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September 30, 2019

Jacob Ewerdt
Director for Innovation and Intellectual Property
Office of the U.S. Trade Representative
600 17th Street, NW Washington, D.C. 20508

Re: Request for public comment on
the 2019 Special 301 Out of Cycle
Review of Notorious Markets.
Docket No. USTR-2019-0013

Dear Mr. Ewerdt:

The Motion Picture Association submits the following response to the request issued August 19, 2019, by the Office of the U.S. Trade Representative, inviting submissions from the public on notorious markets outside of the United States.

The American motion picture and television industry is a major U.S. employer that supported 2.6 million jobs and \$177 billion in total wages in 2017. Nearly 340,000 jobs were in the core business of producing, marketing, and manufacturing of motion pictures and television shows.

Another nearly 587,000 jobs were engaged in the distribution of motion pictures and television shows to consumers, including people employed at movie theaters, video retail and rental operations, television broadcasters, cable companies, and online video services. The industry also supports indirect jobs in the thousands of companies that do business with the industry, such as caterers, dry cleaners, florists, hardware and lumber suppliers, and retailers.

The American motion picture and television production industry remains one of the most highly competitive in the world. In 2017, the enduring value and global appeal of U.S. entertainment earned \$17.2 billion in audiovisual exports. Today there are approximately 450 legitimate services providing audiovisual content to consumers online, accommodating all manner of consumer viewing preference. Moreover, this industry is one of the few that consistently generates a positive balance of trade. In 2017, that services trade surplus was \$10.3 billion, or four percent of the total U.S. private-sector trade surplus in services. The industry exported four times what it imported in 2016.

The industry distributes its films and TV shows to over 130 countries and with well over half of

MPA member companies' distribution revenue annually earned from overseas, MPA has a strong interest in the health and sustainability of these international markets. MPA greatly appreciates USTR's interest in identifying notorious markets that jeopardize the growth of legitimate commerce and that impair U.S. global competitiveness. The economic and cultural vitality of the creative industries is one of our nation's most valuable assets. It is critical that our trading partners protect and enforce intellectual property rights.

While in prior years MPA has included physical marketplaces in our notorious markets recommendations to USTR, this year we again focus our recommendations on online marketplaces. To be clear, physical notorious markets and in some cases content distributors with physical distribution infrastructure, remain a persistent threat in many territories around the world. Online marketplaces, however, are frequently extraterritorial in reach and have the most significant impact on the global legitimate market for U.S. movies and television programming. Moreover, they are the focus of MPA's global content protection energies.

Online Notorious Markets Overview

Online content theft continues to pose the most significant and evolving threat to our industries. Worldwide, in 2016, there were an estimated 21.4 billion total visits to streaming piracy sites worldwide across both desktops and mobile devices.¹ In 2018, there were an estimated 9.8 billion downloads of pirated wide release films and primetime TV and VOD shows using peer-to-peer protocols². Content thieves provide or administer easy-to-use online piracy websites, apps, and services to distribute infringing content usually for monetary gain. These sites and services often have the look and feel of legitimate content distributors, luring unsuspecting consumers into piracy.

Online enforcement efforts are complicated when intermediaries fail to take adequate steps to ensure their services are not being used to facilitate copyright infringement, a problem compounded by the fact that most website operators operate anonymously and outside the boundaries of the law. All stakeholders in the Internet ecosystem – including hosting providers, cloud services (including reverse-proxy and other anonymization services), advertising networks, payment processors, social networks, and search engines – should actively seek to reduce support for notoriously infringing sites such as those we have nominated in these comments, including through voluntary initiatives aimed at combating online content theft.

An emerging global threat is piracy from illegal Internet Protocol television (IPTV) services that provide stolen telecommunication signals/channels and often on-demand infringing film and episodic content to a global audience via dedicated web portals, third-party applications, and piracy devices configured to access the service. MPA has identified over one thousand of these illegal IPTV services operating around the world.

Piracy devices preloaded with software providing access to illicitly stream movies and

¹ Analysis of SimilarWeb data, based on streaming sites with at least 10,000 copyright removal requests according to the Google Transparency Report. <https://www.alliance4creativity.com/mission/the-threat-of-online-piracy/>

² Analysis of MarkMonitor data. https://www.markmonitor.com/download/ds/MarkMonitor_AntiPiracy_GDPI.pdf

television programming and a related ecosystem of infringing add-ons continue to be problematic, particularly in certain countries in which the legality of the boxes and of activities surrounding their trafficking remains in doubt. Websites enable one-click installation of modified software onto set-top boxes or other Internet-connected devices. This modified software taps into an ecosystem of infringing content add-ons and portals to illicitly stream movies and television programming live or “on demand.”

The list of online markets below is not intended to be comprehensive but, rather, reflects an attempt to identify sites and services particularly illustrative of the current nature and scope of online content theft. When possible, we have attempted to provide the specific information requested in the Federal Register Notice (FRN), including popularity rankings from Alexa³ and site traffic volume data from SimilarWeb⁴, as well as information on revenues where available, among other details. MPA has also attempted to respond to the FRN’s request for information of any known enforcement activity including by noting jurisdictions that have issued blocking orders against the named market. In all instances, blocking orders implicate the availability of the piracy service in the specific territories in which the orders are issued; they are not directed at the availability of such services extraterritorially.

In most instances, criminal enterprises and individuals work to obfuscate identifying information such as location, and can hide behind anonymizing services with ease. With this in mind, with regard to online markets, MPA has aimed to identify each site’s predominant location(s) determined by a number of factors including server location, host location, and domain registrant location, recognizing that frequently these may be different. This underscores the vital importance of cross-border law enforcement cooperation.

MPA lauds USTR’s focus on “Malware and Online Piracy.” Piracy is a serious and growing threat to consumers. Pirate sites, apps, and services increasingly use content as bait to generate revenue through identity theft and malware distribution. A March 2018 Carnegie Mellon University study found that doubling the amount of time spent on infringing sites causes a 20 percent increase in malware count.⁵ Further, when consumers use streaming piracy devices and applications, they typically place the devices on the other side of the router, past the firewall or other security measures.⁶ This helps usher hackers beyond the defenses of the network the device is connected to, which can result in access to anything else connected to that network; the siphoning of massive amounts of data; theft and sale of user names, passwords, credit cards, and

³ Alexa rank represents the approximate number of web sites in the world that have popularity higher than the given site – the more popular a site, the smaller the number. To put this in context, Wikipedia is ranked fifth in worldwide traffic and Netflix is 32. See <http://www.alexa.com/> for more information.

⁴ SimilarWeb site traffic data cited here represents worldwide unique visitors on desktop and mobile for the last month available. SimilarWeb is a market intelligence company that uses a combination of panel, public data sources, ISP and other data for its data estimations. See <http://similarweb.com> for more information.

⁶Federal Trade Commission, Blog, Free movies, costly malware (April 2017).

⁷Rahul Telang, Does Online Piracy Make Computers Insecure? Evidence from panel data (2018), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3139240

⁸ Digital Citizens Alliance, Fishing in the Piracy Stream: How the Dark Web of Entertainment is Exposing Consumers to Harm 3,8 (April 2019), https://www.digitalcitizensalliance.org/clientuploads/directory/Reports/DCA_Fishing_in_the_Piracy_Stream_v6.pdf

identities; remote, third-party control of devices and applications on the network; surreptitious use of the network by someone else; or other harms.⁷ The U.S. Federal Trade Commission (FTC) has issued two blogs warning consumers of the dangers of online piracy, which includes malware and theft of personal and financial information.⁸ The FTC advises consumers, “If you want to avoid downloading malware when you stream video, don’t watch pirated content. Period. Not online and not through a video streaming device.”⁹

Linking and Streaming Websites: Linking sites aggregate, organize, and index links to content stored on other sites, largely deriving revenue from advertising and referrals. Linking sites that offer unauthorized movies and TV shows typically organize posts by title, genre, season, and episode and often use the official, copyright-protected, cover art to advertise the content akin to legitimate services. The sites then provide one or more active links so users can access the infringing content. Depending on the website, users are commonly presented with the options of either streaming the content in a video-on-demand format or downloading a permanent copy to their computers. Many streaming link sites also frame or embed video players from third-party websites, reducing the number of clicks needed to get to content for a more seamless user experience while retaining the user to serve advertisements or malware. Some also appear to be hosting the underlying content files on servers they control to maintain continuity of infringing offerings and to avoid takedowns on third-party file-hosting sites.

Further, many of these sites utilize reverse proxy functionality to hide the real IP address of a web server. An example of a CDN frequently exploited by notorious markets to avoid detection and enforcement is CloudFlare, a reverse-proxy service that also provides a CDN functionality. Cloudflare's customers include some of the most notorious, long-standing pirate websites in the world, including The Pirate Bay, whose current domain, thepiratebay.org, has been identified as infringing rightsholders' copyrights over four million separate times.¹⁰ Nonetheless, The Pirate Bay, and other notorious pirate sites, remain Cloudflare customers despite repeated notices of infringement to Cloudflare.

An important development in this space in 2019 was the raid by Uruguayan authorities against the operators of pelispedia.tv and pelisplus.tv. (Pelispedia.tv was included in USTR’s 2018 Notorious Markets report.) These sites were extremely popular throughout much of Latin America and were monetized through advertising. The operators were arrested on May 19 and sentenced to more than three years in prison on the basis of copyright infringement and money laundering.

- **B9good.com** – Japan, Canada. B9good.com is a streaming video site focused on the Japanese market with a vast library of motion picture, television, and anime content.

⁷ *Id.* At 3-5, 8, 15-20.

⁸ FTC Blog, “[Free Movies, costly malware](#)” and “Malware from illegal video streaming apps: What to know,” (May 2019)

⁹ FTC Blog, “[Malware from illegal video streaming apps: What to know,](#)” (May 2019).

¹⁰ Google Transparency Report.

https://transparencyreport.google.com/copyright/overview?hl=en&browse_copyright=ce:domain;size:6&lu=search_copyright©right_result_owner=©right_result_org=©right_result_domain=&search_copyright=q:THEPIRATEBAY.ORG

According to SimilarWeb data b9good.com had almost 16 million visits per month from almost two million unique visitors in August 2019, with more than 96 percent of visitors from Japan. With local ranks of 265 and 289 in Japan by Alexa and SimilarWeb respectively, the site is harming revenue streams across all distribution windows. The top traffic source to b9good is tvanimemuryoudouga.com, which means “television animation free of charge videos dot com” and organizes infringed content by “new releases,” “new HD,” and “movies.” The server appears to be in Canada and the latest data indicates it may be hosted on Yesup Ecommerce Solutions Inc.

- **CB01** – Italy. CB01 is a long-standing piracy source in Italy. The website has changed its top-level domain at least 50 times to avoid site-blocking. The newest domain, cb01 productions, has only been functioning for a month and yet has already climbed to an Alexa ranking of 42 in Italy, with 9.77 million visitors according to SimilarWeb data. The site has over 25,000 movie titles and over 2,500 TV shows available. The site has been blocked in Italy and Indonesia. The operator of the website uses Cloudflare’s services to mask the location of the website’s server.
- **Cda.pl** – Poland. Cda.pl is Poland’s most popular piracy website, eclipsing several legitimate VOD services in the country. Cda.pl had almost 55 million worldwide visitors with 10 million unique visitors in August 2019 according to SimilarWeb data. It currently enjoys a global Alexa rank of 1,357 and a local rank of just 13 in Poland. The operator of the website, Comedian S.A., uses Cloudflare’s services which mask the IP location of the website and curbs rights holders’ ability to identify its precise host. The last time that the information was available, Cda.pl was hosted at OVH Poland in Poland.
- **Cimaclub.com & cima4u.tv** – Egypt. These are the top infringing websites in the Middle East and North Africa and the top Arabic language piracy websites. These sites are very popular, with monthly visitor tallies in August 2019 alone of over 27 million visits from 5 million unique visitors for Cimaclub and 20 million visits from over 3.5 million unique visitors for Cima4u. Cimaclub.com has a local Alexa rank of 26 in Saudi Arabia, and cima4u has a local Alexa rank of 36 in Egypt, ranking higher than many known legitimate services according to SimilarWeb data. The operator of the website uses Cloudflare’s services to mask the location of the website’s server.
- **Cinecalidad.to** – Mexico, Argentina, Spain, Peru, Venezuela, Argentina, Chile, Uruguay. Cinecalidad.to is a popular streaming linking site that offers more than 5,000 infringing links to more than 2,000 titles including movies and television series. The website has been active since at least 2015. Its global Alexa rank is 499 with the following local Alexa ranks: Mexico, 27; Argentina, 48; Colombia, 34; Venezuela, 22; Chile, 27; Uruguay, 46; Peru, 58. Cinecalidad.to had 35 million visits in August 2019 from 4.1 million unique visitors according to SimilarWeb data. The site’s administrators monetize their infringing service through advertising served by a large number of national and international ad networks, as well as through the mining of bitcoin through users’ browsers.
- **Dytt8.net and Dy2018.com** – China, Taiwan. Dytt8.net is a highly ranked pirate website in China with local rankings of 198 and 215 on Alexa and SimilarWeb, respectively. This

website receives around 17.24 million visits per month from users accessing more than 12,000 infringing film titles made available by the operators. With a very user-friendly interface, this website remains a particular threat to legitimate services both within and outside China. Dy2018 received almost 10.5 million visits a month from 2.5 million unique visitors in August 2019. The site has high local rankings of 256 and 399 in China according to Alexa and SimilarWeb, respectively. Dy2018.com makes available to users over 10,000 infringing titles through the provision of direct links to third party storage providers. Dytt8.net and Dy2018 appear to have the same operators and the servers appear to be located in Taiwan. The sites were referred to the NCAC as part of its annual campaign and are under review.

- **Fmovies.is/.to (formerly .se)** – Unknown. Fmovies, also known as bmovies, is currently one of the most popular streaming websites in the world providing access to popular movies and TV series. The .to site’s global Alexa rank is 686 with local ranks of 821 in the U.S., 599 in India, and 24 in South Africa. Fmovies.to had more than 67.76 million visits in August 2019 according to SimilarWeb data. At last available update the site was hosted by Neterra in the Ukraine and is being masked behind the reverse proxy service Cloudflare that curbs rights holders’ ability to identify its precise host and location of the website’s server. The site has been blocked in at least four countries, including Australia, Denmark, Malaysia, and Singapore after former domain fmovies.se was blocked in nine countries.
- **“Indo 21” (Indoxxi) and many related domains (e.g., indoxxi.center, dunia21.pw, and indoxxi.network)** – Indonesia. “Indo 21” has emerged as the main brand for piracy in Bahasa throughout Indonesia and Malaysia. One of the related sites, indoxx1.center, has a local ranking of 40 in Indonesia according to SimilarWeb data with 23.85 million monthly visits in August 2019. Indoxx1.network boasted almost 2.72 million monthly visits in August 2019 according to SimilarWeb data. Another related site dunia21.pw has a local ranking of 196 in Indonesia according to SimilarWeb with 5.95 million visits in August 2019. These sites use Cloudflare’s reverse proxy services which mask the location of the websites’ servers. At last available update the site was hosted by India-based Host Palace. Many domains associated with this syndicate have already been blocked in Indonesia, Malaysia, and Australia.
- **Movie2free.com** – Thailand. Movie2free.com, a notorious pirate streaming site, caters to Thai consumers and boasts almost 16 million monthly visits from nearly 2.3 million unique visitors, 95 percent of which are from Thailand, according to SimilarWeb data. Alexa ranks movie2free.com as the sixth most popular site in Thailand. The site provides access to an array of movie and TV content and comes replete with high-risk ads with malware. The site uses Cloudflare’s services which mask the location of the website’s server. Despite numerous efforts to enforce against the site and its operators, it remains active and accessible.
- **MrPiracy.site and .xyz** – Portugal. MrPiracy is operated out of Portugal and mainly caters to the Portuguese and Brazilian markets. Despite being blocked in Portugal, its domains, MrPiracy.site and .xyz, are ranked 19 and 59 in the country, respectively, according to Alexa. It enjoys 14.88 million monthly visitors, according to SimilarWeb data. The sites host over 13,000 movie titles and 2,250 different TV shows. The operator of the websites uses Cloudflare’s services to mask the location of the websites’ server.

- **Phimmoi.net** – Vietnam. Phimmoi.net is operated out of Vietnam and has a local Alexa rank of 14. It has become one of the most notorious piracy sites in the world, currently ranked 749 in the world according to SimilarWeb with nearly 75 million monthly visits from 11 million visitors according to SimilarWeb data. Notwithstanding complaints about the site and an official letter of denunciation filed with the Vietnamese Ministry of Public Security, the authorities have yet to take firm action to address this egregiously infringing site.
- **Seasonvar.ru** – Russia. With 31.4 million visits and 3.25 million unique visitors in August 2019, the Russian site Seasonvar.ru is among the world’s most popular infringing streaming websites according to SimilarWeb data. As of August 2019, more than 12,000 different TV series were made available to their users. The site’s current global Alexa rank is 677 with a local rank of 133 in Germany which makes it more popular than Twitter, Booking.com, and eBay in the country. It is currently hosted by a Russian hosting provider, ITSARAY - ITCITIRU based in Saint Petersburg. Variants of the site have been subject to blocking orders in Russia.

Direct Download Cyberlockers and Streaming Video Hosting Services: Direct download cyberlockers and streaming video hosting services are websites that provide centralized hosting for infringing content which can be downloaded and/or streamed by the public. The distribution process is simple. A user uploads an infringing file and the cyberlocker or video hosting service gives the user a link for accessing the file. The user posts the link on one or several linking sites facilitating access to the wider public. Clicking the link will either initiate a download, a stream, or both of the uploaded file.

It is common for links to unauthorized copies of movies and television programs to be widely disseminated across the internet, not just via linking sites, but also via mobile and other web applications, social media platforms, forums, blogs, and/or email. Complicating enforcement, cyberlockers and video hosting services frequently provide several unique links to the same file and use proxy services to mask the locations of where the site and content are hosted. If a content owner sends an infringement notice for one of the links, the others may remain active, enabling continued infringement. Additionally, many cyberlockers and video hosting services do not respond to takedown notices.

According to a NetNames and Digital Citizens Alliance report,¹¹ “[u]nlike legitimate cloud storage services the cyberlocker business model is based on attracting customers who desire anonymously to download and/or stream popular, copyright infringing files that others have posted.” NetNames found that the 30 direct download and streaming cyberlockers it analyzed took in close to \$100 million in total annual revenue and generated average profit margins of 63 to 88 percent from a mix of advertising and subscription services. The principal use and purpose of these cyberlockers is to facilitate content theft.

¹¹ NetNames, “Behind The Cyberlocker Door: A Report on How Shadowy Cyberlocker Businesses Use Credit Card Companies to Make Millions,” September 2014. Available online at: <http://www.digitalcitizensalliance.org/cac/alliance/content.aspx?page=cyberlockers>.

The cyberlockers and video hosting services listed below include examples of both direct download and streaming models. By making vast amounts of infringing premium content available to the public, these sites attract huge amounts of traffic.

- **1fichier.com** – France. 1fichier.com is a direct download cyberlocker with a global Alexa ranking of 1,247. 1fichier.com had 29.23 million visits worldwide and 9.2 million unique visitors in August 2019 according to SimilarWeb data. Users can use 1fichier’s services for free with a limited speed and capacity or register for two paid tiers that provide secured access and unlimited speeds. 1fichier.com offers a referral program where users can receive up to 50 percent commission on each transaction of your prospects, and up to 40 percent on future valid rebills. It is hosted at Online SAS in France.
- **Baidu Pan** – China. Large quantities of infringing content are stored on Baidu Pan with links disseminated through popular Chinese social media platforms and piracy linking sites. Baidu holds more than a 75 percent share of China’s search engine market, and it is the second largest search engine in the world by user base. Given its market dominance, it is vitally important to ensure that Baidu has rigorous content protection standards and practices in place, cooperates fairly and transparently with rights holders, and sets the right example for other Internet businesses. Although Baidu has in recent years provided tools for taking down motion picture and television content, and demoted infringing video listings of new release titles on Baidu search results, takedown rates and timeframes for removal of infringing links are inconsistent and too long, from two days for one of its service to as long as fifteen days for another. Given its size, rightsholders must send up to thousands of infringement notices for proliferating copies on Baidu Pan of a single piece of content. Baidu should be encouraged to do more, including improve implementation of its takedown tools, apply rigorous filtering technology to identify infringing content, and take more effective action to suspend or terminate repeat infringers to ensure all rights holders are treated equally and infringing content and links are removed expeditiously. In 2017, Sohu was successful in a first-instance suit against Baidu Pan for indirectly facilitating copyright infringement of third parties. However, that case is on appeal, and meanwhile, Sohu has filed two additional cases against Baidu for copyright infringement of additional licensed series.
- **Clipwatching.com** – Vietnam. Clipwatching.com is a cyberlocker video host with a global Alexa ranking of 4,290 with 15 million visits worldwide and five million unique visitors in August 2019 according to SimilarWeb data. As a video host, Clipwatching.com has a generous affiliation program, offering payments of \$60 for every 10,000 views in tier 1 countries. Users can pay \$30 per year to access the uploaded content without advertisements. The sites that use clipwatching.com to host their content are popular in the U.S. and Canada. Clipwatching.com has been around since 2017 and has been steadily gaining popularity.
- **Gounlimited.to** – Qatar. Gounlimited.to is a streaming/downloading cyberlocker with a global Alexa ranking of 3,762. Gounlimited.to had 13.50 million visits worldwide and 3.82 million unique visitors in August 2019 according to SimilarWeb data. Users who upload files are rewarded up to approximately \$30 per 10,000 views in top tier countries (Germany,

UK, and U.S.). Gounlimited.to has a valuable membership scheme that offers an additional 50 percent profit to users on views when their video player is used as the main server on their website. Gounlimited.to has become increasingly popular in the last nine months, with the site jumping from 2.2 million visits in February 2019 to 13.5 million visits in August of this year. This site is hosted at OBE Network in Sweden.

- **Netu.tv** – Russia. Netu.tv is a cyberlocker with a global Alexa ranking of 26,121. Netu.tv had 2.78 million visits worldwide in August 2019 according to SimilarWeb data. The site has its own NetuUSD currency. NetuUSD is referred to in their terms and conditions as an ‘internal site currency that does not equal any other country currency’. Users who upload files are rewarded up to approximately 80 NetuUSD for every 10,000 views in top tier countries such as U.S., Canada, UK, and Australia. The server of Netu.tv will reject a connection to their content if a viewer has the developer console open at the same time, making it impossible to find the origin of the content. The site is being masked behind Cloudflare’s reverse proxy service to curb rights holders’ ability to identify its precise host.
- **Openload.co/oload.tv** – Romania, France, Canada. Openload.co is a streaming/download cyberlocker with a global Alexa ranking of 304. Openload.co had 42.56 million visits worldwide from 13.83 million unique visitors and oload.tv had nearly one million visits from nearly 400,000 unique visitors in August 2019 according to SimilarWeb data. Until April 2019, the site incentivized users to upload large files, such as television episodes and movies, by paying a fixed reward per 10,000 downloads/streams. The site offered five reward tiers with the “Very High Tier” for files downloaded by users in Australia, Canada, the UK, and the U.S. This tier paid \$40 per 10,000 downloads. There are no download speed limits or upload limits and although they reserve the right to delete streamable files after 60 days, they claim “your files will never be deleted, especially if somebody is downloading them.” At last available update the site was hosted at M247 in Romania and is being masked behind Cloudflare’s reverse proxy service to curb rights holders’ ability to identify its precise host. Openload.co has been suspended twice, once in 2016 by the registrar, and once in 2019 by the registry. In both instances the decision was reversed and the domain was reactivated.
- **Rapidgator.net** – Russia. This site has a global Alexa ranking of 827 and had 24.58 million visits from 6.2 million global unique visitors in August 2019 according to SimilarWeb data. Rapidgator.net offers monetary rewards, which encourage uploaders to distribute popular content such as copyrighted movies and television programs as widely as possible. Users who upload files are rewarded up to approximately \$40 USD for every 1,000 downloads and for every initial purchase of a premium membership, the user making the referral is paid up to 15 percent of the sale. Premium subscription plans are available for \$14.99 a month, allowing users to avoid throttled download speeds and data-download limits. According to NetNames’s “Behind the Cyberlocker Door” report,¹² Rapidgator.net generated approximately \$3.7 million in annual revenue, most of which comes from premium accounts. Rapidgator.net is blocked in Italy. The hosting location of RapidGator.net is being masked behind a reverse proxy service, DDoS Protections Ltd, to curb rights holders’ ability to identify its precise host.

¹² Ibid

- **Rapidvideo.com** – Canada, Germany, France, others. Rapidvideo.com is a streaming/download cyberlocker with a global Alexa ranking of 2,277. Rapidvideo.com had 7.8 million visits from 2.6 million unique visitors in August 2019 according to SimilarWeb data. The site incentivizes users to upload popular content with an affiliate program. The site pays from \$7.50 to \$60 USD per 10,000 views depending on the country in which the viewer is located.
- **Streamango.com** – France, Canada. Streamango.com is a streaming/download cyberlocker with a global Alexa ranking of 2,314. Streamango.com had 11.4 million visits from 4.5 million unique visitors in August 2019 according to SimilarWeb data. Until April 2019, the site incentivized users to upload popular content with a pay per download affiliate program. A fixed fee per 10,000 downloads or streams was paid depending on the user's location.
- **Uploaded.net** – Netherlands, Switzerland. Uploaded.net is a direct download cyberlocker that incentivizes users to upload large files, such as those associated with television episodes and movies, by paying rewards based on the file size, as well as a percentage of premium account sales referred by the user. This popular site also has a global Alexa rank of 1,179. NetNames' September 2014 report on cyberlockers¹³ found that Uploaded.net generated approximately USD \$6.6 million in annual revenue, largely through premium accounts but also in part through advertising. Users who upload files are rewarded up to approximately \$50 USD for every 1,000 downloads; for every initial purchase of a premium membership, the user making the referral is paid 60 percent of the sale. Additional renewals of the premium membership earn the user making the referral 50 percent of the sale. Download speeds are throttled for users who do not purchase the \$69.99 USD annual premium membership. The website operates through multiple redundant domains that include Uploaded.to and Ul.to. The site is blocked in Italy and India. Uploaded.net had over 23 million visits from nearly 7 million unique visitors in August 2019 according to SimilarWeb data. It is owned by Swiss company Cyando AG and is hosted at Eweka Internet Services B.v. in the Netherlands.
- **Uptobox.com** – Switzerland. Uptobox.com is a direct download cyberlocker, but it also allows streaming and embedding via its related site, uptostream.com. The site offers a relatively inexpensive premium account for \$28 a year with unlimited storage and no ads. It is widely used among pirate sites in Europe to generate revenue, utilizing ads on their own sites with embedding, or linking downloads through networks that pay per link visited such as adf.ly. This popular site has a global Alexa rank of 729 and a local rank of 72 in France. It offers a referral/reseller program, for which if a user deposits over €500, they get a 25 percent discount on premium memberships. Uptobox.com had 30 million visits from nearly 7.5 unique visitors in August 2019 according to SimilarWeb data. It is owned by Upworld Genius in Geneva, Switzerland and is hosted by Online SAS in France. The hosting location of Uptobox.com is being masked behind the reverse proxy service Cloudflare to curb rights holders' ability to identify its precise host.

¹³ Ibid

- **Verystream.com** – France. Verystream.com, a streaming/download cyberlocker launched in March 2019, is rising very quickly in popularity with a global Alexa ranking of 358. It had 46.5 million visits from 11 million unique visitors in August 2019 according to SimilarWeb data. The site allows users to upload large files for free without storage or traffic limits. The site further incentivizes users to upload popular content files like movies and television episodes by paying a fixed reward per 10,000 downloads/streams. The site offers five reward tiers with the “Very High Tier” for files downloaded by users in Australia, Canada, the UK and the U.S. This tier pays \$40 per 10,000 downloads. The site is being masked behind the reverse proxy service Cloudflare to curb rights holders’ ability to identify its precise host.
- **Vidoza.net** – France. Vidoza.net is a streaming/download cyberlocker with a global Alexa ranking of 3,305. It had nearly 14 million visits from over 4 million unique visitors in August 2019 according to SimilarWeb data. The site incentivizes users to upload content with a pay per download affiliate program. A fixed fee per 10,000 downloads or streams is paid depending on the downloader’s location. The site offers five reward tiers. Tier 1 is for files downloaded/viewed by users in the U.S., UK, and Germany and pays \$30 per 10,000 downloads.
- **VK.com** – Russia. VKontakte, or VK.com, is the leading social networking site in Russia and Russian speaking territories and a hotbed of illegal distribution of movie and television files. Searching for content is relatively easy and the site supports streaming playback through embedded video players. In September 2016, VK took steps to limit access to third-party applications dedicated to downloading content from the site, which has made it more difficult for users to download content directly. It has also experimented with content recognition technologies and additional progress has been made with its content recognition and filtering tool. VK blocks infringing sites from accessing videos stored on VK, but third-party pirate sites can still stream illegal content from another service, Odnoklassniki, OK.ru, operated by the same parent company, Mail.Ru Group. In spite of these limited measures, VK.com continues to be a major infringement hub; MPA and its member companies continue to find thousands of infringing files on the site each month. Available worldwide in multiple languages, including English, it is easily one of the most visited sites in the world, with a global Alexa ranking of 19 and a local ranking of two in Russia. VK.com had 1.4 billion visits from 50 million unique visitors in August 2019 according to SimilarWeb data. MPA welcomes Mail.Ru Group’s involvement in the Anti-piracy Memorandum, signed last year and recently extended. The Memorandum’s aim is to establish a legal procedure to reduce the availability of pirated content based on voluntary takedown by the platforms when notified by local rights holders. ISPs in Italy were ordered by the Court of Rome to block VK.com in November 2013. The site operates on its own corporate-owned servers in Russia.

Illegal IPTV Services: Illegal IPTV services typically offer hundreds of channels illegally sourced from providers worldwide alongside video-on-demand (VOD) content that includes unauthorized copies of movies and television series. Many of these illegal services are subscription based and run for profit, offering monthly or yearly packages to their user base. The technical infrastructure related to these services is often vast and complex making the identification of content sources and service operators extremely challenging.

IPTV services have been a driving force in the emergence of a number of related illegal businesses including ones engaged in (i) the re-sale of IPTV services and (ii) the theft, distribution, and sale of channel feeds.

IPTV services must rely on infrastructure and support services in order to function such as hosting providers, media servers, and panel hosting. Some of these services are used without the knowledge or approval of the service provider. However, some infrastructure providers cater their business strategy towards illegal sites or ignore bad actors amongst their clients even when notified by rights holders and other stakeholders of illegal activity. Based in the Czech Republic, though the website and marketing materials cite a registration to a UK virtual office, **DataCamp Limited** (and affiliated companies Datapacket and CDN77) is a service provider whose offerings include dedicated IPTV streaming servers and IPTV panel hosting with support for popular panels. A growing number of globally popular illegal IPTV services use DataCamp infrastructure and services to deliver/distribute their illegal IPTV content to a worldwide audience.

The marketing and sale of IPTV services is often carried out by a growing network of global IPTV service resellers who purchase subscriptions at wholesale prices and re-sell them for a profit, further complicating investigations. These resellers are also often involved in the promotion and support of the service with many also providing a limited number of channels to a given service. It is not uncommon to see resellers expand on their business model and move on to become an illegal IPTV service provider.

A significant development in the IPTV piracy space in 2019 was the dismantling of **Xtream Codes (XTC)** in a multi-country enforcement action coordinated by Eurojust. **Xtream Codes**, once the world's most popular IPTV management software, allowed anyone to build their own IPTV server from scratch. Eurojust approximates that the damage caused by the criminal gang operating Xtream Codes amounts to €6.5 million and jeopardized the existence of many legal pay-tv providers. The Eurojust press release notes, "More than 200 servers were taken offline in Germany, France, and the Netherlands, and over 150 *PayPal* accounts of the criminals were blocked."¹⁴

The following notorious markets are a sampling of the global illegal IPTV ecosystem:

- **BestBuyIPTV.com** – Likely located in Italy, BestBuyIPTV offers 11 country-specific channel lists and a Spanish/Latin regional list totaling approximately 7,000 live channels and 8,000 VOD channels including premium and sports networks. The service appears to be most popular in Turkey. To gain the largest possible reach, the BestBuyIPTV is compatible with most open/semi-open platforms and operating systems. While the site utilizes resellers which leads to pricing variations, the main site charges \$10 per month for the service.
- **Buy-IPTV.com** – Egypt. This service is popular in the Middle East and North Africa, averaging over 450,000 monthly visitors to their website, with some months showing activity as high as 733,000 visitors. The site seems to serve no other purpose than to market the

¹⁴ Press Release, <http://www.eurojust.europa.eu/press/PressReleases/Pages/2019/2019-09-18.aspx>

service and provide a means to sign up for illegal access to content so subscriber figures are likely significantly higher. Buy-IPTV is compatible with all types of devices and is supplying over 4,000 live channels and 2,000 VOD channels. There is a reseller and restream program available, which proliferate IPTV services by providing a plan to resell subscriptions and content to repackage into an additional service. Subscriptions start as low as 2.50 EUR (\$2.70 USD) per month for a three-year plan. It has been operating since 2016.

- **GenIPTV** ^{BuyIPTV.com} France. GenIPTV is an IPTV service that is very popular across European markets. The service offers over 8,000 live channels and over 12,000 VOD titles with subscriptions starting as low as seven EUR (7.70 USD) per month. GenIPTV has been running since 2017. To gain the largest possible reach, it is compatible with all types of devices and leads an aggressive expansion campaign with multiple resellers. There are multiple infringing IPTV services that use GenIPTV as a content source.
- **ThePK.tv** – Canada, UK, Australia. The Players KLUB IPTV is a popular illegal IPTV service that offers thousands of live channels and VOD content to subscribers for a monthly fee of \$8 USD/month. Content can be consumed via an online web portal, ISD devices and custom applications for Apple, Android, and KODI. The vast majority of the 90,000 visits per month to their web portal originate from the United States.
- **TVMucho.com** – Spain. TVMucho is an IPTV service targeted to UK and French expatriots. The service provides access to 100 live channels and provides a seven day “catch up” window with differing tiers of service for “French TV, UK TV, and Irish TV.” TVMucho maintains apps available on both the GooglePlay store as well as the Apple iTunes app store. The service charges \$12 per month for its basic services, and it offers add-ons for an increased price.

Piracy Devices and Apps: A damaging piracy ecosystem has emerged around piracy devices and apps, i.e. “illicit streaming devices” (ISDs). Piracy devices and apps provide illegal access to movie and television content through a variety of means including downloading and streaming content as well as unauthorized streaming of live television and sporting events, thus undermining the licensing fees paid by distributors on which content creators depend. MPA members continue to suffer enormously from a growing threat of these devices and apps. Streaming devices that are preloaded with infringing apps and TV/VOD subscription services can be found online and in physical marketplaces. Additionally, illegal apps that can make legitimate streaming devices infringing can be found through a myriad of mainstream and specialty app repositories. Piracy devices are also sold in physical marketplaces in the Asia Pacific region, notably including Singapore’s Sim Lim Square. The BeOutQ piracy device and related services, while currently offline, need continued monitoring to ensure they do not come back.

- **RenRen Shi Pin** – China. This app has been the subject of legal action by legitimate services in China and continues to infringe foreign content. It has approximately 35.6 million downloads from the major China-specific Android Apps Stores. The site is one of many locations where the app can be downloaded and ranks in China at 317 and 391 on

Alexa and SimilarWeb, respectively, with more than 85 percent of its traffic emanating from China. Surprisingly, this app also has ten percent of its traffic originating from Japan and one percent from the United States. The site (rr.tv) supports an app that is available on both Apple and Android platforms, indicating its use is more prevalent than the traffic numbers would suggest. Hundreds of unauthorized foreign television series' episodes are available on the app.

- **ShowBox** - Russia. Although no longer available for download from official App stores, ShowBox remains one of the biggest infringing applications available on Android, iOS, PC & Mac. ShowBox is free of charge, financed instead through advertisements. More than 10,000 Movies and 1,000 TV Shows are made available to over 60 million active users across all platforms. The content can be streamed or downloaded using the P2P technology. The operator is believed to be a resident of Russia.
- **Unblock Tech (unblocktech.com)** – Unknown. Unblock Tech's core business is to sell, develop, and conduct research for the Ubox series of piracy-enabling devices. As a third-party software development kit, Ubox, with its OTT-centric concept, runs on Android and incorporates P2P technology to maintain its video contents and to provide product support. It appears that Unblock Tech has more than 500 agents and distributors. The sellers and users of the device can be found across Asia Pacific, Europe, the U.S. and Canada.

Peer-to-Peer Networks & BitTorrent Portals: Users of peer-to-peer (P2P) or file-sharing networks use software that allows them to join "swarms" of other users who are distributing a particular title (*e.g.*, a movie, TV show, song, book, etc.). As each user downloads pieces of the file, his/her computer distributes the pieces to others in the swarm. The most popular P2P software is "BitTorrent." BitTorrent websites facilitate file sharing by organizing and indexing torrent files, and initiating and managing the download process. The BitTorrent landscape remains popular, serving millions of torrents to tens of millions of users at any given time.

The sites identified in this year's filing were identified in part because of their high-quality, recently-released content and because, in some cases, they coordinate the actual upload and download of that content.

- **1337x.to** – Switzerland. 1337x.to is a popular torrent website with a global Alexa rank of 317 and a local rank of 220 in India. The site provides access to a range of content including movies, TV series, music, and software. 1337x.to had nearly 52 million visits from 6.8 million unique visitors in August 2019 according to SimilarWeb data. The site is hosted with the Icelandic company Flokinet in Finland. Variants of the site have been subject to blocking orders in the United Kingdom, Denmark, Portugal, Belgium, Indonesia, Ireland, Malaysia, India, Austria, Australia, and Italy.
- **Rarbg.to** – Bosnia and Herzegovina. Rarbg.to is a very popular torrent website with a global Alexa rank of 414 and a local rank of 293 in the U.S. The site provides access to a range of content including movies and TV series. Rarbg.to had over 45 million visits from 4.6 million unique visitors in August 2019 according to SimilarWeb data. The site is hosted in Bosnia

and Herzegovina by NETSAAP Transit Services. The site and its variants have been subject to blocking orders in Portugal, Italy, Denmark, Finland, Indonesia, Belgium, Ireland, Malaysia, Australia, and the United Kingdom.

- **Rutracker.org** – Russia. This BitTorrent portal was launched in 2010 in response to the takedown of Torrent.ru by the Russian criminal authorities. Rutracker.org is a BitTorrent indexing website with 14 million registered users and 1.9 million active torrents. It is one of the world's most visited websites, with a global Alexa ranking of 294, and a local rank of 44 in Russia. Rutracker.org had 40.7 million visits from 5.7 million unique visitors in August 2019 according to SimilarWeb data. The site is hosted in Russia by Dreamtorrent Corp., a Seychelles company that is also believed to be the owner of the site. The site has been subject to blocking orders in Russia and Portugal.
- **Tamilrockers.ws** – India. This infamous torrent site, along with its many progeny and copycats, constitutes a notorious piracy syndicate for motion pictures. Tamilrockers.ws has grown exponentially over a short period of time with the site now ranking in the top 200 in 12 countries, and ranking 170 in India, according to SimilarWeb. The site has nearly nine million monthly visits by nearly one million unique visitors according to SimilarWeb data. The site's operators frequently boast about offering new releases on their site within hours of release. Despite many efforts to block Tamilrockers and its related sites, the group has shown an expertise in evasion by quickly creating and rotating new domains to continuously thwart blocking efforts. The syndicate's operators and server locations are unknown and it uses with proxy servers located in Russia or the Ukraine.
- **ThePirateBay.org** – Unknown. Available in 35 languages, ThePirateBay.org (TPB) is one of the largest BitTorrent websites with a global Alexa rank of 172, and a local rank of 104 in the U.S. Swedish prosecutors filed criminal charges against TPB operators in January 2008 for facilitating breach of copyright law. The operators were found guilty in March 2009 and sentenced to prison and a multi-million dollar fine. This judgment was affirmed by the Svea Court of Appeal and the European Court of Human Rights. In 2012, one of the site's co-founders was found guilty on hacking charges in Sweden after his extradition from Cambodia. He was then extradited to Denmark and sentenced for similar charges in 2013. In 2014, another operator was captured in Sweden. The last operator was captured in Thailand and extradited to Sweden in 2014 for an outstanding sentence. Site blocking orders have been handed down in Austria, Belgium, Denmark, Finland, France, Iceland, Ireland, Italy, Malaysia, the Netherlands, Norway, Portugal, Spain, Indonesia, Australia, Argentina, and the United Kingdom. TPB promoted its tenth year as an index website by releasing the PirateBrowser, a self-contained portable web browser with preset bookmarks to BitTorrent websites hosted on the TOR network. The website has been reported to have multiple alternative domains hosted in various countries around the world over the years. In December 2014, TPB's hosting provider was raided and the site went offline, only to reappear online a few months later under various TLDs. While it has not returned to the number one position, TPB had a significant comeback after kat.cr and torrentz.eu went offline in 2016. ThePirateBay.org had nearly 54 million visits from 12.6 million unique visitors in August 2019 according to SimilarWeb data. The hosting location of the website is kept hidden by two intermediaries: first by Cloudflare's reverse proxy service and second by

a system located at the hosting provider Shinjiru Technology in Malaysia.

In May 2016, the Svea Court of Appeal ordered the seizure of the piratebay.se and thepiratebay.se domains from one of the original founders. The decision was appealed, and the Swedish Supreme Court granted leave to appeal. In December 2017, the Swedish Supreme Court confirmed that domains can be seized under Swedish law, upholding the Court of Appeals' decision. In June 2017, the CJEU (case C-610/15) confirmed that The Pirate Bay communicates to the public, directly infringing copyright. That said, the site maintains numerous other domains to evade enforcement.

- **Torrentz2.eu** – Bulgaria. This very popular torrent search website has a global Alexa rank of 1,696. Torrentz2.eu emerged in 2017 following the closure of the original Torrentz.eu. The site positioned itself as a new and improved version that indexes and aggregates over 80 third-party torrent sites. The site also operates a mirror site torrentz2.is. The site claims to currently index over 61,110,000 torrents. The site is currently hosted at BelCloud Hosting Corporation in Seychelles and is being masked behind a reverse proxy service that curbs rights holders' ability to identify its precise host. The site is blocked in Belgium, Italy, Denmark, India, Portugal, and Australia.
- **Zooqle.com** – UK, Russia. Zooqle is a popular torrent website globally, boasting nearly 7 million visits from 1.6 unique visitors in August 2019. It has a UK rank of 1,704 according to SimilarWeb data. The top five most popular countries are the U.S., UK, India, Brazil, and Australia, which make up 35 percent of its market share. Operating since 2009 but previously under the 'bitsnoop' name, zooqle.com is one of the oldest running torrent indexing websites available. The website is known for its carefully organized movie and TV series sections. The site is blocked in Australia, Italy, Denmark, Singapore, and Portugal. The operator of the website uses Cloudflare's services to mask the location of the website's server.

Hosting Providers: Hosting providers make available the essential infrastructure required to operate a website. Websites engaged in massive copyright infringement depend on a hosting provider for the technical infrastructure to make their website easily viewable and to provide high-quality video playback. The hosting provider has the ability to take websites engaged in massive copyright infringement offline or to disable or otherwise shut them down.

Some hosting providers allow sites to hide behind a content delivery network (CDN). A CDN is typically used to effectively and efficiently deliver content to a global user base by placing servers all around the world that cache the pages of the website, providing a high-speed hosting infrastructure to some of the most popular web streaming services. One of the by-products of using a CDN is that they mask the true IP and hosting provider of a website. An example of a CDN frequently exploited by notorious markets to avoid detection and enforcement is CloudFlare, a reverse-proxy service that also provides a CDN functionality. Reverse proxy functionality hides the real IP address of a web server.

Given the central role of hosting providers in the online ecosystem, it is disconcerting that many refuse to take action upon being notified that their hosting services are being used in clear

violation of their own terms of service that prohibit intellectual property infringement and, with regard to notorious markets such as those cited in this filing, in blatant violation of the law.

- **Fishnet Communications LLC** – Russia. Registered and with servers in Russia, FISHNET is a hosting provider for two of the largest 24/7 Live UGC Streaming Platforms, 123tvnow.com and Ustreamix.com. Both Platforms focus on delivering uninterrupted 24/7 access to infringing content. FISHNET and their upstream provider TransTelecom have been unresponsive to outreach attempts.
- **M247** – Romania. For years, M247 has served as a trusted partner for infringing sites. M247 responds to infringement notices by indicating receipt of notice with intent to investigate, but it fails to act expeditiously and take permanent action against pirate sites and repeatedly infringing services. M247 hosts a large number and array of infringing sites and services. The company is registered in Romania and uses servers located in Romania.
- **Network Dedicated SAS** – Colombia, Switzerland. Registered in Colombia with servers in Switzerland, Network Dedicated SAS has gradually become one of the largest hosting providers of non-compliant Live UGC Streaming Platforms, including Wstream.to (formerly Whostreams.net), Streamcdn.to (formerly Streamcdn.co and Widestream.io), and Telerium.tv (formerly Bro.adca.st).
- **Private Layer** – Panama, Switzerland. For years, Private Layer has served as a trusted partner for infringing sites. Private Layer operates in anonymity, refusing to respond to infringement notices. They host a large number and array of infringing sites. The company is registered in Panama and uses servers located in Switzerland.

Ad Networks and Online Advertising Entities: Ad networks are the companies that connecting advertisers to infringing websites, contributing to the prevalence and prosperity of infringing sites by providing funding to the operators of these sites through advertising revenue. Although many ad networks have established best practices and guidelines to address ads supporting or promoting piracy, detection and policing of illicit sites continues to have its challenges. The below entity is knowingly and routinely advertising its services through display ads on piracy sites and by burning ads for its services into the underlying infringing video files.

- **1XBET** - Russia. 1XBET is a Russian gambling site that has started to support some of the earliest releases of infringing theatrical camcords and infringing streams of live television broadcasts. It has become the third most active online advertiser in Russia. Based on data collected and published by Mediascope, 1XBet's advertising comprised 2.4 percent of all advertisements available in Russia, compared to 3.3 percent by Google and 3.1 percent by PepsiCo. Reportedly, the online casino pays to insert visual and audio advertisements into new piracy content sources incentivizing camcord and livestreaming piracy. 1XBET's watermark with promotion codes is 'burned' into the video files of infringing camcord recordings. Thus, piracy is used as a vehicle to support this online gambling giant.

Closing

In the U.S. and around the world, the motion picture and television industry is a community of creators and innovators who work tirelessly at the art and craft of storytelling. The criminals who profit from the most notorious markets threaten the very heart of our industry and in so doing, threaten the livelihoods of the people who give it life. These markets are an immediate threat to legitimate commerce, impairing legitimate markets' viability and curbing U.S. competitiveness. USTR's efforts to shine a light on the most egregious instances of copyright theft in foreign markets is an essential step in fostering creativity and innovation, not only in the film and television industry but throughout the creative economy.

MPA appreciates the opportunity to comment and is ready to provide further information or answer questions as requested.

Sincerely,

A handwritten signature in black ink, appearing to read 'C. H. Rivkin', with a long horizontal flourish extending to the right.

Charles H. Rivkin
Chairman & CEO