

PERU

INTERNATIONAL INTELLECTUAL PROPERTY ALLIANCE (IIPA) 2019 SPECIAL 301 REPORT ON COPYRIGHT PROTECTION AND ENFORCEMENT

Special 301 Recommendation: IIPA recommends that Peru remain on the Watch List in 2019.

Executive Summary:¹ Trade with Peru has almost doubled since the entry into force of the U.S.-Peru Trade Promotion Agreement (TPA) on February 1, 2009. Peru initially made promising steps to implement the comprehensive Intellectual Property Rights (IPR) chapter of the TPA, which contains high standards for copyright protection and enforcement in some areas. However, Peru has yet to complete reforms to achieve the high standards of copyright enforcement required. For example, Peru's law lacks a provision that provides statutory damages for civil copyright infringement. Peru must also ensure that infringing services cannot avoid liability. Most importantly, however, Peru needs to make more use of the existing judicial powers, especially those relating to injunctive relief in copyright infringement actions, and invest more effort into enforcement based on the legal tools already at the authorities' disposal.

While there has been some improvement in enforcement due to several notable enforcement actions, online and physical piracy continues to be a serious problem in Peru and attention to enforcement should continue to end Peru's status as a safe haven for pirate sites distributing content throughout Latin America. Online piracy has continued to grow strong, undermining the market for legitimate content in Peru and across the region. Individuals based in Peru operate many websites offering vast movie and music catalogs from national and international artists to stream and/or download. These sites are highly popular in places such as Argentina, Mexico, and Chile. Pirate businesses, which generate profits by selling advertising and user data, flourish as a result of the lack of coherent action by the government. For example, the website *SetBeat* had around half a million visitors from across the region in the last six months. Urgent action is required from the government to tackle this music piracy problem that is severely damaging Peruvian creative industries and the rights of composers, artists, performers, publishers, and producers. Notably, Peru lacks a specific law dealing with camcording and remains one of the main sources of camcorded materials in the region. To facilitate enforcement against this form of piracy, criminal penalties without a need to prove a profit intent should be enacted. The Internet piracy market managed within Peru is steadily increasing, and its impact is affecting not only Peru, but also other countries in the region. The websites attract hundreds of thousands, and for some countries millions, of visitors.

Additionally, while Peru needs to complete legislative reforms in several copyright areas, it is imperative that any legislation should be developed in consultation with rights holders and through the ordinary legislative process. However, neither such consultation nor the ordinary legislative process were followed by the government when Decreto Legislativo No. 1391 of 4 September 2018 was passed by the government in the exercise of delegated authority to legislate for 60 days without Congressional involvement in matters relating to economic management, the fight against corruption, and the protection of persons at risk of violence. It is highly concerning to see that these exceptional, delegated legislative powers were used to pass legislation concerning the operation of collective management organizations and that neither copyright holders nor the CMOs representing them were consulted, whereas the resulting legislation has a direct, negative impact on the licensing operations.

¹For more details on Peru's Special 301 history, see previous years' reports, at <https://iipa.org/reports/reports-by-country/>. For the history of Peru's Special 301 placement, see <https://iipa.org/files/uploads/2019/02/2019SPEC301HISTORICALCHART.pdf>.



PRIORITY ACTIONS REQUESTED TO BE TAKEN IN 2019

- Pass legislation to introduce clear secondary liability principles for online copyright infringement, establish obligations for ISPs to apply preventive technical measures to combat digital piracy, and provide for statutory damages for copyright infringement.
- Devote significantly more resources and political support to combat digital piracy.
- *El Instituto Nacional de Defensa de la Competencia y de la Protección de la Propiedad Intelectual* (INDECOPI), the agency charged with promoting and defending intellectual property rights, should work to consistently build upon the recent positive examples of IPR enforcement against administrators of piracy websites, who continue to find Peru to be a safe haven. Equally, INDECOPI should also take into consideration contractual practices within industries such as film and music and adequately enforce the existing rights of music rights holders to authorize public performance of music in movie theatres and other venues open to the public.
- Repeal Decreto Legislativo No. 1391 of 4 September 2018, consult with affected rights holders and their CMOs, and resume work on any reforms in this area, if necessary, through an ordinary legislative procedure.
- Pass legislation criminalizing the unauthorized camcording of films without the need to prove an intent to profit.
- Improve the efficiency and effectiveness of the judicial system.
- Grant country-wide jurisdiction to Lima's IP prosecution offices.

COPYRIGHT PIRACY IN PERU

Internet Piracy: Internet-based piracy is widespread in Peru. While Peru is not a leading country in broadband penetration, the number of Internet users is steadily increasing and the number of smartphone subscriptions has increased significantly. At present, there are approximately 22 million Internet users in Peru, representing about 68% of the population.² Mobile broadband penetration is growing rapidly. In 2016 there were 62 active mobile broadband subscriptions per 100 inhabitants, up from 55 the previous year.³ Fixed broadband is not nearly as prevalent, with only 6.7 fixed broadband subscriptions per 100 inhabitants (up from 6.4 in 2015).⁴

Streaming of pirated audiovisual content is prevalent in Peru, with a tendency towards an increase in consumption of internet protocol television (IPTV). This has materialized through all forms of streaming, including through websites, Piracy Devices (PDs) such as Android and Kodi boxes pre-loaded with piracy software, and mobile piracy apps and add-ons. In 2018, the top 180 Spanish-language audiovisual piracy websites received more than 200 million visits from Peru. Two websites the MPAA identified as notorious markets in 2018, *Pelispedia.tv* and *Pelisplus.tv*, are also highly popular in Peru and offer tens of thousands of infringing links to movies and television series. Such piracy websites as well as PDs and apps, affect the legitimate market in the entire region and must be addressed with urgency. Although Peru has seen an influx in modes of infringement with PD entering the market. The prosecution office is currently expanding the time and effort it dedicates to digital piracy. This helps prevent the piracy situation from worsening, even in light of the increased possibilities and methods for users to infringe.

Peru saw a significant increase in digital sales of recorded music in the last year, with almost all growth coming from licensed streaming platforms usually accessed on smartphones, often through a bundled subscription service. That increase is compensating for the steep decline in physical sales (physical sales revenue has gone down from \$0.6m to \$0.2m in just two years).⁵ However, unfair competition created by pirate websites, that are operating openly in Peru and offering millions of illegal music tracks to consumers, mainly via mobile devices, dampens the rate of market growth for the music sector and negatively affects the prospect of users switching to premium tiers of the various legitimate music services. If the legitimate music market is to develop to its full potential,

²See www.Internetworldstats.com.

³Data from International Telecommunication Union, *Measuring the Information Society Report 2017*, p. 144, https://www.itu.int/en/ITU-D/Statistics/Documents/publications/misr2017/MISR2017_Volume1.pdf.

⁴Id.

⁵IFPI, *Global Music Report* (April 2018), at p. 112, available at <http://www.ifpi.org/recording-industry-in-numbers.php> ("GMR 2018").

urgent action is required to tackle endemic piracy problems. Many websites offering vast music catalogs from national and international artists have numerous domain names registered abroad, but were created, and are administered by, individuals operating within Peru. Digital piracy businesses have flourished with different functionalities spanning from streaming and stream-ripping websites, download websites, and linking websites. These websites allow users to access and/or copy thousands of music tracks without authorization from rights holders and compete with legitimate services in the music market. Peruvian pirate websites profit by selling advertising placements and user data. Because the Peruvian Government does not take any substantive action towards the problem, these illegal businesses succeed. Beyond Peru, these websites are highly popular in places such as Argentina, Mexico, and Chile. Examples of the websites are *Foxmusica* (now subject to an INDECOPI order, see below), *FullTono*, *Enladisco*, *BuenTema* and *SetBeat*. All of these websites have a strong regional audience. *SetBeat* for example received around half a million monthly visitors in each of the last six months of 2018. The Peruvian Government needs to take the music piracy problem seriously because it damages the intellectual property rights of Peruvian and international composers, artists, performers, publishers, and producers. It should also shift the focus and training at INDECOPI to better address the problem of digital piracy. Further, as explained below, there is also little to no support from online intermediaries, who are not incentivized to work meaningfully with rights holders to tackle piracy due to a lack of clear secondary liability principles in place. Engagement between rights holders, ISPs, and other key Internet intermediaries should be encouraged.

Hard Goods Piracy: Some industries, such as the motion picture and software industries, have found that hard goods piracy is still prevalent in the Peruvian market, though Peruvian customs has been cooperative. In the notorious black markets such as *Polvos Azules*, *Polvos Rosados*, *Hueco*, and *Mesa Redonda* (which is located one block away from the police and Public Ministry headquarters), pirates operate during daylight hours. There are also some popular shopping galleries and arcades that sell pirate products. The sale of pirate discs through street vendors, small stores, and stands located in informal discount retail centers continues to be the main channel of pirate commerce, and the one that most affects the audiovisual industry. Lima, Arequipa, Trujillo, Chiclayo, and Tacna have the most wide-spread hard goods piracy problem. The purchase of pirate and counterfeit hard goods through websites and online marketplaces is becoming more popular as Peruvians embrace e-commerce. For example, *mercadolibre.com.pe* hosts listings of hacked video game consoles that come installed with infringing video games, as well as listings of circumvention devices and counterfeit consoles bundled with hundreds of infringing video games ("legacy" titles). In addition to advertising listings on *Mercado Libre*, many top sellers also run their own proprietary e-commerce sites where they traffic in video game circumvention devices and services. Optical disc piracy is a major problem in Peru, where large numbers of blank media (e.g., CDs, DVDs) are imported and then used for burning copyrighted content. These discs are then sold in street markets and over the Internet. There are thousands of street vendors selling burned DVD-Rs containing the latest Hollywood releases, available for US\$1.00 each. It is no longer possible to evaluate the dimension of piracy based simply on the volume of optical disc imports. The decline in reported imports of blank media in recent years does not necessarily mean that the amount of blank CDs and DVDs used by pirates has decreased in recent years (down to 16.2 million units in 2007, more recent data is not available).

Camcording: Camcording piracy has grown exponentially over the last few years in Latin America. With the developments in camcorder technology, the camcorded copies are nearly perfect and make detection extremely difficult. Peru remains one of the leading sources of unauthorized camcords in the region and does not have a specific law regulating this issue. Sixteen illicit audio and/or video recordings of MPAA member films were sourced from Peruvian theaters in 2018. While this is an improvement compared to the same period in 2017, Peru is still among the top four sources for camcorded films in South America, along with Mexico, Brazil, and Ecuador. Professional cammers feel safe to conduct this activity in Peru because criminal convictions require proof that the recording was made with an economic intent, which makes it virtually impossible to obtain a conviction. Peru needs to enact legislation that would effectively criminalize unauthorized camcording of films.

COMPLIANCE WITH EXISTING OBLIGATIONS TO THE UNITED STATES

The U.S.-Peru Trade Promotion Agreement (TPA) entered into force on February 1, 2009.⁶ As part of the TPA, Peru also signed IPR-related Side Letters, including one on ISP liability and another on retransmission issues. While Peru acted expeditiously to implement many IPR provisions of the TPA,⁷ it has not yet achieved the objectives of the TPA, which were to improve the level of effective enforcement of copyrighted content online, including through the availability of statutory damages (TPA Article 16.11.8). This long-overdue reform is needed to provide deterrence and encourage settlement of civil claims of infringement.

OTHER COPYRIGHT LAW AND RELATED ISSUES

Bill on Performer Remuneration Rights: The motion picture and recording industries are concerned with a mandatory licensing bill introduced in June 2017, known as either the Cultural Workers Bill or the Art Worker Bill. This bill, if implemented, would grant an unwaivable, nonassignable remuneration right for audiovisual and music performers on top of the existing contractual payments they receive, and even when such rights have been transferred or assigned through contract. The bill also creates an unwaivable remuneration right for made for hire authors of musical works and a mandatory remuneration payable when a recorded performance is copied to a new format. The remuneration claims will be subject to mandatory collective management. This would benefit the collecting societies involved at the expense of restraining trade for U.S. works because performer compensation is collectively bargained for and subject to worldwide exploitation. Peru has already implemented the rights of performers and other rights holders as provided in the international treaties. The proposed bill would only complicate the launch and operation of legal audiovisual and music services. Furthermore, it would frustrate the freedom of contract in the industries. The bill awaits consideration in the Culture and Cultural Heritage Commission and the Labor and Social Security Commission. However, the bill's sponsor resigned in 2018, thus reducing the likelihood of any imminent movement on the initiative.

Copyright Levies: Peru is one of the few markets in the region that has implemented a private copy levy (along with Paraguay, Dominican Republic, and Ecuador) to compensate rights holders for the private use exception applicable to blank media. Unfortunately, the provision has become seriously outdated in that the levies are limited to blank media from the analogue and early digital eras and do not include the typical devices on which private copying takes place these days. INDECOPI needs to urgently update the list of media to which the levy applies in order to keep up with and accurately reflect the current consumption habits. Also, new regulations need to include provisions that empower customs to enforce the levy.

Necessary Legal Reform: Anti-camcording legislation is necessary to address the rapid increase in camcording. Peru should adopt a legislative framework specifically criminalizing illicit camcording in theaters without requiring proof of profit intent. The lack of anti-camcord laws to criminalize unauthorized movie recordings makes it difficult to obtain cooperation from law enforcement and prosecutors. In a promising move, INDECOPI recently proposed a modification to the Criminal Code that aims to improve enforcement against illicit camcording in movie theaters. While the initial proposal appears to remove the need to prove a profit motive, the IIPA urges lawmakers to maintain this provision, which is key to enabling stronger enforcement as the legislative process unfolds in the coming months.

Additionally, with no clear secondary copyright liability principles in place, online intermediaries are not incentivized to participate at a level that will create a sustainable and lasting effect on the piracy situation, and some businesses even engage in copyright-restricted acts while claiming to be mere neutral intermediaries. In addition to

⁶The final text of the TPA Intellectual Property Rights (IPR) Chapter is posted on USTR's website at <https://ustr.gov/trade-agreements/free-trade-agreements/peru-tpa/final-text>.

⁷Peru passed several pieces of legislation that implemented various copyright and enforcement measures. Legislative Decree No. 1076, published on June 26, 2008, amended the copyright law in a number of positive ways to implement the TPA, especially with respect to technological protection measures (TPMs) and judicial remedies.

supporting the implementation of clear provisions on liability principles, INDECOPI should encourage engagement between rights holders, ISPs, and other key Internet intermediaries. This would be further accomplished by imposing legal obligations on ISPs to act or otherwise risk secondary liability.

Copyright Law Amendments: An unexpected amendment was passed in September (Decreto Legislativo No. 1391 of 4 September 2018). The partial amendment to the Copyright Law, sponsored by INDECOPI and approved at Congress without consultation with any rights holder' groups or copyright organizations in Peru, included provisions intended to modify the legal regime for collecting societies (CMOs). Among other modifications, the amendment imposes a limitation on the number of votes that a member can have at a particular CMO. Before these amendments passed, votes at general meetings were assigned to members in proportion to the distributions received from the CMO. The system allowed members with significant catalogs, such as international rights holders, to secure direct participation at governing bodies. However, the amendments introduce considerable uncertainty into CMO governance, including with respect to the CMOs performance regarding collection and distribution.

Another concerning provision in the amendments is the limitation on the operational expenses incurred by a CMO acting on behalf of another CMO in the market. In such instances, a CMO is limited to 30% of total collections. This provision, however, will negatively affect CMOs generally, by constraining the ability of CMOs to assist other CMOs and by depriving CMOs in need of assistance from receiving it. This operational expense limitation will reduce the operational capacity of CMOs by depriving them of needed resources, including significantly constraining their ability to hire personnel and address other basic business expenses.

Synch Rights and Cinematic Works: Two administrative decisions⁸ by INDECOPI against the Peruvian Association of Authors and Composers (APDAYC) on the same day in May 2017 raised concerns regarding sync licensing and public performance rights. INDECOPI held that once a musical work is synched for a film, the owner of the musical work forfeits its remaining rights. The decisions are misinformed as to the operation of sync contracts and the practices in the music and film industries and depart as a matter of law from the correct interpretation of the existing Peruvian law, including even the INDECOPI's own prior guidance on the application of the public performance rights. As a result of the ruling, APDAYC cannot license, enforce, or collect royalties for musical works. This has in turn hampered the ability of the American Society of Composers, Authors, and Publishers (ASCAP) to license U.S. musical works because ASCAP relies on APDAYC to license public performances of its repertoire in Peru. An appeal was filed by the APDAYC against one of the decisions and ADPAYC was supported by the recording industry in their efforts to overturn the administrative decisions in question.

COPYRIGHT ENFORCEMENT IN PERU

On balance, enforcement has improved in the past two years, though criminal and administrative enforcement against piracy is hampered by a distinct lack of resources devoted to combatting piracy, and, in particular, online piracy. That being said, industry sectors generally report good cooperation with the criminal enforcement authorities (prosecutors, police, administrative, and tax authorities) handling hard goods piracy, but continuing difficulties exist in obtaining prosecutions and administrative measures that would result in effective sanctions to deter piracy. Peru has a cross-commission established by law, *Comisión de Lucha contra los Delitos Aduaneros y la Piratería*, to "fight against border-control infringements and piracy."⁹ This commission should focus on establishing priority enforcement targets from each affected industry to make combatting piracy a governmental

⁸Asociación Peruana de Autores y Compositores (APDAYC) v Cineplex SA, 24 May 2017 (case reference 002902-2016/DDA, Resolution number 278-2017/CDA-INDECOPI) and APDAYC v Cinemark del Peru Srl, 24 May 2017 (case reference 002903-2016/DDA, resolution number 279-2017/CDA-INDECOPI).

⁹The commission is comprised of the Ministry of Production; the Ministry of Economy and Finance; the Ministry of Trade and Tourism; the Ministry of Internal Affairs; the Ministry of Defense; the Commissioner of Tax Administration; a representative of the General Prosecution Office; the President of *El Instituto Nacional de Defensa de la Competencia y de la Protección de la Propiedad Intelectual* (INDECOPI); and representatives of the National Association of Industries, the Finance Intelligence Unit of Peru, the National Group of Commerce Chambers, Small and Medium Company Associations, the Association of Border Agents of Peru, the Association of Exporters, the State Governments, the Committee to Fight Against Piracy (*Contracopia*), the Peruvian Books Chamber, the Association of Phonographic Producers, the Association of Cities of Peru, the National Association of Authors and Composers (APDAYC), and the National Council of Cinema (CONACINE).

priority. The U.S. Secret Service agency deployed to Lima has conducted trainings and assisted local police efforts against organized crime, which is usually related to the large and organized distributors of pirated media content. In the longer term, this effort should counteract piracy and counterfeiting activity in Peru. Additionally, the deployment of a Department of Justice Law Enforcement Coordinator (IPLEC) to Latin America should help coordinate training efforts across the region. However, more needs to be done to ensure effective and proper copyright enforcement.

Criminal Anti-Piracy Enforcement in Peru

Police actions and prosecutions: The copyright industries have excellent relationships with the Fiscal Police, as well as with the specialized prosecution division in Lima for Intellectual Property and Border Enforcement (*Fiscalia Especializada en Delitos Aduaneros y Contra la Propiedad Intelectual*). However, this specialized prosecution division has very limited geographic jurisdiction, which limits its effectiveness. For example, the jurisdiction of the specialized IP prosecution offices in Lima are based on territory. Cases outside of Lima need to be prosecuted by local prosecutors, many of whom are not specialized in this matter. Specialized prosecution offices should have jurisdiction over the entire country. There is also a continued need to allocate more public resources to support the special IPR unit of the Fiscal Police (*Division de Investigacion de Delitos contra los Derechos Intelectuales*) in order to conduct effective anti-piracy investigations, support the National Police, and provide troops when large raids are conducted. Moreover, the National Police lacks sufficient resources to develop intelligence plans that would support investigating and discovering large warehouses of pirated goods.

The four IPR prosecutors in Lima's special prosecution division work with INDECOPI when they are requested to do so. Unfortunately, filing a complaint before a judge can take four to six months after the raid has occurred; in fact, some cases have seen delays as long as two years from the time of the raid before getting to court. Amidst all of these challenges, Peru has made some positive strides in enforcement. On September 13th, 2017, the High-Technology Police Unit in Lima, Peru (DIVINDAT) and the 2nd IP Prosecution Office executed raids on four premises belonging to the operators of the websites *Pelis24.tv*, *Series24.tv*, and *Pelis24.com*. These sites were constantly amongst the five largest Spanish-language websites in the LATAM region. These raids were executed following a court order seizing electronic equipment, documents, and any evidence related to the three mentioned websites; temporary arrest of the three operators of the websites; and suspension of the websites. In April 2018, the three operators of these websites were each convicted to 2 years, 11 months, and 20 days of imprisonment for the crime of Copyright Violation, specifically public communication and reproduction of the works without authorization and with a profit intent. The judge further issued an order seizing all assets in relation to the illegal activity and transferring the three domains definitively to the Motion Picture Association of America (MPAA). The result of this case was very positive and produced the first-ever precedent on a digital copyright infringement criminal case in the country. It was the first of its kind, in Peru, to recognize an injunction as an adequate means to interrupt the continuous, criminal, intellectual property violations. Additionally, the court order solidified that this type of activity may constitute an act of infringement by distributing copyrighted works to the public and that the monetization through advertisement suffices as indicating a profit intent. While these victories are well-received, more resources need to be invested in enforcement to ensure sustainable change.

Problems with the judiciary—non-deterrent results and delays: Few criminal IPR cases reach the Peruvian judiciary, and if they do, judges do not impose deterrent sentences. Judges do not appear to perceive the importance of IPR or see IPR crimes as 'dangerous'; as a result, sentences are non-deterrent. Criminal sentences take between 3-5 years to be issued, and cases often languish even longer. For example, a criminal case involving circumvention devices that was filed in 2011 was repeatedly delayed due to excessive bureaucracy and appeals, but was finally concluded in 2017 when the Supreme Court of Peru rejected an appeal by the defendants. The defendant was found guilty of Article 220-B of the Peruvian Criminal Code: Products made to circumvent a technological protection measure. Despite this positive outcome, many cases remain "pending" and languish in the courts. Some cases for some of our members have been pending for nine years or more as a result of multiple appeals and administrative delays. Such delays cause brand owners to incur prolonged legal fees, which become even more burdensome when courts do not impose deterrent sentences. Furthermore, the Peruvian Criminal Procedure Code

permits sentences of four years or less to be suspended. This has continued even after several positive amendments to the criminal code, including: (1) the 2004 amendments, which provided an increase of minimum sentencing to four or more years for copyright infringements, and (2) amendments made in November 2006 to penalize repeat offenders with stronger sanctions and establish additional penalties for more crimes.

INDECOPI and Administrative Enforcement

INDECOPI serves as an administrative enforcement agency for the copyright sector. It has been active in public awareness and educational campaigns, and it also collects royalties for the public performance right. INDECOPI is supposed to be self-funded through its income from patent and trademark registrations and from the fines imposed by its administrative bodies. However, significant fiscal restrictions have adversely affected *ex officio* enforcement activities. Additional resources should be allocated to support INDECOPI's *ex officio* enforcement efforts.

Need for consistent administrative enforcement: Despite some legislative deficiencies, INDECOPI must work within the current legal regime to take action against pirate sites, suspend their domain names, and fine the operators. INDECOPI needs to maintain consistent enforcement and strengthen its commitment towards the digital piracy problem. Unfortunately, due to its wide range of activities and competences, INDECOPI tends to get pulled in different directions, resulting in a lack of consistent action or lasting effort on individual issues.

Increasing deterrent sanctions: Through Legislative Decree No. 807, INDECOPI has the authority to issue fines against individuals or businesses that refuse to be investigated. Article 28 of this law stipulates that if an individual or business is served with an injunction or receives a fine from INDECOPI and fails to comply, the maximum allowable penalty for the violation will be imposed. If the non-compliance persists, then INDECOPI may impose a new fine, the amount of which will be doubled at established intervals. INDECOPI can file a criminal complaint with the Office of the Public Prosecutor. To support greater enforcement against piracy, IIPA suggests that regulations be issued increasing and establishing fines, which would also help fund INDECOPI's actions.

Developing a digital anti-piracy campaign: Record producers have filed a number of cases with INDECOPI to address digital piracy. These collaborative efforts should remain consistent and develop into a long-lasting, anti-piracy campaign. On October 10, 2017, INDECOPI issued a first suspension order to a significant pirate service operating under the domain name *Foxmusica.me*. Further, 2018 saw the implementation of Peru's first site-blocking decision in an administrative case filed before INDECOPI. The decision was directed at *Roja Directa*, a site dedicated to the illegal streaming of soccer matches. IIPA expects that these actions will be followed by more orders. At this point, 19 additional cases have already been filed. While this is a positive step, rights holders have identified more pirate domains that should be the subject of future orders. INDECOPI's continued interest in, and attention to, digital piracy will be crucial for tackling these pirate sites.