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October 1, 2018

Sung Chang 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 2018 Special 301 Out of Cycle Review of Notorious Markets. Docket No. USTR-2018-0027

Dear Mr. Chang:

The Motion Picture Association of America submits the following response to the request issued August 16, 2018, 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 2.1 million jobs and \$139 billion in total wages in 2016. Nearly 342,000 jobs were in the core business of producing, marketing, manufacturing, and distributing motion pictures and television shows. These include people employed in film and television production-related jobs on a freelance basis, part-time or full-time at major studios, independent production companies, and core industry suppliers like film labs, special effects and digital studios, location services, and prop and wardrobe houses dedicated to the production industry, among others.

Another nearly 354,000 jobs were in related businesses that distribute motion pictures and television shows to consumers, including people employed at movie theaters, video retail and rental operations, television broadcasters, cable companies, and new dedicated online ventures. 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 2016, the enduring value and global appeal of U.S. entertainment earned \$16.5 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 2016, that services trade surplus was \$12.2 billion, or

five 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 MPAA member companies' distribution revenue annually earned from overseas, MPAA has a strong interest in the health and sustainability of these international markets. MPAA 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 MPAA 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 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 MPAA'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 5.4 billion downloads of pirated wide release films and primetime TV and VOD shows using peer-to-peer protocols.¹ In 2016, there were an estimated 21.4 billion total visits to streaming piracy sites worldwide across both desktops and mobile devices.² Content thieves take advantage of a wide constellation of easy-to-use online technologies, such as streaming, direct download, and piracy apps to provide 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 and anonymizing 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 to a global audience via dedicated web portals, third-party applications and piracy devices configured to access the service. MPAA has

¹ Analysis of MarkMonitor data. https://www.alliance4creativity.com/mission/the-threat-of-online-piracy/

² 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/

identified over one thousand of these illegal IPTV services operating around the world.

Piracy devices preloaded with software to illicitly stream movies and television programming and a related ecosystem of infringing add-ons continue to be problematic, although not as prevalent as in prior years due in part to enforcement actions against key targets. Websites enable one-click installation of modified software onto set-top boxes or other internetconnected devices. This modified software taps into an ecosystem of infringing content addons and portals to illicitly stream movies and television programming live or "on demand."

It is important to note that websites and applications that traffic in infringing movies, television shows, and other copyrighted content harm not only rights holders but consumers as well. Malicious software is increasingly a revenue source for pirate sites and applications. A 2015 study by the Digital Citizens Alliance (DCA) found that consumers' computers are 28 times more likely to be infected by malware from a content theft site than similar mainstream sites.³ Further, 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.⁴ Such risks jeopardize the general public, the health of the internet, and legitimate digital trade.

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 Alexa⁵ and site traffic volume data from SimilarWeb⁶, as well as information on revenues where available, among other details. MPAA 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 territory where they are issued; they are not extraterritorial in scope. 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, MPAA 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.

Linking and Streaming Websites: Linking sites aggregate, organize, and index links to content

³ Digital Citizens Alliance, "Risk IQ," Available Online at:

https://media.gractions.com/314A5A5A9ABBBBC5E3BD824CF47C46EF4B9D3A76/d88c7e51-cb31-46a9-8365-87161afbef22.pdf

⁴ Teland, Rahul. "<u>Does Online Piracy Make Computers Insecure? Evidence from Panel Data</u>." Carnegie Mellon University. March 12, 2018.

⁵ 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 <u>http://www.alexa.com/</u> for more information.

⁶ 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 <u>http://similarweb.com</u> for more information.

stored on other sites. 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. 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. 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. They largely derive their revenue from advertising and referrals.

An important development in 2018 was the shuttering of a ring of piracy services that had operated under the names 123movies, 123movieshub, gostream, and gomovies following the launch of a criminal investigation in Vietnam and significant industry engagement. Since its closure, many copycat sites have emerged. This ring of piracy services had been blocked in at least eight countries prior to its shut down and efforts are underway to shut down the copycats as well.

- **b9good.com** Japan. Streaming video site focused on the Japanese market containing a vast library of motion picture, television, and anime content. According to SimilarWeb data b9good.com has 27.5 million visits per month from 3.7 million unique visitors, with 95% of visitors sourced from Japan. With local ranks of 78 and 148 in Japan by Alexa and SimilarWeb respectively, the site is harming revenue streams for various kinds of content across all distribution windows. Given the Japanese government's increased attention to the needs of creators to protect their works in the online environment, this site should be a priority in the movement to clean up the Japanese market. The site contains categories of content including "new releases," "new HD," and "movies." The server location appears to be in Canada and the latest data indicates the site may be hosted on Yesup Ecommerce Solutions Inc.
- **Cda.pl** Poland. Cda.pl is Poland's most popular piracy website where users from around the world find and view copyright infringing content. It is so big that it is now more popular than several legitimate VOD services in the country. Cda.pl had 68.13 million worldwide visitors with nearly 13 million unique vistors in July 2018 according to SimilarWeb data and currently enjoys a global Alexa rank of 1,477 and a local rank of just 15 in Poland. The operator of the website, CWMedia S.A., uses Cloudflare's services which mask the IP location of the website. Currently hosted at OVH Poland in Poland, Cda.pl is being masked behind a reverse proxy service that curbs rights holders' ability to identify its precise host.
- **Dytt8.net** China. Dytt8.net is the highest locally ranked pirate website in China with a local Alexa ranking of 105. This website receives around 20 million visits per month from users accessing the 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.com** China. With 12 million visits a month from 3.5 million unique visitors, dy2018.com has a local rank of 432 in China according to SimilarWeb data. This linking pirate website makes available to users over 10,000 infringing titles through the provision of direct links to third party storage providers. The operator of the website uses Cloudflare's services to mask the location of the website's server.
- **Filmeseseriesonline.net** Brazil. With nearly 5 million unique visitors each month, this site garners roughly 16 million monthly visits, mostly from Brazil (SimilarWeb), where the site consistently ranks in the top 500 websites according to Alexa data. The website illegally offers over 10 thousand titles for streaming in Portuguese, dubbed or subtitled, and monetizes itself through advertisements. The operator of the website uses Cloudflare's services to mask the location of the website's server.
- **Fmovies.is/.to (formerly .se)** Sweden. 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 .se site's global Alexa rank is 627 with local ranks of 506 in U.S. and 50 in India. Fmovies had more than 60 million visits in July 2018 according to SimilarWeb data. The site is currently hosted by Neterra in the Ukraine and is being masked behind a reverse proxy service that curbs rights holders' ability to identify its precise host. This site uses Cloudflare's services which mask the location of the website's server. The site has been blocked in at least four countries, including Australia, Denmark, Malaysia, and Singapore.
- **Indoxx1.com** Indonesia. "Indo 21" has emerged as the main brand for piracy in Bahasa throughout Indonesia and Malaysia. The site boasted almost 75 million monthly visits in July 2018 from more than 13 million unique users worldwide according to SimilarWeb data. The site has local ranks of 13 (SimilarWeb) and 33 (Alexa) in Indonesia, and 143 (Alexa) in Malaysia. Although Indoxx1 may remove individual infringing links in response to rights holders' takedown requests, infringing content is often rapidly replenished. This site uses Cloudflare's services which mask the location of the website's server. We believe the site is hosted in India and latest data indicates it may be hosted by India-based Host Palace.
- Kinogo.cc Netherlands. Kinogo.cc (kinogo.club redirects to kinogo.cc), formerly Kinogo.co, is one of the most popular streaming link sites worldwide. It is a Russian language site with a global Alexa rank of 1,226 and a local rank of 56 in Azerbaijan. Kinogo.cc had 8.08 million worldwide unique visitors in July 2018 according to SimilarWeb data. The Moscow City Court ordered the blocking of Kinogo.co in June 2016. Analysis suggests that Kinogo hosts some of its own video content, which is becoming an increasingly common practice among major Russian-language video streaming links sites. The website is currently hosted by Serverius, a hosting provider registered in the Netherlands. Kinogo.club uses Cloudflare's services which masks the IP location of the website.
- **Pelispedia.tv** Mexico/Argentina/Spain/Peru/Venezuela/Argentina/Chile/Uruguay. Pelispedia.tv is a popular streaming linking site that offers more than 50,000 infringing links to more than 8,000 titles including movies and television series. The website has been active since May 2014. Its global Alexa rank is 2,266 with the following Alexa ranks per country:

Mexico, 165; Argentina, 83; Chile, 82; Venezuela, 163; and, Spain, 597. Pelispedia.tv had 30.05 million visitors in August 2018 with 5 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.

- **Pelisplus.tv** Mexico/Argentina/Spain/Peru/Venezuela/Argentina/Chile/Uruguay. Peliplus.tv is a popular streaming linking site that offers more than 10,000 infringing links to more than 1,700 titles including movies and television series. The website has been active since March 2015. Its global Alexa rank is 2,431 with the following Alexa ranks per country: Mexico, 143; Argentina, 153; Chile, 215; Venezuela, 156; and, Spain, 1061. Pelisplus.tv had 19.6 million visitors in August 2018 with 6.2 million unique visitors according to SimilarWeb data. Administrators of the website monetize their infringing service through advertising served by a large number of national and international ad networks.
- Seasonvar.ru Russia. With its 99.48 million visitors and 15.41 million unique visitors in July 2018, the Russian Seasonvar.ru is the world's most popular infringing streaming website according to SimilarWeb data. As of August 2018, there are more than 12,000 different TV series made available without the authorization of the rights holder. The site's current global Alexa rank is 527 with a local Russia rank of 43, which makes it more popular than Twitter, Booking.com, or eBay in the country. It is currently hosted by a Russian hosting provider, ITSARAY ITCITI.RU based in Saint Petersburg. Variants of the site have been subject to blocking orders in Russia.
- Zimuzu.tv (now Zimuzu.io) China. Once known as Yyets, this site garners roughly 26.5 million monthly visits, mostly in China (SimilarWeb), where the site consistently ranks in the top 250 websites (currently, Alexa has zimuzu.io ranked at 133 in China). Despite numerous referrals of this site in China for enforcement, it remains up and running, appearing to capitalize on a very active user upload community, affiliations with other popular apps and websites in China, as well as real-time updates of the latest TV series and movies. Servers for both Zimuzu.tv and Zimuzu.io are located in the US. The latest data indicates Zimuzu.tv may be hosted by Quadranet whereas Zimuzu.io may be hosted by Alibaba LLC.

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. 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 at all to takedown notices.

According to a NetNames and Digital Citizens Alliance report, ⁷ "[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 principle use and purpose of these cyberlockers is to facilitate content theft.

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.

- **Openload.co/oload.tv** Romania, France, and Canada. Openload.co is a streaming/download cyberlocker with a global Alexa ranking of 133. Openload.co had 58.27 million worldwide unique visitors and oload.tv had 2.17 million worldwide unique visitors in July 2018 according to SimilarWeb data. The site incentivizes users to upload large files, such as television episodes and movies, 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 United Kingdom, and the United States. This tier pays \$40 per 10,000 downloads. There are no download speed 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." The site is hosted at M247 in Romania and is being masked behind a reverse proxy service to curb rights holders' ability to identify its precise host.
- **Rapidgator.net** Russia. This site has a global Alexa ranking of 717 and had 16.34 million global unique visitors in July 2018 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% 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,⁸ Rapidgator.net generated approximately \$3.7 million in annual revenue, most of which comes from premium accounts. In April 2013, the Court of Rome ordered ISPs in Italy to block Rapidgator.net. The hosting location of RapidGator.net is being masked behind a reverse proxy service to curb rights holders' ability to identify its

⁷ 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.

precise host.

- **Rapidvideo.com** Canada, Germany, France, and others. Rapidvideo.com is a streaming/download cyberlocker with a global Alexa ranking of 999. Rapidvideo.com had 21.66 million worldwide unique visitors in August 2018 according to SimilarWeb data. The site incentivizes users to upload 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 and Canada. Streamango.com is a streaming/download cyberlocker with a global Alexa ranking of 1,461. Streamango.com had 13.42 million worldwide unique visitors in August 2018 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 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 689 and a local ranking of 220 in Japan. NetNames' September 2014 report on cyberlockers⁹ 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% of the sale. Additional renewals of the premium membership earn the user making the referral 50% 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. In April 2012, the Court of Rome ordered ISPs in Italy to block Uploaded.net. In addition, ISPs in India were ordered by the Delhi High Court to block Uploaded.net, Uploaded.to and Ul.to in July 2014. Uploaded.net had 20.95 million worldwide unique visitors in July 2018 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 registered in Switzerland. Uptobox.com is a direct download cyberlocker, but it also allows streaming and embedding via its site, uptostream.com. The site incentivizes users to upload large files, such as copyrighted television episodes and movies, thanks to the large storage offered for free to registered members, but also a very cheap premium account for \$28 a year with unlimited storage and no ads. It is widely used among pirate sites in Europe to generate revenue, based on ads on their own sites with embedding, or linking downloads through pay networks such as adf.ly. This popular site has a global Alexa rank of 659 and a local rank of 62 in France. It offers a referral/reseller program, for which if a user deposits over €500, they get a 25% discount on premium memberships. Uptobox.com had 11.66 million worldwide unique visitors in July 2018 according to SimilarWeb data. It is owned by Swiss company Upworld Genius and is hosted by Online SAS in France. The hosting location of Uptobox.com is being masked behind a reverse proxy service to curb rights holders' ability to identify its precise host.

⁹ Ibid

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. VK blocks infringing sites from accessing videos stored on VK, but third-party pirate sites can still stream illegal content from another service operated by the same parent company. In spite of these limited measures, VK.com continues to be a major infringement hub; MPAA 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 17 and a local ranking of 2 in Russia. VK.com had 169.2 million worldwide unique visitors in July 2018 according to SimilarWeb data. MPAA welcomes recent overtures by VK parent company Mail.Ru Group expressing a desire to address piracy issues with VK and other Mail.Ru services, and will keep USTR informed about any concrete progress. 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.

The marketing and sale of these services is often carried out by a network of global IPTV service re-sellers who purchase subscriptions at wholesale prices and re-sell them for a profit, further complicating investigations. 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 legal service or product, however, some cater their business strategy towards illegal sites or ignore bad actors amongst their clients even when informed. As such, these rogue legitimate services become bad actors in their own right. 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 content to a worldwide audience. 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. In order 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.

- **GoIPTV.me** GoIPTV.me is an IPTV service targeted towards the Brazilian market with marketing materials primarily in Portuguese. This illegal service offers two subscription options, one with Brazilian content (\$15/month) and the other which includes content from around the world (\$20/month). GoIPTV.me boasts 1.5 million monthly visits to their website which has seemingly no other purpose than to market the service and provide a means to sign up.
- **TVMucho.com** TVMucho is an IPTV service targeted to UK and French expats. 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." In what appears to be an attempt to appear legitimate, 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 with potential add-ons that more than double the price.

<u>Piracy Devices and Apps:</u> A damaging piracy ecosystem has emerged around piracy devices and apps, i.e. "illicit streaming devices" (ISDs). MPAA appreciates USTR's focus on this problem in its 2017 Notorious Markets Report.

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. MPAA members continue to suffer enormously from a growing threat of these devices and apps. For example, the **BeOutQ** piracy device and related services infringe high-quality film and television productions including sports rights, undermining the growing Middle East marketplace. 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 legitimate and specialty app repositories. We once again highlight several apps emanating from China which can be used on piracy devices or as standalones.

- **3DBoBoVR** China. The 3DBoBoVR app, with tens of millions of downloads, poses a threat to budding legitimate OTT and online platforms in China. The app facilitates access to infringing copies of the latest motion pictures and television content. Different versions of the 3DBoBoVR app facilitate viewing of infringing content on smart high-definition TVs, mobile devices, and the virtual reality headsets sold by this pirate operator. The operator of the 3DBoBoVR app and the manufacturer of the virtual reality headsets is a company listed in Shanghai.
- **TVPlus, TVBrowser, and KuaiKan** China. These three apps, run by related companies in China, now boasts more than 64 million downloads. The content is sourced from third

parties, and under current Chinese law, there is legal uncertainty as to whether a service which does not store infringing or unauthorized content on its server can be held liable. This so-called "server principle" which is adopted and applied by some judges in China should be reconsidered and/or reversed, either through judicial practice, judicial interpretations, or a change in the law. The fact is that escaping liability for facilitating infringement (which is called for under the current Network Regulations) solely on the basis that a service does not store the content on its own server leaves a serious gap in the law and raises questions as to China's international obligations. These apps allow people in China to view unauthorized streams of movies, TV, and live events (e.g., sports) without payment to rights holders, on any device of their choosing.

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, or, book). 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 281 and a local rank of 117 in India. The site provides access to a range of content including movies, TV series, music, and software. 1337x.to had 13.59 million worldwide unique visitors in July 2018 according to SimilarWeb data. The site is hosted with 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 popular torrent website with a global Alexa rank of 351 and a local rank of 194 in the U.S. The site provides access to a range of content including movies and TV series. Rarbg.to had 12.99 million worldwide unique visitors in July 2018 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 13.9 million registered users and 1.5 million active torrents. It is one of the world's most visited websites, with a global Alexa ranking of 395, and a local rank of 70 in Russia. Rutracker.org had 14.72 million worldwide unique visitors in July 2018 according 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 by the Moscow City Court and in Portugal.

ThePirateBay.org – Unknown. Available in 35 languages, ThePirateBay.org (TPB) is one of the largest BitTorrent websites with a global Alexa rank of 136, and a local rank of 81 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 cofounders 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. TPB continued to combat efforts to protect the interests of copyright holders by changing its top level domain to .SE in an effort to thwart site blocking orders. 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 never returned to its former number one position, TPB had a significant comeback after kat.cr and torrentz.eu went offline in 2016. ThePirateBay.org had 36.92 million worldwide unique visitors in July 2018 according to SimilarWeb data. The hosting location of the website is kept hidden by two intermediaries: first by Cloudflare's reverse proxy service and then 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 has 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.

- **Torrentz2.eu** Bulgaria. This very popular torrent search website has a global Alexa rank of 572 and a local rank of 161 in India. Torrentz2 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 Histate Global in Bulgaria 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.
- Xunlei Thunder China. Xunlei Thunder is an integrated download tool and built-in

browser through which users can access unauthorized content. Xunlei Thunder is believed to be operated out of China by the Shenzhen Xunlei Networking Technology Co., Ltd.

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 to make their website easily viewable and to provide high quality streaming videos. 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. Gostream.is is a good example of how a web streaming service is able to avoid the cost of hosting while providing high quality, always available HD video streams to its users. 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 CDN that also provides reverse proxy 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 prohibiting intellectual property infringement and, with regard to notorious markets such as those cited in this filing, in blatant violation of the law.

• **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 outreach notices. They host a large number and array of infringing sites. The company is registered in Panama and uses servers located in Switzerland.

<u>Ad-Networks</u>: The companies connecting advertisers to infringing websites inadvertently contribute 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.

• **WWWPromoter** – Canada. Toronto-based WWWPromoter is the fastest growing advertising network amongst infringing sites and provides services to notorious sites such as project-free-tv.ag, newepisodes.co, and various Primewire associated TLD's including Primewire.life. By using WWWPromoter's services, operators of infringing sites are able to generate revenue from traffic and advertisements that the network serves to their site.

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 they 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.

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

Sincerely,

CLA.M

Charles H. Rivkin Chairman & CEO