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October 2, 2017

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

Re: Request for public comment on
the 2017 Special 301 Out of Cycle
Review of Notorious Markets.
Docket No. USTR-2017-0015

Dear Ms. Peterson:

The Motion Picture Association of America submits the following response to the request for written submissions issued August 16, 2017, 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 million jobs and \$134 billion in total wages in 2015. Nearly 319,000 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 free-lance 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 353,000 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 2015, the enduring value and global appeal of U.S. entertainment earned \$17.8 billion in audiovisual exports. Moreover, this industry is one of the few that consistently generates a positive balance of trade. In 2015, that services trade surplus was \$13.3 billion, or five percent of the total U.S. private-sector trade surplus in services. The

industry exported four times what it imported in 2015.

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 focused solely 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

While the legitimate digital marketplace for creative content is flourishing, online content theft continues to pose a significant and evolving challenge. Content thieves take advantage of a wide constellation of easy-to-use online technologies, such as direct download and streaming, to create infringing sites and applications, often with 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 some website operators and intermediaries 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.

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 nature and scope of online content theft. When possible, we have attempted to provide the specific information requested in the NOI, including popularity rankings from Alexa¹ and site traffic data from SimilarWeb², as well as information on revenue sources, volume, among other details. MPAA has also attempted

¹ 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.

² 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.

to respond to the NOI's request for information of any known enforcement activity 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 work to obfuscate identifying information such as location, and can hide behind anonymizer 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.

An emerging global threat is streaming piracy which is enabled by piracy devices preloaded with software to illicitly stream movies and television programming and a burgeoning ecosystem of infringing add-ons. The most popular software is an open source media player software, Kodi. Although Kodi is not itself unlawful, and does not host or link to unlicensed content, it can be easily configured to direct consumers toward unlicensed films and television shows. 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." There are more than 750 websites offering infringing devices or software. Moreover, vendors online and in malls, markets and trade shows market "fully loaded" devices that are preconfigured to access unlicensed content, further reducing the complexity of accessing pirated works. The rapid growth of this problem is startling – six percent of North American households have a device with Kodi software configured to access pirated content and of the 38 million active Kodi users globally, 26 million use piracy add-on repository tvaddons.ag³. Tvaddons.ag is currently offline.

It is important to note that websites and applications that traffic in infringing movies, television shows, and other copyrighted content do not harm only the rights holder. 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 sites⁴. Another DCA study⁵ evaluated the appearance of advertising on infringing websites and found that one-third of the 589 infringing websites studied included links with the potential to infect users' computers with viruses and other malware. A related study⁶ found that approximately 70% of all the malware on the today is some kind of Trojan, including the Remote Access Trojan (RAT). This malware opens a user's device to a hacker, exposing their pictures, documents and personal

³ Sandvine, 2017 Global Internet Phenomena, Spotlight: the "fully loaded" Kodi ecosystem.

⁴ Digital Citizens Alliance, "Risk IQ," Available Online at: <https://media.gractions.com/314A5A5A9ABBBBC5E3BD824CF47C46EF4B9D3A76/d88c7e51-cb31-46a9-8365-87161afbef22.pdf>

⁵ Digital Citizens Alliance, "Good Money Still Going Bad: Digital Thieves and the Hijacking of the Online Ad Business," May 2015. Available online at: <http://illusionofmore.com/wp-content/uploads/2015/05/latest-DigitalCitizensAlliance5.pdf>

⁶ Digital Citizens Alliance, "Selling 'Slaving', Outing the Principal Enablers that Profit from Pushing Malware and Put Your Privacy at Risk," July 2015. Available at: <https://media.gractions.com/314A5A5A9ABBBBC5E3BD824CF47C46EF4B9D3A76/07027202-8151-4903-9c40-b6a8503743aa.pdf>

information, as well as turning on a user's webcam to spy on them, send emails that appear to be from the user, and even to launch malicious attacks against others from the hacked computer. Increasingly, illegal services also expose users to high-risk advertisements.⁷ Such risks jeopardize the general public, the health of the internet and legitimate digital trade.

Linking and Streaming Websites: Linking sites aggregate, organize and index links to content 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 cover art to represent 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 computer. Many streaming linking 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. 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.

In 2017, Putlocker dramatically changed its behaviour, morphing from a piracy site to a scam site (available at Putlocker.co): when users want to stream videos from putlocker.co, they are led to a scam site which asks users to register and to provide their credit card details. The data on all the Putlocker domains indicates severe disruption of what used to be the Putlocker site/brand. Preceding this, the Putlockers.ch domain was suspended by EuroDNS, following a February 22, 2017, Luxembourg court ordered suspension of the domain name, see *BEA v EuroDNS*, LU 220217 District Court Luxembourg, 22 February 2017 (6 domain names).

- **Fmovies.is** –Sweden. Fmovies also operates .se and .to domains and is currently one of the most popular streaming websites in the world providing access to popular movie and TV series. The site's current Alexa rank is 260 and is ranked 54 in India. Fmovies had 26.35 million unique visitors in July 2017 according to SimilarWeb data. The site is currently hosted at Lala-Bhoola Hosting Servers in Sweden and is being masked behind a reverse proxy service that curbs rights holders' ability to identify its precise host. This site uses Cloudflare services which mask the IP location of the website. Denmark's District Court Frederiksberg blocked the site in February 2017.
- **Gostream.is (Gomovies.to; 123movieshd.to)** – Vietnam and Ukraine. 123movies, now redirects to Gostream.is, the latest iteration of which is a very popular streaming website that embeds popular movie and series content from third-party cyberlockers. The site has undergone changes in 2016-2017, rebranding as gomovies in March 2017, and then the domain name registered as gostream in July 2017; it is believed this is due in part to high-profile pressure. Gostream currently has a global Alexa rank of 477 and a local rank of 170 in the U.S. Gostream (and its associated domains) garnered 18.45 million unique visitors in July 2017 according to SimilarWeb data. The site takes numerous steps to hide the identity of the operator, including using Cloudflare, but there is strong reason to believe the operator is still

⁷ See, e.g., Dr. Paul A. Watters, *The Impact of High Risk Advertising on Thai Social Values: The Role of Piracy Websites*, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=257058, March 2015.

in Vietnam; content is uploaded to cyberlockers from numerous email accounts originating from Can Tho University of Medicine and Pharmacy. The website is currently hosted at Privacy Ukraine LLC. AGCOM blocked Gomovies.to in April 2017.

- **Kinogo.club** – Netherlands. Kinogo.club, 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 241 and a local rank of 21 in Ukraine. Kinogo.club had 36.78 million worldwide unique visitors in July 2017 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 3NT Solutions, a hosting provider registered in the United Kingdom. Kinogo.club uses Cloudflare services which masks the IP location of the website.
- **MeWatchSeries.to** – Switzerland. Mewatchseries.to was previously watchseries.ac, remains one of the most popular websites in the world to find and view copyright infringing content. The site is owned and operated by the same group of operators that runs the Movshare Group of websites discussed above. Watchseries.ac had 1.3 million worldwide unique visitors in August 2017 according to SimilarWeb data. The site has a global Alexa rank of 11,613 and a local rank of 497 in the United Kingdom. Mewatchseries.to is currently hosted by Private Layer in Switzerland and uses Cloudflare services which masks the IP location of the web site.
- **Movie4k.tv** – Russia. Movie4k.tv is a popular streaming linking site with a current global Alexa rank of 1,287 and a rank of 84 in Germany. Movie4k.tv had 2.991million worldwide unique visitors in July 2017 according to SimilarWeb data. The site boasts: “We are one of the biggest internet movie websites today with free movies from years ago to the current date.” The site organizes movies by genre. The site operates from a number of top level domains (TLDs) including .me, and variants of the site have been subject to blocking orders in the United Kingdom, Denmark, Italy, Norway and Austria. Movie4k is hosted in Russia and is being masked behind a reverse proxy service curbing rights holders’ ability to identify its precise host. This site uses Cloudflare services which masks the IP location of the website.
- **Primewire.ag** – Switzerland. Formerly known as 1channel.ch, Primewire.ag is one of the most visited websites in the world for locating links to illicit copies of first run motion picture and television content. The site claims to link to more than 68,000 free copies of movies. The site encourages users to use a VPN and directly links to the provider Windscribe. Variants of the site have been subject to blocking orders in Norway, Portugal and the United Kingdom. In 2013, the streaming link site was hijacked by a group who moved the site to a new domain, Vodly.to. The original operators of 1channel then launched a new site, Primewire.ag, which now has a global Alexa rank of 1068 and a local U.S. rank of 564. Primewire.ag had 4.685 million worldwide unique visitors in July 2017 according to SimilarWeb data. Primewire.ag has been the subject of blocking orders in the United Kingdom, Norway and Denmark. Over the years, the site has employed numerous tactics attempting to make it “bullet proof” from enforcement measures and stay online, including hosting through a rotating inventory of 30 or more domains and a variety of hosting

locations. This site also uses Cloudflare services which masks the IP location of the website. Currently hosted at PrivateLayer in Switzerland, Primewire.ag is being masked behind a reverse proxy service that curbs rights holders' ability to identify its precise host.

- **Repelis.tv** – Mexico/Argentina/Spain/Peru/Venezuela. Repelis.tv is a popular streaming linking site that offers more than 150,000 links to more than 10,000 illegally reproduced titles including movies and television series. The website has been active since December 2013. Its global Alexa rank is 1,095 with the following Alexa ranks per country: Mexico, 64; Argentina, 102; Colombia, 70; Venezuela, 145; and, Spain, 226. Repelis.tv had 18.19 million worldwide unique visitors in August 2017 according to SimilarWeb data. Administrators of the website monetize it through advertising served by a large number of national and international ad networks. Repelis.tv uses Cloudflare services which masks the IP location of the web site.

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 illegal 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 up, enabling continued infringement. And, many cyberlockers and video hosting services, including Nowvideo.sx and the sites included in the Movshare group, do not respond at all to takedown notices.

According to a NetNames and Digital Citizens Alliance report,⁸ “[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

⁸ 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>.

download and streaming models. By making vast amounts of infringing premium content available to the public, these sites attract huge amounts of traffic.

- **Nowvideo.sx** (Ukraine) and the “**Movshare Group**” (Several locations). Nowvideo.sx, formerly Nowvideo.eu, is one of the top streaming cyberlocker sites worldwide. It pays its uploaders about USD \$20 per 1,000 downloads. Nowvideo.sx had 5.201 million worldwide unique visitors in July 2017 according to SimilarWeb data. The site also has a global Alexa rank of 3,022. Notably, Nowvideo.sx belongs to a family of problematic sites in the “Movshare Group”, which includes cyberlockers such as the popular Wholecloud.net, Auravid.to, Bitvid.sx, Nowdownload.ch and Clouptime.to are all under the same operators. Globally, the Movshare group receives an estimated 83 million unique visitors on a monthly basis (more than KickAss Torrents at the time of the shutdown) thus having an enormous reach around the world. Nowvideo.sx is hosted at Neterra in the Ukraine. Both the Court of Rome in 2014 and the Delhi High Court in 2014 have ordered ISPs in Italy and India to block various Nowvideo and Movshare sites.
- **Openload.co/oload.tv** – Romania. Openload.co is a streaming/download cyberlocker with a global Alexa ranking of 147. Oload.tv directs to openload.co. Openload.co had 77.03 million worldwide unique visitors and oload.tv had 7.316 million worldwide unique visitors in July 2017 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, United Kingdom and 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 707 and had 19.7 million global unique visitors in July 2017 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,⁹ Rapidgator.net generated approximately \$3.7 million in annual revenue, most of which comes from premium accounts. ISPs in Italy were ordered by the Court of Rome to block Rapidgator.net in April 2013. The hosting location of RapidGator.net is being masked behind a reverse proxy service to curb rights holders’ ability to identify its precise host.
- **Uploaded.net** – Netherlands/Switzerland. Uploaded.net is a direct download cyberlocker

⁹ Ibid

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. The popular site also has a global Alexa rank of 488 and a local ranking of 118 in Germany. NetNames' September 2014 report on cyberlockers¹⁰ found that Uploaded.net generates 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. ISPs in Italy were ordered by the Court of Rome to block Uploaded.net in April 2012. 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 28.01 million worldwide unique visitors in July 2017 according to SimilarWeb data. It is owned by Swiss company Cyando AG and is hosted at Eweka Internet Services B.v. in the Netherlands.

- **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 18 and a local ranking of 1 in Russia. VK.com had 216.8 million worldwide unique visitors in July 2017 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 corporate-owned servers in Russia.

Website Portals for Piracy Apps: An ecosystem has emerged around piracy apps for mobile, handheld, and other compatible devices. Websites provide the portal through which the app can be downloaded. Once downloaded and/or registered/subscribed, these apps provide users access to myriad pirate motion picture and television titles, including MPAA member studio content. These apps attract millions of consumers who often pay for subscriptions.

- **IpPlayBox.tv and related sites** – Thailand. The website ipplaybox.tv and related sites are portals that allow users to register to download apps. The apps allow users to access the

¹⁰ Ibid

latest run motion pictures, television content, sporting events, and live streamed PPV events and concerts. These sites are extremely popular in Thailand.

- **MoreTV and 3DBoBoVR** – China. Similar to the above, the MoreTV and 3DBoBoVR apps, with almost 24 million and 19 million downloads, respectively, pose existential threats to budding legitimate OTT and online platforms in China. The app facilitates access to infringing copies of the latest run motion pictures and television content. Different versions of the MoreTV and 3DBoBoVR apps facilitate viewing of infringing content on smart high definition TVs or any mobile device. The website moretv.com.cn is running on CDN service provided in China. The operator of the 3DBoBoVR app is a company listed in Shanghai.
- **TVPlus, TVBrowser, and KuaiKan** – China. App and add-on developers providing users with access to “free” TV, live sports, and other audiovisual content including movies and television programming, are on the rise. These three apps, run by related companies in China, now boast of more than 64 million downloads. They are problematic in that the content being provided is sourced from third parties, and under current Chinese law, there is a debate as to whether a service which does not store infringing or unauthorized content on its server can be held liable (the so-called “server principle”). Traditional copyright theories would hold that surely an app developer which 1) circumvents technological protection measures protecting content, 2) bypasses authentication protocols for that content, and 3) makes that content available to users for free, or worse yet, for a fee, would be liable for infringement. These app developers are taking advantage of a lacuna or uncertainty in the law to profit off the backs of copyright owners. These apps allow people in China to view movies, TV, and live events (e.g., sports) without payment to rights holders, on any device of their choosing, from mobile devices to high definition large-screen TVs in their homes.

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 (movie, TV show, and/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.

An important recent development in the BitTorrent landscape is the July 20, 2016, arrest of a Ukrainian man charged with owning and operating Kickass Torrents, the world’s most visited illegal file-sharing website, and seizure of the associated domain names. The owner was arrested on a charge of criminal copyright infringement. According to the US Department of Justice, Kickass Torrents was responsible for distributing over \$1 billion of copyrighted materials. Separately, in late 2015, following a lawsuit by the six member companies of the MPAA, the High Court of New Zealand issued an interim injunction against the operator of YTS, ordering him to shut down YTS and refrain from operating or promoting the site. This was part of a coordinated legal action against Popcorn Time in Canada. YTS, like Kickass Torrents, had been included in prior years’ Notorious Markets filings by the MPAA.

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 336 and a local rank of 87 in India. The site provides access to a range of content including movies, TV series, music and software. 1337x.to had 15.49 million worldwide unique visitors in July 2017 according to SimilarWeb data. The site is hosted in Switzerland in by Private Layer Inc. Variants of the site have been subject to blocking orders in the United Kingdom, Greece, Denmark, Portugal and Italy.
- **Rarbg.to** – Bosnia and Herzegovina. Rarbg.to is a popular torrent website with a global Alexa rank of 260 and a local rank of 318 in the U.S. The site provides access to a range of content including movies and TV series. Rarbg.to had 19.63 million worldwide unique visitors in July 2017 according to SimilarWeb data. The site is hosted in Bosnia and Herzegovina in by NETSAAP Transit Services. The site and its variants have been subject to blocking orders in Portugal, Italy, Denmark 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 313, and a local rank of 27 in Russia. Rutracker.org had 16.03 million worldwide unique visitors in July 2017 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.
- **ThePirateBay.org** – Unknown. Available in 35 languages, ThePirateBay.org (TPB) is one of the largest BitTorrent websites on the internet with a global Alexa rank of 87, and a local rank of 54 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 addition, another operator was captured in 2014 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 their top level domain to .SE in an effort to thwart site blocking orders in Austria, Belgium, Denmark, Finland, France, Iceland, Ireland, Italy, Malaysia, Netherlands, Norway, Portugal, Spain 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

number one position, it had a significant comeback after kat.cr and torrentz.eu went offline in 2016. ThePirateBay.org had 62.21million worldwide unique visitors in July 2017 according to SimilarWeb data. The hosting location of the website is kept hidden by two intermediaries: first by a reverse proxy service and then by a system located at the hosting provider VinaHost in Vietnam. In addition, users visiting the previously known .se domain are now redirected to the .org domain.

In May 2016 the Svea Court of Appeal decided to seize piratebay.se and thepiratebay.se from one of the original founders. The decision was appealed, and the Swedish Supreme Court has granted leave to appeal. A decision is expected within a year. In June 2017, the Court of Justice of the European Union (case C-610/15) confirmed that The Pirate Bay communicates to the public, directly infringing copyright.

- **torrentz2.eu** – Switzerland. This relatively new and very popular torrent search website has a global Alexa rank of 274 and a local rank in the US of 1,413. Torrentz2 emerged only this year following the closure of Torrentz.eu. The site positions itself as a new and improved version searching over 80 torrent sites. The site also operates a mirror site torrentz2.me and torrentz2.is. The site claims to currently index over 61,110,000 torrents. The site is currently hosted at Private Layer in Switzerland and is being masked behind a reverse proxy service that curbs rights holders' ability to identify its precise host. Portugal blocked the site in March 2017.

Hosting Providers: Hosting companies provide 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. Reverser proxy functionality hides the real IP address of a web server.

Given the central role of hosting providers in the online ecosystem, it is very concerning 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.

- **Netbrella** -- Panama/Sweden/Netherlands. Netbrella is known to host numerous infringing websites and is consistently noncompliant to MPAA notices. Netbrella does not have a

website with identifying information though it is operated out of Panama City with servers located in Sweden and the Netherlands.

- **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 including nowvideo.sx, one of the top streaming cyberlockers in the world; 1337x.to a very popular torrent indexing site; and, Primewire.ag, mewatchseries.to, and a highly notorious linking site. The company is registered in Panama and uses servers located in Switzerland.

Ad-Networks: 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 primewire.ag, projectfreetv.at and 123movies.to. 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,



Charles H. Rivkin
Chief Executive Officer