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Dear Mr. Lee:

In response to the Federal Register Notice (“Notice”) referenced above, the International Intellectual Property Alliance (IIPA) appreciates the opportunity to provide the Special 301 Subcommittee with written comments on notorious markets. According to the Notice, notorious markets are “online and physical markets that reportedly engage in and facilitate substantial copyright piracy or trademark counterfeiting that infringe on U.S. intellectual property (IP).” We commend USTR for continuing the notorious markets reporting process, which identifies key online and physical marketplaces that engage in the infringement of intellectual property rights and cause commercial harm to creators.

POSITIVE DEVELOPMENTS

The Notorious Markets List continues to lead to concrete results, including effective actions taken by the identified websites themselves, and in some cases the governments or courts in the countries in which the websites are hosted, to rectify the infringing behavior. Some recent positive developments include:

1 IIPA is a private sector coalition, formed in 1984, of trade associations representing U.S. copyright-based industries working to improve copyright protection and enforcement abroad and to open foreign markets closed by piracy and other market access barriers. Members of the IIPA include Association of American Publishers (www.publishers.org), Entertainment Software Association (www.theesa.com), Independent Film & Television Alliance (www.iftaonline.org), Motion Picture Association (www.motionpictures.org), and Recording Industry Association of America (www.riaa.com). Collectively, IIPA’s five member associations represent over 3,200 U.S. companies producing and distributing copyrightable content. The materials produced and distributed by IIPA member companies include entertainment software (including interactive video games for consoles, handheld devices, personal computers and the Internet) and educational software; motion pictures, television programming, DVDs and home video and digital representations of audiovisual works; music recorded in all formats (from digital files to DCs and vinyl) for streaming and other online services, as well as broadcasting, public performance and synchronization in audiovisual materials; and fiction and non-fiction books, educational, instructional and assessment materials, and professional and scholarly journals, databases and software in all formats.
In 2022, following action by the Alliance for Creativity and Entertainment (ACE), Afdah, a Singapore-based streaming site, was successfully removed.

As a result of actions taken by ACE in 2022, illegal sites HDfilme and xCine, both operated out of Vietnam, were shutdown.

In 2022, a successful ACE action also led to the takedown of Peru-operated sites Pelispluhd.net and Serieskaol/Serieslationamerica.

A successful ACE action also resulted in the takedown of Argentina-operated site Pelispop/Pelismart in 2022.

The creative industries are encouraged by these positive developments, which indicate that this Out-of-Cycle Review can be very effective. Yet, many notorious markets remain, threatening the vitality of the U.S. copyright-based industries, and as a result, harming the U.S. economy as a whole.

The “core” copyright industries generated over $1.5 trillion dollars of economic output in 2019, accounting for 7.4% of the entire economy. These industries employed nearly 5.7 million U.S. workers in 2019, with jobs paying an average of 43% more than the rest of the U.S. workforce. The core copyright industries in the U.S. outpaced the U.S. economy, growing at 5.87% between 2016 and 2019, while the U.S. economy grew by 2.48%. As evidenced by these numbers, the copyright-based industries have been one of the fastest-growing and most dynamic sectors of the U.S. economy. Notably, the economic contributions of the “total” copyright industries, which include other industries that at least partially contribute or depend on the production or distribution of copyrighted materials (e.g., manufacturers of television sets or personal computers), are even more staggering. Yet, the sustainability of these economic contributions depends in large part upon the extent to which overseas piracy and market access barriers can be reduced.

THE ADVERSE IMPACT OF ONLINE PIRACY ON U.S. WORKERS

IIPA applauds USTR’s decision to focus on the adverse impact of online piracy on U.S. workers. Online piracy, including the sharing of digital content and the sale of pirated physical goods over e-commerce platforms, financially burdens and harms the creative industries in the United States, causing significant hardships for U.S. workers. Online piracy constrains the ability of the U.S. creative industries to export legitimate content, which negatively impact revenues returning to the United States and the growth of U.S. jobs, particularly those that are connected to exporting content to the worldwide marketplace. For this and other reasons, we commend USTR for taking a comprehensive view of the ecosystem in identifying markets that facilitate substantial online piracy.

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3 Id.

4 Id.

5 Id.
Numerous studies have demonstrated the negative effect of piracy on the market for legitimate content, including on businesses and workers. Unions representing creative professionals have quantified the direct and significant negative economic impact on workers by copyright theft. A 2016 study “estimate[d] that the commercial value of digital piracy in film in 2015 was $160 billion,” while the corresponding estimate for the music industry was $29 billion. The study also spells out methodological reasons why “it is most likely that the value of total digital piracy exceeds our estimates by a considerable amount.” This study does not include a comparable estimate for video games but discusses briefly how such an estimate might be prepared. The study also attempts to quantify the broader social and economic costs of piracy. A 2013 study noted that economic literature has generally found that piracy has a negative impact on legal media sales. The study went on to conclude that the analysis and results “strongly suggest that the shutdown of the popular Megaupload and Megavideo sites caused an increase in digital motion picture sales and rentals leading to an increase in digital revenues of 6.5-8.5%.” Another 2014 analysis of the major studies on piracy determined that “the vast majority of papers that have been published in peer-reviewed academic journals—papers spanning a variety of methods, time periods, and contexts—find that piracy causes a statistically significant decrease in sales.” For example, in inflation-adjusted dollars, the music industry’s revenues in 2021 remain 37% below its peak U.S. revenues from 1999. This period of time coincides with the rise of broadband and digital piracy generally, as well as the later rise of the sale and importation of foreign-made, counterfeit physical music products through e-commerce platforms. Additionally, in 2020, there were an estimated 137.2 billion visits to film and TV piracy sites globally, which cost the U.S. economy at least $29.2 billion in lost revenue each year.

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8 Id.


10 Id. at p. 24.


The inevitable effect of this piracy on creative workers is the reduction in employment opportunities: as piracy reduces the potential revenue of companies, it also diminishes their ability to fund new creative projects and the additional jobs created for, or sustained by, these projects. For example, piracy has been estimated to reduce employment in the motion picture and television industry between 230,000 and 560,000 jobs.\textsuperscript{15} Moreover, for the jobs that do exist, there is a negative effect on employment and retirement income and on benefits. As the MPA pointed out in its submission, in 2021 the Department for Professional Employees (DPE) of the AFL-CIO stated: “creative professionals rely on copyright protections and royalty or residual payments to make a living, provide healthcare for their families, and retire with security.”\textsuperscript{16}

Therefore, to address the devastating impact of this piracy on employment and workers, the U.S. government should engage with our trading partners that allow these notorious markets to thrive and push for laws that deter infringement. IIPA urges USTR to continue to pursue discussions with the governments of countries where the notorious markets identified here and in the respective filings of IIPA’s members are located. It is critical to recognize that online notorious markets operate within a complex ecosystem of providers and intermediaries, including domain name registrars, advertisers, ad placement networks, payment processors, reverse proxy services, and others. Such intermediaries may enable, facilitate, or profit from the infringing conduct in various ways and need to be considered in any action plan. The only way to address the negative effects of these notorious markets on the labor market is to address how these markets are entangled in an entire ecosystem that supports them.

An effective response to online piracy requires the establishment of strong legal incentives for all these different types of providers to cooperate with rights holders to battle pervasive infringement and to promote the healthy growth of a legitimate e-commerce marketplace for copyrighted materials. Governments have a critical role to play in encouraging such cooperation, ensuring that their laws are fit for the digital age and confronting the services that promote, induce, or benefit from infringers who exploit laborers and divert consumers from legitimate providers. Attention to these issues is an essential element in correcting the present dysfunction in the online ecosystem that permits websites dedicated to infringement to continue to operate and be profitable.

Whether located online or at a physical location, notorious markets for infringing activity almost always have transnational characteristics. Such characteristics require governments to collaborate and work together across national borders to make lasting progress on this issue. IIPA commends the efforts of law enforcement authorities that have engaged in such initiatives to address cross-border copyright piracy and stresses the need to continue such efforts. Effective takedown of infringing content hosted on such services requires the active cooperation of all participants in the e-commerce ecosystem, both domestically and abroad. Among many other features, reverse proxy services are a serious concern for IIPA members because they act as a firewall and protect websites by hiding the IP addresses and hosting providers of these websites.

\textsuperscript{15} Id.
While reverse proxy services serve a legitimate purpose, many of the websites on the Notorious Markets List utilize reverse proxy services to hide true hosting information and to transmit large files faster. Such uses make enforcement against these sites extremely challenging. IIPA requests that USTR include reverse proxy services in its efforts to address this widespread, systemic problem and to stop the misuse of such services. IIPA also urges USTR to work with foreign governments to encourage registry operators to take action against pirate websites with domain names that include a country code top-level domain (ccTLD).

Many copyright infringing sites also utilize content delivery networks (CDNs). CDNs may be used to efficiently deliver content to users worldwide by placing servers all around the world that store copies of that content to provide high-speed access. However, one feature of the CDN is that it masks the IP address and hosting provider of a website, which may be exploited by notorious markets to avoid detection and enforcement.

An additional and persistent challenge for IIPA members in enforcing their rights is the lack of meaningful access to accurate domain name registrant data, which occurs because of ICANN’s failure to establish and implement an effective mechanism for registrars to collect accurate data and for rights holders to access the data for the protection of intellectual property. This lack of access is in part due to: (i) ICANN’s failure to meaningfully enforce a requirement for accurate registrant data collection, (ii) ICANN’s failure to implement approved policies concerning privacy/proxy services, and (iii) ICANN’s over-interpretation of the EU’s General Data Protection Regulation (GDPR), which has almost entirely shut down access to registrant WHOIS data.

For IIPA members, some online platforms enable the distribution of pirated hard goods, circumvention devices, or piracy devices. Similarly, some third-party intermediaries fail to ensure their services are not being used to facilitate copyright infringement, significantly increasing the difficulty and cost of industry efforts to thwart piracy. These services should not be allowed to profit off the theft of American intellectual property or avoid responsibility for enabling piracy by asserting that they are mere “infrastructural” services.

NOTORIOUS MARKETS

IIPA refers the Special 301 Subcommittee to the separate filings submitted by IIPA members Association of American Publishers (AAP), Entertainment Software Association (ESA), Motion Picture Association (MPA), and Recording Industry Association of America (RIAA). These filings identify specific bad actors from both online and physical markets that refuse to comply with laws on intellectual property rights and merit further investigation. Our members’ filings identify several notable cyberlockers, BitTorrent indexing websites, linking and streaming websites, illegal IPTV services, piracy devices and apps, stream-ripping websites, direct download websites, unlicensed pay-for-download websites, websites offering or selling unauthorized digital

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17 Circumvention devices and associated software bypass the technological protection measures (TPMs) of video game consoles and authentic games, allowing for the use of unauthorized software and pirated video games. Piracy devices are preloaded with software providing access to illicitly streamed movies and television programming.
goods, and hosting providers that make infringing content accessible to users around the world. The following sites appear in more than one of our members’ filings:

**BitTorrent Sites**

- **ThePirateBay.org** remains the single most popular, and one of the largest, BitTorrent websites in the world. Available in 35 languages, the site operates under a hidden hosting location and disclaims responsibility for copyright infringement, because no torrent files are saved on its server. The site provides access to the world’s most popular and newly released films, music, books, articles, and video games, including pre-release content. The site had 26.1 million visits from 7.96 million unique visitors in August 2022 – with the U.S. having the highest combination of visitors and page viewers, followed by Canada and Australia. The site’s current SimilarWeb global rank is 1,983.18

- **Rarbg.to**, a BitTorrent website hosted in Bosnia and Herzegovina, had 44.74 million visits from 5 million unique visitors in August 2022, provides access to a wide range of content such as movies, television shows, and music, and generates revenue from advertising and pay-per-install of potential malware. The site is also the subject of blocking orders in several European and Asia-Pacific countries. The site has a SimilarWeb global ranking of 784.

- **1337x.to** and related domains constitute a popular BitTorrent website hosted in Bulgaria that had 66.9 million visits from 9.62 million unique visitors in August 2022. The site provides access to a range of content, including movies, TV series, music, and software. Variants of the site have been the subject of blocking orders in a number of European and Asian countries. The site has a SimilarWeb global rank of 518.

**Cyberlockers**

- **1fichier.com** is a direct download cyberlocker based in France with a global SimilarWeb rank of 1,772, a local rank in France of 235, and 39.26 million visits worldwide from 12.29 million unique visitors in August 2022. The site has a very low compliance rate for takedown notices, and users are rewarded when they refer others to the site. The site has a SimilarWeb global rank of 1,861.

- **Rapidgator.net** is a cyberlocker, believed to be hosted in Russia, which offers unlimited file storage and fast downloads and features a sophisticated network of offshore companies. The site had 396 million visits in the past year and is a major source of pre-release content. The service is most popular in Japan, with the highest combination of visitors and page views for the site, followed by the United States, and France. The site’s SimilarWeb global ranking is 1,670.

- **Telegram**, a social media and instant messaging platform based in Dubai. One of its growth drivers is the presence of infringing copyrighted content on the platform. Its core features support the sharing and discoverability of unauthorized files, protect anonymity of uploaders,

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18 SimilarWeb Global ranks represent the approximate number of web sites in the world whose popularity is higher than that of the given site: the more popular a site, the smaller the number. SimilarWeb also provides site traffic data that represents worldwide unique visitors on desktop and mobile for the last available month. See [http://similarweb.com](http://similarweb.com) for more information.
and make consumption easy and convenient, which supercharges the circulation of infringing content. Telegram is a leading source of pirated text-and professional books and journal articles, and other copyrighted content. The platform, attracting over 550 million users, operates by allowing infringing content to be distributed to large, encrypted private groups. While the platform has shown some improvement in removing infringing links and channels, its response to takedown notices remains inconsistent and inadequate. The platform has been the subject of enforcement actions and lawsuits in several jurisdictions.

- **VK.com or VKontakte** is the leading social networking and the most visited website in Russia. Available in 86 languages, VK.com is a hotbed of illegal distribution of thousands of movies, television, and ebooks. Although the site had taken steps in recent years to improve its responsiveness to takedown notices, its cooperation has diminished following the Russian invasion of Ukraine. The site continues to be a significant infringement hub, does not impose any consequences against repeat infringers, and hosts an increasing volume of infringing content posted by subscribers. The site is subject to criminal blocking orders in Italy. It should be noted that this site agreed to music licenses with several major record companies in 2016. The site has a SimilarWeb global ranking of 16.

**Piracy-as-a-Service (PaaS)**

- **2embed.to** is an example of a PAAS. It is a pirate content management system (CMS) library based in Vietnam used by at least 508 sites that collectively receive over 676 million visits per month, according to SimilarWeb. The site’s CMS crawls various websites and search engines to find infringing movie and TV show streaming links, which are then stored in their database and served through their API service. It offers a large library of movies via streaming, direct link, or embedding. Pirate site operators can either use 2embed’s service for free, in which case 2embed remunerates itself by inserting ads, or use its paid service that allows them to insert their own ads.

**OTHER NOTORIOUS MARKETS IDENTIFIED BY IIPA MEMBERS**

In addition to those listed above, IIPA members, in their individual filings, provided USTR a detailed review of some of the other pervasive notorious markets threatening their industries. IIPA members also explained the difficulties they face tracking and enforcing against online notorious markets because of restricted access to domain name registration data, reverse proxy services, off-shore hosting Internet service providers (ISPs), and IP address space subleasing.

In its filing, RIAA stressed the continued growth and pervasiveness of stream-ripping sites like Ytmp3, flvto.biz and 2Conv, Mp3juices.cc, Y2mate, Savefrom, and Ssyoutube which facilitate the unauthorized reproduction and distribution of copyrighted music from licensed streaming sites through the circumvention of technological protection measures by, in some cases, enabling a user

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19 Piracy-as-a-Service (PaaS) offerings, a newer threat in the piracy landscape, lower the barriers to entry into commercial piracy, because PaaS offerings make up a suite of off-the-shelf services that allow would-be pirates without much technical expertise to create, operate, and monetize a full-functioning pirate operation. See also, Submission by the Motion Picture Association (MPA) in Response to the Request for public comment on the 2022 Special 301 Out of Cycle Review of Notorious Markets Docket No. USTR-2022-0010, October 7, 2022, p. 20-21.
to simply copy and paste YouTube links and click a “convert to” button. RIAA also identified websites, including *newalbumreleases.net* and *intmusic.net*, that engage in the unlicensed streaming or downloading of millions of tracks, some not yet commercially released, at a fraction of the cost found on licensed services and without accounting to copyright owners. Moreover, RIAA raised concerns about piracy within mobile applications that allow users to create channels and upload content and about “bulletproof” ISPs that show leniency in the kinds of materials they permit to be uploaded and distributed via their networks and fail to respond to notices of infringement or letters warning that the ISP is hosting and supporting known infringing sites. Some of these ISPs include *PRQ* and *FlokiNET*.

MPA highlighted the emerging global threat of illegal internet protocol television (IPTV) services that provide stolen signals/channels to a global audience via dedicated web portals and third-party applications, such as *BIPTV.best* and *BestBuyIPTV.store*, *GenIPTV*, *IcutCord.net*, *TheKing365tv.org*, *MagisTV*, and *Spider Receiver*. Additionally, MPA flagged the persistent harms of piracy devices and applications configured to access IPTV services and to permit illegal streaming of movies and television programs on mobile, handheld, and other devices, such as *LokLok*. MPA also noted several linking and streaming websites such as *Cda.pl*, *Cuevana3.me*, *Dytt8.net* and its associated domains, *Fmovies.to*, *Gimy.app*, *KatmovieHD*, *Myflixer.to*, *NooNoo.tv*, *Soap2Day*, and the *Tamilblasters* network of sites that allow millions of users to stream unauthorized copies of popular movies and television shows. MPA also notes hosting providers such as *Amaratu/KoDDos* and *OVH* that refuse to take action upon notification that their services are being used to infringe intellectual property in blatant violation of both their own terms of service and the law.

ESA emphasized the negative impacts of unauthorized sales of in-game digital items and software products (collectively known as “unauthorized digital goods”) that enable the accelerated collection of virtual goods, such as bots, hacks, and “cheats.” *Unknowncheats.me*, *mpgh.net* and *iwantheats.net* offer hundreds of thousands of free cheats and unauthorized in-game currency, items, skins, accounts, keys, and power-leveling to millions of users. ESA also mentioned linking sites such as *oceanofgames.com* and *nsw2uin*, which provide hyperlinks to infringing copies of complete versions of copyright-protected video games stored on third-party hosting sites (cyberlockers). Finally, ESA noted torrent indexing sites *torrentfunk.com* and *torrentdownloads.pro*, which provide links to torrent files that enable users to join peer-to-peer “swarms” to share infringing content, including illegal copies of video game software files.

AAP addressed recurring notorious markets *sci-hub.io* (also known as *sci-hub.se* and *sci-hub.st*) and *libgen.is* (also known as *libgen.rs* and *libgen.me*). Sci-Hub facilitates unauthorized access to some 88.34 million journal articles and academic papers (at least 85% of all toll access journal articles published). Libgen boasts that it hosts 2.4 million non-fiction books, 80 million science magazine articles, 2.2 million fiction books, 0.4 million magazine issues, and 2 million
comic strips, all of which are being made available through multiple mirror sites.\textsuperscript{20} The \textit{Libgen} group of sites, prominent among them \textit{Z-Library}, hold a significant volume of infringing copies of trade books, journal articles and other scholarly materials. AAP also reported on the proliferation of ad-supported “read online” websites, such as \textit{full-english-books.net} and \textit{novel22.net}, both of which use a CDN to shield their identifying information, as well as \textit{graycity.net}, and \textit{anybooksfree.com}. Supported by Google Ads, Microsoft Advertising, Steepto, and MGID, these sites allow users to access infringing works on their phones without downloading them. These sites pose a significant enforcement challenge as the copyright owner is forced to send a notice for each page of a work, because each page has its own URL.

While Independent Film & Television Alliance (IFTA) did not file separately to identify notorious markets, it reports that illegal online streaming of its members’ independently produced, financed, and distributed films is deeply affecting investment in independent films and impacting their successful worldwide exportation.

Although most of the markets identified by IIPA members are online, the filings also emphasize the continued importance of addressing physical markets. RIAA listed China and Russia, and ESA listed Mexico and Brazil to call attention to the substantial harm being caused by physical piracy in these troubling markets. AAP and MPA did not identify any specific physical markets because their enforcement efforts have shifted to the online environment, but their filings recognized that physical marketplaces remain a persistent threat to many markets around the world.

Notorious markets are egregious examples of open and blatant piracy that play a disproportionate role in harming the copyright industries, and thus, have an extremely negative impact on the U.S. economy and on U.S. employment and workers. IIPA applauds USTR for shining a spotlight on these notorious markets and services that enable them, and for encouraging the governments of territories where these markets are physically or virtually located, or whose nationals operate them, to take meaningful action to address such markets and combat piracy.

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IIPA appreciates this opportunity to provide input to the Special 301 Subcommittee in this Out-of-Cycle Review regarding notorious markets for copyright piracy, and once again refers the Subcommittee to its members’ filings for consideration of the specific markets listed therein. We thank the Subcommittee and all those in the U.S. Government who work steadfastly to reduce harm to U.S. copyright interests.

\textsuperscript{20} See \url{https://www.revolutionreport.net/libgen-library-genesis/#:%7E:text=You%20can%20find%20a%20wide%20array%20of%20files,books%2C%202%20million%20comics%20and%20magazines}. 
Respectfully submitted,

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