR) technology may contain garbled or partial computer-readable text data. This may be true regardless of whether the document is readable to humans. These conditions make it very difficult, if not impossible, to detect matches.…

False Positives

The BookID database may contain reference samples from educational textbooks and other works that contain long excerpts of classic literature, religious texts, legal documents, and government publications that are typically in the public domain. This can occasionally result in the removal of uncopyrighted, authorized, or public domain material from Scribd.

… Unfortunately, the volume of reference samples and uploads to Scribd prevent any sort of manual oversight or notification prior to effecting removals.

A computer treats a nonbreaking space differently than a regular space, even though humans see them as indistinguishable, making two identical-looking documents seem very different to technological solutions; each “fix” to sweep in less precise matches increases the resulting complexity, fragility, and expense of the technology, as well as inviting over-blocking. Moreover, although certain kinds of text, audio, and video are at least sometimes searchable, the same is not true for the remaining universe of copyrighted works. Encrypted material, some kinds of text, software, visual materials, games, physical goods, and countless other types of works are simply impossible to assess by technological means, and it is relatively easy for even sophisticated filtering technologies to be circumvented.

3. Process under the current statute:

(a) Formal Process: Does section 512(i) implicitly require a formal process for adoption of an STM? If so, what are the requirements for such a process, and what should such a process entail?

(b) Informal Process: If the statute does not require a formal process, is an informal process appropriate or necessary? What type of informal process would facilitate the identification and adoption of an STM, and what should such a process entail?

(c) Entities: What entity or entities would be best positioned to convene the process, whether formal or informal? What, if anything, is needed to authorize such an entity to convene the process? Is there any role under section 512(i) for third parties, such as regulatory agencies or private standard-setting bodies, to determine whether a particular technology qualifies as an STM? If so, what is the nature of that role? How would the third party determine that a particular technology qualifies as an STM? What would be the effect of such a determination?

(d) Courts: What role, if any, do or should courts play in determining whether a particular technology qualifies as an STM under section 512(i)? How would a court determine that a particular technology qualifies as an STM? What would be the effect of such a determination? For example, would such a determination be binding or advisory? Would it bind non-parties or apply outside of the court’s jurisdiction? What would be the effect of pending appeals or inconsistent determinations across jurisdictions?

The statute requires a process that is sufficiently formal to generate standards that meet the requirements of 512(i). One may look to the wealth of other standards-setting and standards-developing organizations and processes for guidance regarding what would be involved.

Crucially, under 512(i), the establishment of STMs requires the participation of a broad range of United States copyright owners and service providers—including not only large companies and industry participants, but also small and nonprofit service providers and Internet creators—in an open, fair, voluntary, multi-industry standards process that builds broad consensus. A court or agency could, but would not be required to, ratify the results of such a process.

4. International Organizations: Could technologies developed or used by international organizations or entities become STMs for purposes of section 512(i)? If so, through what process?

Technologies developed or used by international organizations or entities could become STMs for purposes of 512(i) as long as they otherwise met the requirements of 512(i), including that such measures were developed pursuant to the involvement of a broad range of United States copyright owners and service providers in an open, fair, voluntary, multi-industry standards process that builds broad consensus.

5. Consensus: Under section 512(i)(2)(A), a measure can qualify as an STM if it has been “developed pursuant to a broad consensus of copyright owners and service providers in an open, fair, voluntary, multi-industry standards process.”

(a) What level of agreement constitutes a “broad consensus”? 
(b) What groupings qualify as “multi-industry”?
(c) Can the phrase “multi-industry” as used in the statute mean a grouping within a subset of industries? Could such sub-industry divisions adopt separate STMs? What would be appropriate sub-industry divisions?

Crucially, under 512(i), the establishment of STMS requires the participation of a broad range of United States copyright owners and service providers—including not only large companies and industry participants, but also small and nonprofit service providers and Internet creators, who are themselves copyright owners—in an open, fair, voluntary, multi-industry standards process that builds broad consensus. Agreement among only one constituency or industry (be that copyright content industry groups, ISPs, or any other particular constituency or industry) would not constitute a consensus under 512(i). Likewise, agreement among only one size or type of participant (such as agreement between copyright content industry groups and large-scale OSPs, without the participation of small or nonprofit OSPs or Internet creators) would not constitute a consensus under 512(i).

The development of standards may vary among types of work. For example, it may one day be possible to develop standard technical measures that adequately address sound recordings (but not other kinds of copyrighted works). In such a case, “consensus” would involve consensus among a broad range of sound recording copyright holders (including not only content industry groups, but also small or nonprofit Internet creators) and OSPs that host and transmit sound recordings (including not only large scale OSPs, but also small and nonprofit OSPs).

6. Availability:
(a) Under section 512(i)(2)(B), an STM must also be “available to any person on reasonable and nondiscriminatory terms.” Is this a threshold requirement for a technology to qualify as an STM or an obligation to make a technology available on reasonable and nondiscriminatory terms once it is designated as an STM?
(b) How has concern over the potential availability and accessibility of a technology affected the adoption of STMs? What terms would be reasonable and nondiscriminatory for STMs? In what ways would it be possible to enforce these terms?

For something to qualify as a STM, it must be available to any person on reasonable and nondiscriminatory terms. Therefore, a technology that would otherwise qualify as an STM that is not available on reasonable and nondiscriminatory terms is not an STM.

OTW does not believe that the potential availability and accessibility of technology has had any impact on the development or adoption of what might be described as copyright management technologies. Such technologies have developed in accordance with market forces and technological feasibilities. To the extent that copyright management technologies have developed, they have done so in highly commercial, for-profit environments for commercial sale and/or use by particular OSPs.
7. Costs and burdens: Under section 512(i)(2)(C), an STM must not “impose substantial costs on service providers or substantial burdens on their systems or networks.” How should the substantiality of costs and burdens on internet service providers be evaluated? Should this evaluation differ based on variations in providers’ sizes and functions?

One can ascertain whether a technology would impose substantial costs on service providers or substantial burdens on their systems or networks by asking service providers. Whether a technology is burdensome is, inevitably, a different question for smaller and/or nonprofit providers than it is for providers with greater resources, and it would be inconsistent with 512(i), and with principles of fairness and progress, to hold lower-resourced providers to the same standards for affordability, person-time, or technological burden as those with greater resources.

Burden must be assessed in light of potential benefit. One should neither burn down a forest to kill a mouse, nor even poison a small patch of land to do so. As the Office is aware, most services that host user-generated content are not conducive to large-scale infringement. The burden of any technological measure requirement is substantial where there is no significant corresponding benefit. The Organization for Transformative Works, for example, relies on volunteer coders and moderators for its technical and enforcement capacities. It cannot afford or self-develop complicated technologies. Nor are such technologies needed given the scale of actual infringement on our main user-generated content hosting site, the Archive of Our Own. As we have explained, almost all of the takedown notices we receive are either invalid (claiming ownership of titles instead of works, for example) or are from people who have deleted their accounts or “orphaned” their own works and now wish to remove their own works. Although we host millions of works, we receive at most one to two valid takedown notices per year.²

We fully endorse the Wikimedia Project’s explanation of the trouble with any automation mandate:

Even if a perfect (or very good) automated process could be created for sending notices, it would still not be feasible for organizations like us—small, non-profit—to implement and comply with automated processes. We do not have the engineering resources to create or purchase an automated system for identifying problematic material (or even for evaluating and processing notices) in a manner that still protects free expression. It would be prohibitively expensive to hire professional staff to review the many more notices that we could receive in an environment that allowed for widespread, unchecked use of automated notice-sending systems. In addition, it would be unnecessary to make it easier for rightsholders to send more automated notices to sites where there is no evidence of widespread copyright infringement.…

² We treat notices from people who initially uploaded their own works, but changed their minds and need technical assistance to remove them, as valid for purposes of performing takedowns, but we do not consider these true notices of infringement because the works were uploaded with the consent of the author.
Complying with a new requirement to check every upload against every piece of material we have ever taken down would necessitate an enormous investment of resources—time and money—on our part—resources that we frankly do not have. We would need to develop new technological mechanisms and provide the staffing necessary to implement and maintain those mechanisms. Large and for-profit OSPs may be able to shoulder those additional burdens, but we would struggle under the weight. Additional burdens also serve to privilege existing and well-funded OSPs over newcomers and organizations like us with limited resources.\(^3\)

Likewise, the Takedown Project’s summary of its findings stands as a simple statement about why technological proposals aimed at conduct affecting large providers like Google are a terrible idea for the internet ecosystem as a whole:

First, the relatively high number of problematic notices we observed our studies counsels against expanding automated practices without much better controls against mistake and abuse. Second, DMCA Classic OSPs appear to make up a substantial portion of the online ecosystem, and they are very sensitive to the costs automated measures would impose on them. Further, many DMCA Classic OSPs rarely or never encounter large-scale infringement issues, weighting the cost-benefit analysis against automated measures.\(^4\)

8. Internet service provider responsibilities: Section 512(i)(1)(B) states that an internet service provider must “accommodate[ ] and [ ] not interfere” with STMs to qualify for the statutory safe harbor. What actions does this standard require service providers to take or to affirmatively avoid taking? Must all internet service providers have the same obligations for every STM? What obstacles might prevent service providers from accommodating STMs? What could ameliorate such obstacles?

Different service providers will inevitably have different obligations depending on what sorts of material they transmit and/or host, and how their users store and/or interact with that material. For example, a service provider that transmits or hosts sound recordings would be bound by a (hypothetical) STM relating to sound recordings, while a service provider that does not transmit or host sound recordings would not be.

Obstacles to accommodating STMs, as a practical matter, currently overwhelm the very concept of STMs. Expense, server burden, person-hour burdens, and technical infeasibility are just a few. Even assuming those were not prohibitive, the particular challenges of evaluating fair use make accommodating any hypothetical STM insuperable for certain kinds of OSPs. For example, OTW is focused on hosting fair-use derivative works. Even assuming that future technologies might allow detection of material that is substantially similar to copyrighted material, such technologies are unlikely to be able to distinguish between fair uses and infringements of that copyrighted

---

\(^3\) Wikimedia comments to 2016 Copyright Office Notice of Inquiry on 512, at 9-10.

\(^4\) Takedown Project comments to 2016 Copyright Office Notice of Inquiry on 512, at 8.
material. Imposing such filtering technologies on any OSPs would place an undue burden on expression. Imposing such filtering technologies on OSPs focused specifically on fair use derivative works would, effectively, eliminate entire categories of legal, non-infringing expression.

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

The definition of STMs in section 512 of Title 17 could be improved in three specific ways. First, it should, consistent with the larger context of the DMCA, include Internet users among those involved in developing a consensus concerning what qualifies as an STM. Second, it should establish that in addition to being available on reasonable and non-discriminatory terms, STMs must be available at no monetary cost. Third, it should specify explicitly that STMs will not unduly burden copyright limitations and exceptions, including fair use.

10. Obligations: Currently, section 512(i)(1) conditions the safe harbors established in section 512 on an internet service provider accommodating and not interfering with STMs.

(a) Is the loss of the section 512 safe harbors an appropriate remedy for interfering with or failing to accommodate STMs? If not, what would be an appropriate remedy?
(b) Are there other obligations concerning STMs that ought to be required of internet service providers?
(c) What obligations should rightsholders have regarding the use of STMs?

Rightsholders should not be able to override fair use through uses of STMs. In particular, they should not be able to use STMs to detect claimed infringement without considering fair use, or the balance created by the overall copyright system, as well as by §512 as a whole, would be profoundly disrupted, potentially creating First Amendment infirmities.

11. Adoption through rulemaking:

(a) What role could a rulemaking play in identifying STMs for adoption under 512(i)?
(b) What entity or entities would be best positioned to administer such a rulemaking?
(c) What factors should be considered when conducting such a rulemaking, and how should they be weighted?
(d) What should be the frequency of such a rulemaking?
(e) What would be the benefits of such a rulemaking? What would be the drawbacks of such a rulemaking?

OTW believes that rulemakings are not consistent with STMs under 512(i).

12. Alternatives: Are there alternative approaches that could better achieve Congress’s original goals in enacting section 512(i)?

OTW believes that Congress’s original goals in enacting 512(i) are satisfied by 512(i) itself, and that, until technology advances to the stage where STMs are feasible, 512(i) will continue to serve its purpose by awaiting such technological development.
Other Issues
13. Please identify and describe any pertinent issues not referenced above that the Copyright Office should consider

[no response]

Submitted May 27, 2022
Betsy Rosenblatt
Organization for Transformative Works