



## U.S. Copyright Office

[Docket Number 2022-2]

### Standard Technical Measures and Section 512

**AGENCY:** Library of Congress, U.S. Copyright Office.

**ACTION:** Notification of Inquiry.

**SUMMARY:** The U.S. Copyright Office is gathering information on the development and use of standard technical measures for the protection and identification of copyrighted works. The Office seeks public comment on this topic to enhance the public record and to advise Congress. This Notice of Inquiry on standard technical measures is separate from the Office's consultations on voluntarily deployed technical measures for identifying or protecting copyrighted works online, announced in the *Federal Register* on December 22, 2021, with the opening plenary session held on February 22, 2022.

**DATES:** Written comments must be received no later than 11:59 p.m. Eastern Time on May 27, 2022. If the Office determines that an additional round of written comments is needed, it will issue a separate notice.

**ADDRESSES:** For reasons of governmental efficiency, the Copyright Office is using the *regulations.gov* system for the submission and posting of public comments in this proceeding. All comments are therefore to be submitted electronically through *regulations.gov*. Specific instructions for submitting comments are available on the Copyright Office's website at <https://www.copyright.gov/policy/stm>. If electronic submission is not feasible due to lack of access to a computer and/or the internet, please contact the Office using the contact information below for special instructions.

**FOR FURTHER INFORMATION CONTACT:** Aurelia J. Schultz, Counsel for Policy and International Affairs, by email at [aschu@copyright.gov](mailto:aschu@copyright.gov) or Benjamin Brady, Counsel for

Policy and International Affairs, by email at [bbrady@copyright.gov](mailto:bbrady@copyright.gov). They can each be reached by telephone at 202-707-8350.

**SUPPLEMENTARY INFORMATION:** In 2015, the U.S. Copyright Office initiated a study on section 512 of Title 17, enacted as part of the Digital Millennium Copyright Act (DMCA).<sup>1</sup> Public input for the Study included two rounds of comments and several roundtables.<sup>2</sup> The comments and transcripts of the roundtable proceedings are available on the Copyright Office website at <http://copyright.gov/policy/section512/> under “Public Comments” and “Public Roundtables,” respectively.<sup>3</sup> The Office issued its report, *Section 512 of Title 17*, on May 21, 2020; it is available at <http://www.copyright.gov/policy/section512/section-512-full-report.pdf>.

Among other topics, the Study examined section 512’s “safe harbor” framework, which limits an internet service provider’s liability for infringement if the provider meets certain conditions. One of these conditions is that the internet service provider “accommodates and does not interfere with standard technical measures.”<sup>4</sup> Section 512(i) defines standard technical measures (STMs) as measures “used by copyright owners to identify or protect copyright[.]” that “have been developed pursuant to a broad consensus of copyright owners and service providers in an open, fair, voluntary, multi-industry standards process.”<sup>5</sup> These measures must be “available to any person on reasonable and nondiscriminatory terms” and cannot “impose substantial costs on service providers or substantial burdens on their systems or networks.”<sup>6</sup>

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<sup>1</sup> Section 512 Study: Notice and Request for Public Comment, 80 FR 81862 (Dec. 31, 2015).

<sup>2</sup> *Id.*; Section 512 Study: Request for Additional Comments, 81 FR 78636 (Nov. 8, 2016); Section 512 Study: Announcement of Public Roundtables, 81 FR 14896 (Mar. 18, 2016); Section 512 Study: Announcement of Public Roundtable, 84 FR 1233 (Feb. 1, 2019).

<sup>3</sup> References to the transcripts are indicated by “Tr.” followed by the page(s) and line(s) of the reference, the date of the roundtable, and the speaker’s name and affiliation.

<sup>4</sup> 17 U.S.C. 512(i)(1)(B).

<sup>5</sup> 17 U.S.C. 512(i)(2)(A).

<sup>6</sup> 17 U.S.C. 512(i)(2)(B), (C).

Several participants observed that, in the two decades since the passage of the DMCA, no STMs have been identified under section 512(i).<sup>7</sup> Although some participants expressed an interest in building consensus around existing technologies,<sup>8</sup> others warned that the consultative multi-industry process the statute requires might be difficult or impossible to achieve.<sup>9</sup>

In its Report, the Office concluded that a complete consensus across industries and one-size-fits-all technical solutions are unlikely to emerge. The Office suggested that Congress clarify that the “broad consensus” in section 512(i) does not require agreement by all stakeholders on a given STM.<sup>10</sup> The Office also suggested that stakeholders and Congress consider “legislative, regulatory, or practical avenues to encourage the adoption

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<sup>7</sup> See, e.g., Authors Guild, Inc., Comments Submitted in Response to U.S. Copyright Office’s Dec. 31, 2015, Notice of Inquiry at 27 (Apr. 1, 2016) (“As a result, there has been no impetus to conduct the sort of standards creation process to develop STMs that was contemplated by Congress . . . .”); Comput. & Commc’ns Indus. Ass’n (“CCIA”), Comments Submitted in Response to U.S. Copyright Office’s Dec. 31, 2015, Notice of Inquiry at 24 (Mar. 31, 2016) (“CCIA Initial Comments”) (“CCIA is unaware of any successful or emerging inter-industry technological effort that satisfies the requirements of Section 512(i)(2).”); Copyright All., Comments Submitted in Response to U.S. Copyright Office’s Dec. 31, 2015, Notice of Inquiry at 26 (Apr. 1, 2016) (referring to STMs as an “entirely un-utilized device”); Software & Info. Indus. Ass’n, Comments Submitted in Response to U.S. Copyright Office’s Dec. 31, 2015, Notice of Inquiry at 4 (Apr. 1, 2016) (observing that “the multi-stakeholder process that the statute envisioned never occurred, and is not likely to occur”); Tr. 19:8–11 (May 13, 2016) (Keith Kupferschmid, Copyright All.) (noting that section 512(i) “really hasn’t been used virtually at all”); Tr. 68:22–69:6 (May 3, 2016) (Lisa Willmer, Getty Images) (stating that “it’s clear that leaving it to voluntary action is not enough” and that “there’s no technology that meets that definition”).

<sup>8</sup> See Tr. at 70:14–18 (May 13, 2016) (Jeffrey Sedlik, PLUS Coal.) (“[T]he technology is there and ready to use. And there is a voluntary initiative by all the stakeholders to get together and come together and create a solution that doesn’t necessarily involve revising the statute.”). Despite the interest expressed during the 2016 roundtables, the development of any STMs still had not occurred by 2019. See Tr. at 439:21–440:2 (Apr. 8, 2019) (Nancy Wolff, Digit. Media Licensing Ass’n (“DMLA”)) (“[T]he idea that it’s a multi-industry standard process with everyone involved, I don’t think that’s the way that really has worked. I haven’t seen any of that happening.”).

<sup>9</sup> See CCIA Initial Comments at 24–25 (“In light of the fact that Section 512(i) amounts to a private sector technology mandate that would govern many thousands of diverse platforms, it should not be surprising that no one-size-fits-all system meeting the statute’s high standards has evolved.”); Google Inc., Comments Submitted in Response to U.S. Copyright Office’s Dec. 31, 2015, Notice of Inquiry at 16 (Apr. 1, 2016) (“Given the wide array of OSPs of different sizes, users, and service offered, a one-size-fits-all requirement imposed by private stakeholders would be unworkable for many OSPs, especially smaller ones . . . .”); Tr. at 438:12–17 (Apr. 8, 2019) (Nancy Wolff, DMLA) (“The way [STMs are] defined just doesn’t work because technical measures aren’t done by a broad consensus of users and technology companies. They really come out of different sectors that are familiar with their own type of content.”); Tr. at 111:8–16 (May 13, 2016) (Dean Marks, Motion Picture Ass’n of Am.) (“[I]n the kind of notice-and-takedown or anti-piracy copyright protection context online, [development of STMs] just hasn’t worked that way, I think possibly because there is such a variety of platforms and players and different types of sites and technology. You know, when the DMCA was passed, there wasn’t even peer-to-peer technology. So I think the context just changes so rapidly that it’s made it more difficult.”).

<sup>10</sup> U.S. Copyright Off., Section 512 of Title 17, at 177 (2020) (“Section 512 Report”).

and development” of STMs.<sup>11</sup> The Office encouraged “stakeholder collaboration to leverage their diverse expertise in order to find and adapt solutions as technology and piracy evolve.”<sup>12</sup>

Shortly after the Report’s release in 2020, Senators Thom Tillis and Patrick Leahy of the Senate Judiciary Committee wrote to the Copyright Office requesting additional information on potential improvements to the safe harbor framework.<sup>13</sup> The Senators specifically inquired about ways in which the Office “can help stakeholders identify and adopt standard technical measures without congressional action.”<sup>14</sup> In response, the Office held a virtual stakeholder meeting in September 2020, with three separate discussions covering the legal foundation of STMs, current technologies and their potential for adoption as STMs, and means of identifying or developing STMs going forward.<sup>15</sup> Recognizing the importance of the “collaboration and cooperation of all stakeholders involved in the online ecosystem,” the Office invited participation by representatives from a wide range of stakeholders.<sup>16</sup> Videos of these public discussions are available at <http://www.copyright.gov/512/> under “Standard Technical Measures Discussion.”<sup>17</sup> In the Office’s view, the September 2020 event highlighted a lack of consensus among stakeholders and raised more questions than answers.

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<sup>11</sup> *Id.*

<sup>12</sup> *Id.* at 179.

<sup>13</sup> Letter from Sens. Thom Tillis & Patrick Leahy to Maria Strong, Acting Reg. of Copyrights (May 29, 2020), <https://copyright.gov/laws/hearings/response-to-may-29-2020-letter.pdf>.

<sup>14</sup> *Id.* at 2.

<sup>15</sup> The panel discussions were held on September 22, 23, and 29, 2020. More information is available at <https://www.copyright.gov/events/stm-discussion>.

<sup>16</sup> Letter from Maria Strong, Acting Reg. of Copyrights, to Sens. Thom Tillis & Patrick Leahy at 11 (June 29, 2020), <https://copyright.gov/laws/hearings/response-to-may-29-2020-letter.pdf> (“Strong, June 29, 2020, Letter”).

<sup>17</sup> See U.S. Copyright Off., *Standard Technical Measures: Legal Foundation* (Sept. 22, 2020), <https://stream-media.loc.gov/copyright/STM-Legal-Foundation.mp4>; U.S. Copyright Off., *Standard Technical Measures: Current Technologies and Their STM Potential* (Sept. 23, 2020), <https://stream-media.loc.gov/copyright/STM-Current-Technologies-and-their-STM-Potential.mp4>; U.S. Copyright Off., *Standard Technical Measures: Looking Forward* (Sept. 29, 2020), <https://stream-media.loc.gov/copyright/STM-Looking-Forward.mp4>.

In June 2021, Senators Tillis and Leahy again wrote to the Copyright Office expressing concern about the lack of progress on achieving the DMCA’s goal of encouraging stakeholder collaboration in the development of STMs.<sup>18</sup> The Senators asked the Office to look into the deployment of technical measures to identify and protect copyrighted works online generally and to explore the identification and implementation of STMs under section 512(i).<sup>19</sup>

The Office’s Notice of Inquiry from December 2021 addresses the Senators’ first request concerning the voluntary development of technical measures to identify and protect copyrighted works online generally.<sup>20</sup> Today’s Notice of Inquiry addresses the second request by examining issues surrounding STMs as defined in the current statutory framework and seeking input on alternatives.

In the Section 512 Report and a subsequent letter to Congress, the Office described several hurdles to identifying and adopting STMs under section 512(i), including ambiguities in the statutory language that potentially restrict or discourage their use,<sup>21</sup> the limited application and availability of specific technologies to certain subsets of stakeholders,<sup>22</sup> and practical challenges impeding the Office from either facilitating the development of STMs or playing a direct role in their development or use.<sup>23</sup> To provide Congress with a better understanding of how these issues might be addressed, the Office requests comments on the following questions. In your response, please identify which question(s) you are answering.

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<sup>18</sup> Letter from Sens. Patrick Leahy & Thom Tillis to Shira Perlmutter, Reg. of Copyrights, at 2 (June 24, 2021).

<sup>19</sup> *Id.* at 2–3.

<sup>20</sup> Technical Measures: Public Consultations, 86 FR 72638 (Dec. 22, 2021).

<sup>21</sup> Section 512 Report at 179; *see also* Strong, June 29, 2020, Letter at 12–13.

<sup>22</sup> Section 512 Report at 67–68, 71–72.

<sup>23</sup> Strong, June 29, 2020, Letter at 12 (June 29, 2020).

### **Questions about existing technologies as STMs:**

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

### **Questions about section 512(i):**

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?

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?
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?
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?
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?

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?

**Questions about potential changes to section 512:**

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

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

**Other Issues**

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

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Shira Perlmutter,  
Register of Copyrights and  
Director of the U.S. Copyright Office

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