Before the
U.S. COPYRIGHT OFFICE, LIBRARY OF CONGRESS

Technical Measure: Public Consultations
Docket No. 2021-10

Statement of Interest -- Electronic Frontier Foundation
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Submitted by:

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The Electronic Frontier Foundation (EFF) is the leading nonprofit organization defending civil liberties in the digital world. For more than 30 years, EFF has represented the public interest in ensuring that law and technology support human rights and innovation. In the United States and abroad, we work to ensure that copyright policy, legislation, and practice appropriately balance the rights of artists, authors, and the general public. As part of that work, we have been involved in virtually every major case interpreting the DMCA. As a legal services organization, we also counsel users, including internet creators, who have had their lawful expression taken offline or kept offline due to a DMCA takedown notice or a standard technical measure such as an automated content filter.

In light of this mission and experience, we submit this initial statement responding to Questions 3 and 8, and request to participate in the consultations. EFF will be represented by Legal Director Corynne McSherry.

As explained below, current technical measures for addressing infringement, specifically filtering tools, are unable to account for the complexities of fair use, licensing arrangements, or the possibility of claims targeting material in the public domain, and no
filter has yet been shown to be completely successful at detecting and preventing infringement.¹

A. Existing Technical Measures Inevitably Inhibit Lawful Expression

While the Copyright Office may be contemplating a range of technical measures, we anticipate that many participants in the consultation will focus on content filters. We will do the same, and our conclusions are simple: Despite years of financial and technical investment, filtering technologies continue to do a poor job of sorting legal expression from infringement.

Here’s a small fraction of the many misfires EFF and others have documented:

1) Filters cannot tell when someone has a license to use a work or, even more basically, when an account is owned by the rightsholder. The very rightsholders pushing for these filters can find themselves in trouble. In 2020, for example, CBS found its own San Diego Comic Con panel on Star Trek removed from YouTube. CBS said there was “an issue with our content protection” that led to the blocking of the video.²

2) Filters cannot tell the difference between two different performances of the same public domain work. As a result, a copyright holders’ claim to a particular version of a work can block many other performances. For example, classical musicians have been struggling in this exact way on platforms with filters already in place.³

¹ See Jayasuriya, et. al., Forcing the Net Through a Sieve: Why Copyright Filtering is Not a Solution for U.S. ISPs 4 (2009), https://www.publicknowledge.org/pdf/pk-filtering-whitepaper-200907.pdf (explaining that “filters will be underinclusive because their technology is not advanced enough—and will likely never be advanced enough—to identify every instance of prohibited content on the network. Filters will also be overinclusive; as a filter will never be able to distinguish between fair, legal uses of content and illegal uses of content with 100 percent accuracy.”).


3) One creator reported uploading bits of a video to YouTube as he finished them, to see if the filter would block it. 20-minute chunks of the video passed. When he uploaded the whole work, it was blocked because of a match.4

4) In 2015, Sebastien Tomczak uploaded a ten-hour video of white noise.5 A few years later, as a result of YouTube’s Content ID system, a series of copyright claims 6 were made against Tomczak’s video. Five different claims 7 were filed on sound that Tomczak created himself. Although the claimants didn’t force Tomczak’s video to be taken down they all opted to monetize it instead. In other words, ads on the ten-hour video could generate revenue for those claiming copyright on the static.

5) A YouTube user uploaded a 12-second loop of his cat purring, which the ContentID system mistakenly matched to content owned by EMI Publishing and PRS.8

6) The Daily Conversation, a YouTube channel that seeks to present independent news, received multiple ContentID matches based on a compilation video looking at 10 years of viral video on the site.

7) English rapper and songwriter, Dan Bull received multiple Content ID matches for a video he made in 2010 criticizing the Anti-Counterfeiting Trade Agreement (ACTA), an onerous trade agreement negotiated in secret between counties that was precursor to the Trans Pacific Partnership (TPP). One of the ContentID matches was from an entity that itself sampled the background vocals and music, and does not hold rights to enforce them via ContentID.

5 https://www.youtube.com/watch?v=VeQZAzDVTIA
7 https://twitter.com/littlescale/status/949032404206870528
8) In 2012, UStream blocked a NASA video of the Curiosity landing on Mars was automatically blocked due to a mistaken copyright claim. More recently, a group of musicians reported that a song they independently produced and licensed, on nonexclusive terms, to a movie studio released a song that was licensed for use in a movie and the soundtrack to a major motion picture, was flagged and then blocked on Soundcloud (which uses Audible Magic).

9) Videos of birdsong are routinely removed from YouTube because Rumblefish, a stock audio company, has claimed its own recordings of birdsong and these generate false matches.

10) A panel of America's foremost copyright experts gathered to discuss the controversial "Blurred Lines" decision. Their discussion was removed from YouTube because it included short snippets of the relevant works. These experts - again, the country's leading copyright authorities - could NOT navigate YouTube's content "put-back" system to get their video reinstated (they ended up creating a bad publicity storm that led to reinstatement - this is not a solution available to the average person)

11) Jamie Zawinski owns the DNA Lounge, San Francisco's leading independent (non-TicketMaster/LiveNation) club. A band he booked supplied him with a promotional video for an upcoming appearance, which Instagram's (Facebook!) filter blocked. It took him 18 months to reinstate that video - 17.5 months after the band had come and gone.

The core problem is this: distinguishing lawful from unlawful uses often requires context. For example, the “amount and substantiality” factor in fair use analysis depends on the purpose of the use. So while the use may be a few seconds, as for some kind of music criticism, it can also be the whole piece, such as in a music parody. Humans can flag these differences, automated systems cannot.

In sum, our 15 years of experience with well-financed filtering systems shows that while automated measures can play a role in identifying potentially infringing content, such

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11 https://www.law.nyu.edu/centers/engelberg/news/2020-03-04-youtube-takedown

12 https://www.jwz.org/blog/2020/05/fucking-facebook-3

processes cannot substitute for human review. Moreover, there is no need to take EFF’s word for it – the Copyright Office should also heed the concerns of hundreds of internet creators who spoke out last year in response to a filtering proposal from Senator Tillis. 14

B. Mandated Technical Measures Will Inhibit Competition, Reinforcing Incumbent Power

Any requirement to implement filtering or another technical measure would distort the market for internet services by privileging those service providers with sufficient resources to develop and/or implement costly filtering systems, reduce investment in new services, and impair incentives to innovate.15 If the price of hosting or transmitting content is building and maintaining a copyright filter, investors will find better ways to spend their money, and the current tech giants will stay comfortably entrenched.

C. Consultations Must Include All Affected Sectors And Take Full Account Of The Public Interests At Stake

The internet is essential to education, family, employment, politics, civics, charity, romance, and so much more (including entertainment). Any standard technical measures will necessarily affect these activities, as the service providers that support them struggle to implement such measures and/or go out of business. For example, a technical measure that resulted in internet account termination would cause immediate and dramatic harm to anyone who depended on that account. A measure that led to the takedown of a small business website could devastate that business.

Accordingly, these consultations must include all of the different sectors that rely on the services that will be affected. They must also consider the many types of copyright owners that would be affected by any such measures, from large movie studios to vidders to YouTube creators to musicians to teachers to political organizers to ordinary people just posting the proverbial cat videos. Many of these creators may, for example, be much more concerned about protecting fair use than protecting a movie studio’s ability to monetize snippets.

We should also heed the experience of the EU. Policymakers attempting to implement new copyright laws there have found that reconciling the rights of users, independent creators

14 https://www.eff.org/document/creators-letter-03052021
15 Matthew Le Merle, et. al., The Impact of U.S. Internet Copyright Regulations on Early-Stage Investment: A Quantitative Study, Booz & Co. 6 (2011), http://www.strategyand.pwc.com/media/uploads/Strategyand-Impact-US-Internet-Copyright-Regulations-Early-Stage-Investment.pdf (finding that increasing liability for online service providers that host content, for example by requiring those intermediaries to filter content, would “have a significantly negative impact on investment.”).
and rightsholders, giant rightsholders, and the obligations of platforms has been difficult to turn into workable law.¹⁶

This is not a problem the Copyright Office can solve. In the 21st century, copyright policy affects a wide array of public interests, and those interests must be represented and considered.

**D. Evaluation Of Technical Measures Must Address Network Security**

The Copyright Office should also consult with security and privacy experts regarding the potential corollary effects of any technical measures. For example, when DNS filtering was proposed a decade ago as part of the PROTECT IP Act, security researchers raised the alarm, explaining the costs would far outweigh the benefits.¹⁷ As respected researchers Steve Crocker, David Dagon, Dan Kaminsky, Danny McPherson, and Paul Vixie concluded:

- DNS filters would be evaded easily, and would likely prove ineffective at reducing online infringement. Further, widespread circumvention would threaten the security and stability of the global DNS.

- The DNS provisions would undermine the universality of domain names, which has been one of the key enablers of the innovation, economic growth, and improvements in communications and information access unleashed by the global Internet.

- Migration away from ISP-provided DNS servers would harm efforts that rely on DNS data to detect and mitigate security threats and improve network performance.

- Dependencies within the DNS would pose significant risk of collateral damage, with filtering of one domain potentially affecting users’ ability to reach non-infringing Internet content.

While DNS filtering is only one possible technical measure, the concerns raised above may well be replicated with other measures. As 83 prominent Internet inventors and engineers explained in connection with the site-blocking and other measures proposed in SOPA and PIPA, any measures that interfere with internet infrastructure will inevitably cause network errors and security problems. This is true in China, Iran and other countries that censor the network today; it will be just


as true of American censorship. It is also true regardless of whether
censorship is implemented via the DNS, proxies, firewalls, or any other
method. Types of network errors and insecurity that we wrestle with today
will become more widespread, and will affect sites other than those
blacklisted by the American government.

The US government has regularly claimed that it supports a free and open
Internet, both domestically and abroad. We cannot have a free and open
Internet unless its naming and routing systems sit above the political
concerns and objectives of any one government or industry. To date, the
leading role the US has played in this infrastructure has been fairly
uncontroversial because America is seen as a trustworthy arbiter and a
neutral bastion of free expression. If the US begins to use its central position
in the network for censorship that advances its political and economic
agenda, the consequences will be far-reaching and destructive.

The desires of some copyright holders for more technical measures against
infringement must be balanced against the profound public interest in a robust, reliable
and open internet. To ensure that interest is fully considered, we urge the Copyright
Office to give security experts a prominent voice in any evaluation process.