

A Decade After SOPA/PIPA, It's Time to Revisit Website Blocking

NIGEL CORY | JANUARY 2022

In 2012, U.S. lawmakers scuttled legislation to block websites trafficking in pirated content after opponents instigated a furious backlash by claiming it would “break the Internet.” But since then, dozens of countries have done it effectively—and the Internet continues to flourish.

KEY TAKEAWAYS

- The core argument against the House and Senate bills known as the Stop Online Piracy Act and Protect IP Act, respectively (SOPA/PIPA), was that blocking piracy websites would undermine the Internet’s technical foundations. But it was a canard.
- Absent effective restraints, piracy continues to threaten the jobs and economic and cultural contributions of America’s creative sectors. Multitudes of offshore piracy services make it easy to access pirated content in the United States.
- Research from Australia, the United Kingdom, and elsewhere proves the intuitive rationale for website blocking—if enough piracy sites are blocked, then people will shift to legal sources, especially given the growing number of such services.
- Not all content on the Internet deserves to exist and be protected by law. Many countries have shown it is possible to take reasonable, targeted measures against illegal material without undermining their commitment to “a free and open Internet.”
- It is a false binary to suggest the Internet can only be completely free or closed. What matters is what and how some things are blocked, where the lines are drawn, and how they are overseen by courts.
- Courts in Australia, the European Union, and elsewhere have demonstrated that website blocking is a fair, effective, and proportionate tool to target major piracy sites and that it does not undermine human rights, free speech, or net neutrality.
- It’s time for the United States to follow the rest of the world by creating an effective legal pathway for rightsholders to get ISPs to block access to websites involved in the mass (not incidental) dissemination of copyright-infringing content.

INTRODUCTION

A decade ago, Congress considered legislation known as the Stop Online Piracy Act (in the House) and the Protect IP Act (in the Senate)—or “SOPA/PIPA”—that would have allowed rightsholders to seek a court order requiring Internet service providers (ISPs) to block the domain names of foreign infringing sites. The legislation would have also required search engines, payment networks, and advertising networks to stop doing business with those sites.¹ But after a number of companies and advocacy groups staged a global blackout of popular websites, warning that this legislation was tantamount to censorship and would destroy the Internet, the ensuing public backlash led Congress to drop the proposal.

Since then, 33 countries—including dozens that are democratic, rule-of-law, and human-rights-defending—have allowed rightsholders to obtain injunctions requiring ISPs to block access to websites involved in mass disseminations of copyright-infringing content, and the Internet continues to flourish. (See the appendix.) Moreover, in these countries, website blocking has proven effective in reducing piracy and encouraging more consumers to use legal content services. Courts in Australia, the European Union, India, and elsewhere demonstrate that SOPA/PIPA-era criticisms simply do not hold up to scrutiny—as implemented to date, website blocking is a fair, effective, and proportionate tool to target sites involved in the mass, illegal dissemination of copyrighted content and that it does not undermine human rights, free speech, or net neutrality. It’s time the United States followed the rest of the world and created an effective legal pathway for rightsholders to get ISPs to block access to piracy websites involved in the mass dissemination of copyright-infringing content.

Video games, video streaming, and other digital content and services have helped people get through COVID-19, but with better antipiracy policies, they could have created an even more vibrant and supportive environment for content creators. Piracy remains a large and growing problem that threatens the employment, economic, and cultural contributions of the many creative sectors of the U.S. economy, especially film, television, video games, and music. As legal streaming services have proliferated, so has digital piracy, as criminal actors adapt to take advantage of new technologies and consumer behaviors, such as piracy-loaded TV set-top boxes. A U.S. Chamber of Commerce study shows that piracy stifles the economic growth and progress generated by streaming, estimating that global online piracy costs the U.S. economy at least \$29.2 billion in lost revenue each year.² This is important, as the film and TV industry, directly and indirectly, supports over 2.5 million U.S. jobs.³ The video game industry—which is bigger than Hollywood—supported over 429,000 jobs and generated over \$90 billion in economic output in 2019 alone.⁴

In the battle between legal and pirated content, the status quo in the United States still clearly favors piracy. It takes seconds with a simple search to find and access piracy sites. Cost-benefit analyses of making this somewhat more difficult through website blocking (and other actions) show that the benefits vastly outweigh the costs. Research from the United Kingdom and elsewhere around the world shows that blocking access to a large group of prominent piracy websites, on an ongoing basis, is enough to shift many people from illegal to legal content services.⁵

Many democratic, human-rights-respecting countries—Australia, Denmark, Germany, India, Ireland, Israel, Italy, the Netherlands, Portugal, Sweden, the United Kingdom, and others—use website blocking as a tool to block websites that disseminate illegal content and services such as child pornography, malware, investment fraud, terrorism, counterfeiting, and copyright infringement. Around the world, 33 countries are actively allowing rightsholders to use website blocking for copyright enforcement. Of these, 20 also allow for dynamic blocking injunctions (to block the proxy and mirror sites to which the piracy operators shift once the primary site is blocked), and 7 allow for live blocking injunctions (to block illegal streams of live events). What this shows is that since the SOPA/PIPA debate in the United States in 2010-2012, policymakers around the world have moved on as they realize that website blocking is an effective tool to fight digital piracy that does not “break the Internet.”

Opponents of website blocking hope that cries of “censorship” will trigger a Pavlovian response that is intense enough to cause policymakers, the media, and citizens to recoil from the proposal itself.⁶ This gets to a central point opponents don’t want to acknowledge: Not all content on the Internet deserves to exist and be protected by law, just as not all content offline deserves to exist and be protected by law. The Internet is not “special”—it is subject to laws and regulations like any other technology. The growing use of website blocking for copyright enforcement shows that countries can take clear, reasonable, and targeted measures against illegal material and activity online without undermining their commitment to “a free and open Internet.” In fact, blocking piracy sites in a careful and judicious manner doesn’t undermine freedom, it expands it—unless one champions a version of “freedom” that includes the freedom to steal.⁷ No one accuses an opponent of trade in elephant tusks of being anti-free trade. Likewise, no one should be accused of supporting censorship just because they favor the blocking of illegal online content.

A decade after SOPA/PIPA, with dozens of democratic, human-rights-respecting countries using website blocking against thousands of piracy websites, it’s clear that the hyperbolic claims of SOPA/PIPA opponents have proven baseless.

Therefore, the key issue for U.S. policymakers when considering Internet freedom is not whether the Internet is and should be completely free or whether governments should have unlimited censorship authority. Even the most ardent “information should be free” advocates acknowledge that some content, such as child pornography, should be blocked. So the issue is not between blocking and open, but what things are blocked and how; where and how the appropriate lines should be drawn, and how they are overseen. This should be the foundation for Congress restarting this debate about how to craft legislation that allows timely website blocking for copyright infringement in the United States.

This report analyzes the SOPA/PIPA debate over website blocking in the United States and how its adoption in dozens of countries around the world over the last decade shows that the hysterical criticisms leveled against it during this debate have proven baseless. It then provides a review of recent research showing that website blocking effectively reduces access to pirated services and encourages consumers to use legal content providers. It then reviews important EU court decisions that analyze many key legal questions that would inevitably come up in the United States. These EU court decisions also disprove many common criticisms opponents use to

attack website blocking. The report then looks at how the debate over website blocking has changed worldwide, with policymakers and stakeholders, such as ISPs and search engines (many of which had previously been opposed to website blocking), working together to create website-blocking systems.

Finally, the report provides recommendations for the United States in reconsidering website blocking:

- Congress should enact legislation to allow rightsholders to ask courts for a legal injunction for ISPs to block access to piracy websites clearly involved in the mass distribution of copyright-infringing material.
 - This legislation should allow for dynamic and live injunction orders, as major piracy sites tend to shift to proxy sites once their main site is blocked, and it should focus on broadcasting pirated streams of live events.
 - Rightsholders should be allowed to use blocking injunctions to target piracy cyberlockers and stream-ripping services.
 - Legislation should provide judicial oversight and the option for redress if a website feels it has been unfairly blocked.
- To inform legislation, Congress should take the U.S. Copyright Office up on its suggestion to conduct a detailed study into website blocking and its potential use in the United States.⁸ The Copyright Office observed that site blocking has been “an effective tool in addressing digital piracy,” and cautioned against “misperceptions” about claimed overreach and abuse in connection with site blocking. It noted that the conflicting views among different sets of stakeholders “argue in favor of additional, dedicated study before adopting such a proposal.”
 - This study should analyze the impact of piracy on the U.S. economy and, more specifically, content creators.
 - It should provide a comparative analysis of other countries’ website-blocking systems to help guide the development of legislation.⁹
 - It should analyze the best ways, including safeguards, to ensure website-blocking injunctions only target services involved in the mass distribution of pirated material (not websites with incidental or minor amounts of pirated material).

THE REST OF THE WORLD HAS MOVED ON FROM SOPA/PIPA HYSTERIA

At the time of the SOPA/PIPA debate, which was 2010 to 2012, the United Kingdom was the only country (starting in 2011) that allowed rightsholders to get injunctions to ask ISPs to block access to piracy sites involved in the mass distribution of copyright-infringing content.¹⁰ Now there are dozens of countries. The debate in these countries has changed dramatically compared with SOPA/PIPA. Policymakers, tech firms, rightsholders, and others realized that the fear and misinformation that defined the SOPA/PIPA debate were untrue and that policymakers could work with stakeholders to create legal and administrative frameworks that are fair, effective, and proportionate. This process shows that the Internet and copyright enforcement online is not a

special issue that is somehow immune from the laws and regulations that govern the rest of society.

In 2010 and 2011, the Preventing Real Online Threats to Economic Creativity and Theft of Intellectual Property Act (PROTECT IP Act or PIPA) and the Stop Online Piracy Act (SOPA) sparked a contentious and distorted debate that has thus far poisoned any and all serious consideration of website blocking in the United States.¹¹ One can engage in a legitimate debate over whether these bills were crafted in optimal ways. But rather than do that, opponents sought, successfully, to just kill them outright.

While these bills have important differences, many of their enforcement mechanisms are the same as those in other countries in that they enable Internet intermediaries to take action against foreign-hosted websites that are outside the jurisdiction of U.S. law enforcement and other legal remedies. In essence, website blocking is the logical end point, as rightsholders have no other legal remedies to stop foreign piracy websites from being accessible to people in the United States—where, absent website blocking, these piracy sites are essentially acting with impunity.

Policymakers, tech firms, rightsholders, and others realize that the fear and misinformation that defined the SOPA/PIPA debate were untrue and that it's eminently possible to create balanced and efficient website-blocking frameworks.

Much of the controversy over SOPA/PIPA was based on false or misleading information. As the Information Technology and Innovation Foundation's (ITIF's) report "PIPA/SOPA: Responding to Critics and Finding a Path Forward" details, much of this has been driven by "Internet exceptionalists."¹² For these advocates, the Internet is inherently different from the offline world and should be off-limits to the societal rules that democratically elected governments want to impose on it. Any attempt to put limitations on illegal activities is decried as the first step to totalitarian repression. For example, the Electronic Frontier Foundation (EFF), using some especially over-the-top language, called SOPA "censorship," and a "massive piece of job-killing Internet regulation." And perhaps the most over the top—and at the time of SOPA/PIPA, what no policymaker wanted to be accused of being responsible for—was that it would "break the Internet."¹³ Clearly, that reticence is gone, and has been replaced with almost the opposite: a passion to hammer "big tech."

Ten years later, with dozens of democratic, human-rights-respecting countries using website blocking against thousands of piracy websites, it's clear that not only do these claims remain untrue, but their hyperbolic nature has undermined efforts to have reasonable and rational debates about other Internet-related issues over the last decade. After all, advocates have learned that there are few downsides to spreading fear, doubt, and uncertainty about Internet policy, so they continue to use this tactic today, such as to oppose facial recognition, call for breaking up large tech companies, and argue that social media should be more heavily regulated because it is dangerous to children.

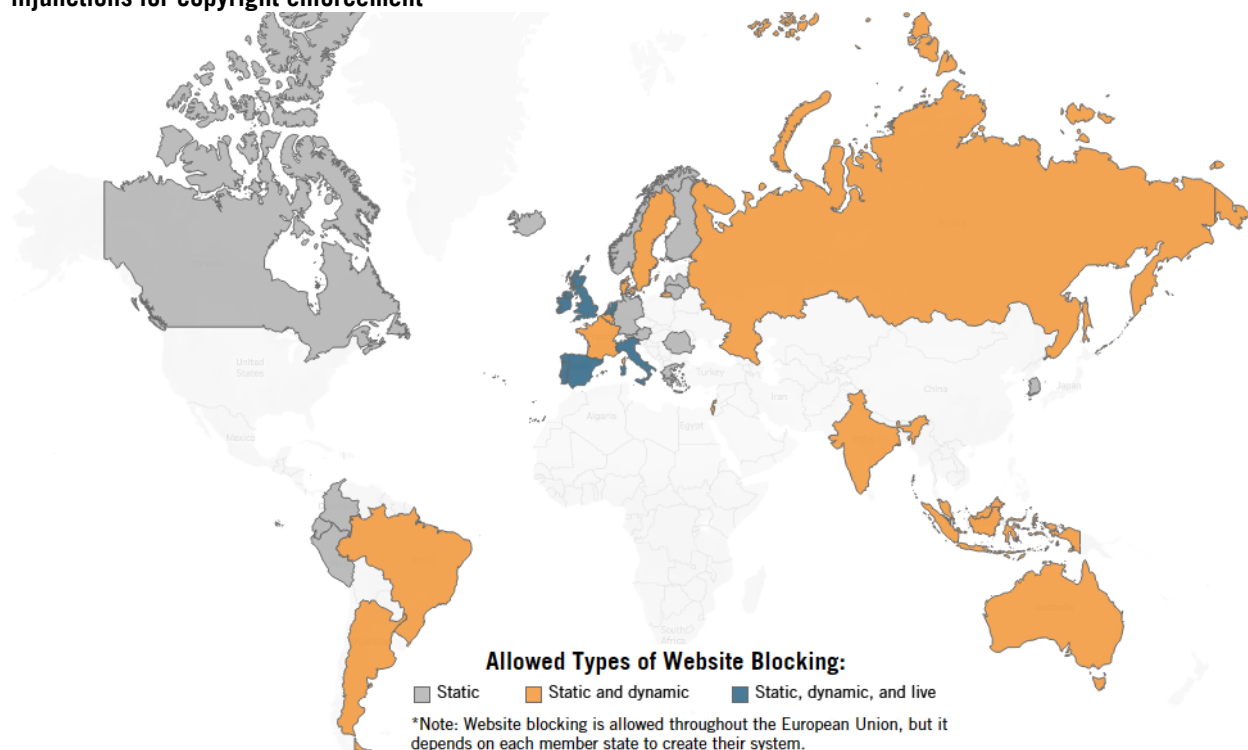
Thankfully, when it comes to online piracy, policymakers outside the United States have increasingly ignored the vitriolic SOPA/PIPA-like arguments. Instead, they look at the growing body of evidence, case law, and model frameworks to help them develop their own legal and

administrative frameworks, with appropriate checks and balances, to allow rightsholders to work with ISPs and other intermediaries to block access to websites that are clearly involved in piracy as a business. U.S. policymakers should follow their lead.

WEBSITE BLOCKING FOR COPYRIGHT INFRINGEMENT HAS BECOME NORMALIZED

Website blocking for copyright infringement has been normalized as a tool to fight digital piracy and support legal content creators and services, whether it's TV, film, books, video games, or music.¹⁴ Figure 1 shows that 34 countries actively allow rightsholders to request website blocking for copyright infringement. At least another 12 countries (e.g., Bulgaria, Croatia, Cyprus, Czech Republic, Estonia, Hungary, Liechtenstein, Luxembourg, Malta, Poland, Slovakia, and Slovenia) have laws that allow website blocking but aren't (as yet) actively using the legal authority to block websites.

Figure 1: Global map of countries allowing rightsholders to use static, dynamic, and live website-blocking injunctions for copyright enforcement



Politicians and policy leaders from around the world have come out in support of website blocking and more significant action to target digital piracy (quotes from European political leaders is in the separate section below):

- **Australia:** Mitch Fifield, former minister for communications and the arts (2018): “[W]here a site exists purely to facilitate piracy, and with judicial oversight playing a crucial role, the website blocking scheme has been very successful in further reducing copyright infringement.”¹⁵
- **Brazil:** André Mendonça, minister of justice and public security (2020), stating that digital piracy’s lucrative profits demonstrate that it was not just a crime of copyright, but also money laundering and possible criminal organization.”¹⁶

- **India:** Justice Manmohan Singh, Delhi High Court (2019): “[W]ebsite blocking in the case of rogue websites, like the defendant websites, strikes a balance between preserving the benefits of a free and open Internet and efforts to stop crimes such as digital piracy.”¹⁷
- **The Philippines:** Teodoro C. Pascua, deputy director general, Intellectual Property Office of the Philippines (IPOP HL): “With these inter-coordination mechanisms being developed, IP right holders must be more active and emboldened to enforce their IP rights and file a complaint with our IEO. Rest assured that IPOP HL and its antipiracy partners will work hard to ensure the successful and timely removal of their pirated content online and avert the losses of an already struggling industry.”¹⁸
- **Singapore:** The Intellectual Property Office of Singapore (2018): “We are glad to see rights holders utilizing the [site blocking] legal framework that we have put in place to protect their copyright works.”¹⁹

A growing number of countries also allow live and dynamic blocking injunctions so sports leagues and other live event organizers can block sites providing pirated streams before and during live events (see figure 1). The British Premier League, UEFA, the Italian Serie A and B soccer competitions, and others have received live blocking injunctions in Ireland, the United Kingdom, Italy, and elsewhere in Europe. Similarly, in 2021, Canadian firms applied for a dynamic blocking order to protect their broadcast rights for National Hockey League games in Canada.²⁰ Courts issue live injunctions for the duration of a season. While sporting events are typically not subject to copyright protection, teams and organizations retain the exclusive right to license the broadcasts of their events. Regardless of the distinctions in copyright laws, broadcast licensing of sporting events is integral to every country’s professional sports, which often flows directly to teams and their efforts to support those sports and new players.²¹

Research Update: Website Blocking Is Effective in Reducing Piracy and Increasing Consumption of Legal Content

A growing body of research proves the intuitive basis of website blocking: If enough piracy sites are blocked, then people will shift to legal sources, especially given the growing number of such services. The research shows that it is an effective tool. But it should be one of many tools that together build a digital economy that supports the creation and consumption of legal content, rather than pirated content. The following studies from the United Kingdom, Australia, Indonesia, and Portugal, respectively, provide data points to support the growing use of website blocking.

How Piracy Website Blocking Affects Consumer Behavior

“The Effect of Piracy Website Blocking on Consumer Behavior,” by academics Brett Danaher, Jonathan Hersh, Michael Smith, and Rahul Telang, is a granular, data-driven study into the impact of a series of website-blocking orders in the United Kingdom. It provides a valuable comparative assessment of website blocks of different strengths (from orders that block only one site to others that block many major sites).²² ITIF’s report “How Website Blocking Is Curbing Digital Piracy Without ‘Breaking the Internet’” details Danaher et al.’s initial study.²³

This study, initially released in April 2016, shows that the expansion of website blocking in the United Kingdom has been effective in fighting digital piracy. The study uses consumer-level data (of nearly 60,000 users, broken into 10 groups based on their piracy activity) to analyze how a

court order for ISPs to block 53 websites in the United Kingdom in November 2014 changed user behavior regarding their consumption of illegal and legal content. It shows what consumers do when they face a block, they find ways to circumvent the blocks, find other sites to access pirated content, increase their use of legal channels, or decrease their consumption of the media in question.

The results are clear: Website blocking was effective in changing consumer behavior, causing a 90 percent drop in visits to the blocked sites by users in the study sample (from 86,735 visits to blocked sites to 10,474), while causing no increase in usage of unblocked piracy websites. The blocking of these websites had a significant impact on piracy, leading to a 22 percent decrease in total piracy for all users affected by the blocks. These blocks changed consumer behavior, with a 10 percent increase in user visits to legal ad-supported streaming sites such as the United Kingdom's BBC and Channel 5. It also caused an estimated 6 percent increase in visits by users to paid legal subscription-based streaming sites such as Netflix.²⁴ Website blocking had a significant impact on heavy consumers of pirated content. The final version of the study (published in 2019) includes a new analysis of the impact website blocking had on heavy consumers of pirated content. Looking only at users who did not visit subscription sites pre-block, the study found a causal relationship between users who were more affected by the blocks (as they were relatively heavy users of piracy sites) and those more likely to become new paid subscribers.

Danaher et al.'s research makes an intuitive point: Much like the Greek myth of the multiheaded Hydra, to be effective, website blocking needs to affect a broad range of major piracy sites. Blocking just one site is ineffective.

In conclusion, the authors made an intuitive point: Systems need to block access to a broad range of major piracy sites to be truly effective in shifting people to legal content providers. Danaher et al. used the analogy of the Greek myth of the Hydra, the mythical, multiheaded beast, to capture the context of the debate around digital piracy. Opponents of greater online enforcement compare piracy sites to Hydra, in that cutting off one "head" only results in several more growing back to replace it (via proxy and mirror sites). Blocking a single site is akin to decapitating only one of the Hydra's heads.²⁵ However, blocking multiple sites at once is like decapitating several heads, significantly disrupting the network of piracy sites and thus directing more users to increase their use of legal channels. Such blocking could also be mortally wounding to piracy sites, with anecdotal cases (such as from Time2Watch) showing piracy sites in Europe having had to shut down due to the impact of broad and consistent blocking.²⁶

Australia: MPA's Replication of Danaher et al. Shows Website Blocking Shifts Even Heavy Piracy Users to Legal Content

In 2020, the Motion Picture Association (MPA) replicated Danaher et al.'s methodology to study a wave of website-blocking orders in Australia in 2018, which had a similar impact as in the United Kingdom in reducing visits to blocked sites and increasing visits to legal content sites.²⁷

The study used an individual-level panel dataset from 6,241 Australian visitors' weekly desktop visits to sites over a four-month period from November 2018 to February 2019. These were put into three categories: December 2018 blocked piracy sites, unblocked piracy sites, and legal

content viewing sites. Prior to the December 20, 2018, wave of blocking orders, 15 percent of all individuals in the dataset had visited one or more of the blocked domains in the seven weeks before the blocks were put in place, and the blocked sites made up 39 percent of the total visits to piracy sites pre-block.

This wave of blocked websites led to a 19 percent decrease in visits post-blocking. Similar to Danaher et al., prior visits to blocked sites was associated with increased visits to legal content sites in the period after blocking. Overall site-blocking also caused a statistically significant 5 percent increase in visits to legal sites and an 11 percent increase in visitation to unblocked piracy sites.²⁸ The heaviest consumers of piracy services drove both of these notable changes in behavior. For example, the impact on the sub-group of heaviest users showed a 39 percent increase to unblocked piracy sites and a 17 percent increase in visits to legal content sites.

The study reinforces the finding from Danaher et al., showing that website blocking is effective in shifting even heavy consumers of pirated content to legal sources. However, to change consumption over the long term, rightsholders need to consistently ensure top piracy sites are blocked and that other access points (i.e., search) don't help displaced piracy users find other piracy sites. For example, a 2020 survey of piracy behavior in Australia shows that 51 percent of respondents had run into a blocked site, and in response, 67 percent turned to an alternative legal source to access the same content. The same survey study shows that 76 percent of respondents used a search engine to search for an alternative site for the same content, while 74 percent went directly to an alternative piracy site.²⁹ Indeed, this result is rather intuitive: Users will visit a piracy website if it is a top search result ahead of legal options, but if they only find legal options, then that is where they will go. This survey and the MPA study support the case for broad and consistent blocking of major piracy sites, and working with search engines to stop them from providing easy access to piracy sites.

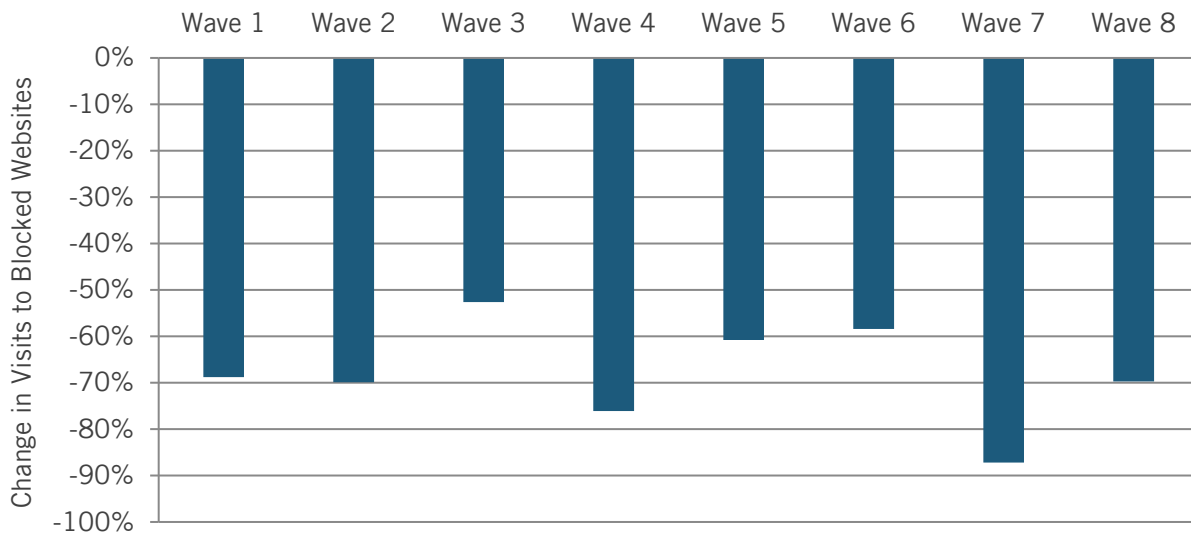
Indonesia's Rolling Website Blocks Reduced Piracy and Increased Consumption of Legal Content

Piracy undermines content creators everywhere, but especially so in developing countries such as Indonesia, where their ability to (financially) sustain creativity is already difficult due to the lack of proper IP protection and enforcement. Starting in July 2019, and continuing into 2020, Indonesia's Ministry of Communication and Information Technology has worked with the Video Coalition of Indonesia (VCI) to block over 2,300 piracy streaming sites.³⁰ According to one survey-based study, the blocks directly impacted consumer viewing habits, as 55 percent of consumers noticed piracy websites being continually blocked and therefore no longer accessed any of them; 34 percent stated that they now "only rarely" accessed piracy websites; and 16 percent said they were aware of the government blocking piracy sites and had since subscribed to a paid streaming service.³¹

Portugal: Website Blocking Had a Significant Impact on Piracy Visits

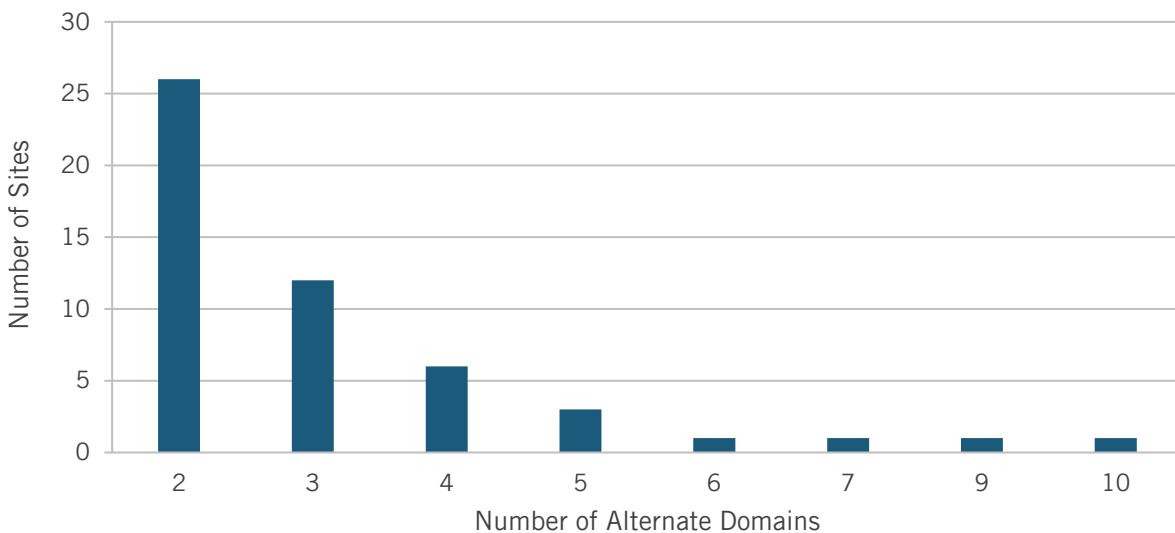
A 2017 INCOPRO (a brand and intellectual property (IP) protection company) study of eight "waves" of blocking orders (targeting 146 sites) in Portugal from November 2015 to October 2016 showed a 68 percent drop in visits to blocked sites (see figure 2).³² The study highlights the need for blocks to (constantly) target the most popular sites, showing that the 65 blocked websites in the top 250 piracy sites in Portugal saw a 56 percent decrease in visits, but that visits to those sites globally increased 3.9 percent.

Figure 2: Efficacy of eight waves of blocking orders in Portugal, November 2015 to October 2016³³



The headline impact—a 70 percent drop in visits to blocked sites—is consistent with studies in other countries showing visits dropping by around that amount, but that this gradually decreases over time with shifts to proxies and other piracy sites (again, showing the importance of updated blocking injunctions). Figure 3 shows how common it is for major piracy sites to have proxy sites. Of the 146 blocked sites, 51 had at least one alternative domain (for a total of 159 alternative URLs). For wave 1, there is evidence of a shift in usage to alternative sites after the blocks, as seen for sites such as Extratorrent, which had proxies extratorrent.cc, etmirror.com, extratorrent.date, etproxy.com, and extraterroentlive.com. However, indicative of the impact of blocking the primary piracy sites, the study shows that these proxies got a much smaller share of visits than pre-block. This also happened for the piracy site Kickass in the second wave and key piracy sites in waves 3, 4, and 7. However, the study did find that some alternative sites picked up more visitors post-block in waves 2 and 6.

Figure 3: Blocked sites with multiple domains³⁴



Many European politicians have spoken out in support of their respective website-blocking frameworks and broader efforts to fight piracy:

- Sander Dekker, Dutch minister for legal protection (2021): “This is an important step in tackling online piracy,” adding that copyrighted content should be “fairly rewarded and not illegally distributed.”³⁸
- José Manuel Rodríguez Uribes, Spain’s minister of culture (2021): “Proper protection of creators’ rights is a fundamental guarantee for the continued enjoyment of a rich and innovative cultural ecosystem.... The government is proud to place Spain at the forefront of member states that, through a voluntary code of conduct, promote self-regulation between the cultural sector and the telecommunications operators.”³⁹
- Roselyne Bachelot, French minister of culture (while presenting reforms to France’s audio-visual law, which deals with piracy) (2021): “[T]his strong increase in the consumption of dematerialized cultural goods has been accompanied by an increase in illicit practices, which justifies even more the provisions of this bill. The fight against piracy is strengthened by several provisions that target not Internet users, but websites that make a commercial profit from putting works online, in violation of creators’ rights.”
- The German federal government’s response to a question from members of the German Greens Party in regard to Germany’s website-blocking framework called *Die Clearingstelle Urheberrecht im Internet* (CUII) and known as a clearinghouse for copyright on the Internet:
 - “The Federal Government is of the opinion that, based on the current state of affairs, there are no fundamental objections to the establishment of CUII ... DNS blocks can lead to a containment of access to SUW [referring to “Strukturell urheberrechtsverletzende Webseite” or structurally copyright-infringing websites] and thus make it easier for rights holders to take action against SUW. Even if DNS blocks can be technically circumvented, DNS blocks create a barrier to accessing SUW and raise users’ awareness of copyright infringement by rights holders.... When examining reasonableness and proportionality, a balance must be struck between the affected fundamental rights of property protection of copyright holders and freedom of information and informational self-determination of Internet users ... Despite a DNS block, users still have the option of lawfully obtaining the copyrighted content from commercial streaming services, for example. According to the case law of the Federal Court of Justice, blocking is only reasonable if exclusively infringing content is made available on the website.”⁴⁰

It took a decade for European courts to clarify the use of website blocking in the region. In 2010, BREIN (a Dutch rightsholders’ group) asked Dutch courts to issue an injunction to get local ISPs to block their users from accessing the infamous piracy site The Pirate Bay.⁴¹ The case weaved its way up through Dutch courts, which eventually referred several key questions to the CJEU in 2015, which led to the *Stichting Brein* decision (analyzed below).⁴² The CJEU made its judgment in 2017, after which the case was referred back to Dutch courts. In mid-2020, the Amsterdam Court of Appeal (CoA) finally issued a dynamic blocking injunction that allowed two of the Netherlands’ largest ISPs, Ziggo and XS4All, to block access to The Pirate Bay.⁴³

The European court judgments highlight three key legal and policy points relevant to the U.S. debate.

The first key point: Piracy sites such as The Pirate Bay make acts of communication to the public and thereby are liable for copyright infringement.⁴⁴ The CJEU determined that even if the copyright-protected works in question are placed online by the users of the online sharing platform, the operators of that platform can play an essential and active role in making those works publicly available.⁴⁵ These acts impact several IP rights, including dissemination discretion, away from the content creators who legally have the sole right to choose where and how their content is communicated to the public.⁴⁶

This is important, as The Pirate Bay and other piracy sites try to defend themselves by claiming that they are not responsible for, or aware of, what their users post and therefore can't be held responsible for copyright-infringing content. The CJEU rejected this fallacy, as The Pirate Bay indexes, categorizes, and provides a search function for the torrent files (which guide users and content in a peer-to-peer file-sharing network) for copyright-protected material, making the illegal copies easier to locate and download. It also deletes obsolete or faulty torrent files and actively filters some content. It was clear that The Pirate Bay was aware that it provided access to works published without the consent of the copyright owners, given the latter had alerted them to that fact, and it did nothing about the problem. As if its name and this conduct weren't enough to make clear that its business was based on theft, the court noted that The Pirate Bay explicitly states in blogs and forums that it makes copyright-protected material available to users and encourages them to make further copies of such works.

The second key point: The Pirate Bay's central role in facilitating piracy means it is not protected by the same legal provisions that protect websites for being held responsible for user-posted content (i.e., a legal safe harbor). This contrasts with websites focused on legal content that engage in good-faith efforts with rightsholders concerning illegal content on their sites. This may seem like a simple and surprising point to casual readers—who can see in 10 seconds that The Pirate Bay is actively involved in providing massive amounts of pirated material and thus breaking the law—but it was an important legal outcome that makes this commonsense view clear in EU law. It also points to the absurdity of policy discussions wherein opponents of IP rights online still debate The Pirate Bay as if it were somehow unclear what its purpose is and whether the law should provide rightsholders with legal remedies to easily and quickly target actors like it.

The CJEU rejected the fallacy that The Pirate Bay and other piracy sites are not responsible for, or aware of, what their users post, as these sites clearly index, categorize, and provide a search function for torrent files of copyright-infringing material.

Piracy site operators consistently attempt to hide behind legal safe harbor provisions, but this decision removes that option for blatant piracy sites in Europe.⁴⁷ The CJEU stated that The Pirate Bay and others cannot try to play dumb about what is going on to avoid legal liability. Importantly, the CJEU decision states that operators of an online service such as The Pirate Bay (which pretend to be ignorant as to what their site is used for) are not required to have actual knowledge of infringing material on the site.⁴⁸ Rather, the bar for holding these service providers

legally liable is lowered to constructive knowledge (where they would know what is going on if they took a reasonable look).⁴⁹

The third key point: There was no doubt that The Pirate Bay's activities were carried out with the purpose of obtaining a profit. Swedish prosecutors claimed The Pirate Bay generated \$3 million in ad revenue each month, and this was in 2008, so it'd likely be much more today.⁵⁰ A 2013 study shows that the 30-largest piracy sites generated an average \$4.4 million in ad revenue annually, while high-traffic torrent and peer-to-peer sites made \$6 million annually.⁵¹ It's estimated that, in the United States alone, pirated subscription Internet Protocol Television services (those that resemble Netflix, etc.) is a \$1 billion industry.⁵²

The profit imperative for piracy site operators is important to reiterate given the false and naïve statement often made by opponents of IP that piracy operators are ideologically driven and simply trying to “set information free.” This framing remains embedded in many debates and media reports, despite the fact that piracy is blatantly theft. The CJEU's judgment clearly states that The Pirate Bay, and other major piracy sites, is a piracy-as-a-business model; it is not a human rights issue. If opponents of IP recognized and accepted these central points, it would be much easier to debate cases in which genuine human rights issues were involved and how best to calibrate laws and regulations to protect them. Instead, too often, opponents simply frame any and all efforts to enact online laws as censorship and attacks on human rights.⁵³

The Dutch Framework as a Model: Applying the European Court of Justice's Judgment to The Pirate Bay

The CoA's final decision holds Europe-wide implications, as it provides a replicable framework for other courts (and countries) to consider website-blocking cases.⁵⁴ The CoA's sensible application of the CJEU's core requirements to The Pirate Bay provides important points for U.S. policymakers on targeting mass (and not incidental) piracy operators, that dynamic website-blocking injunctions are effective, website blocking does not undermine human rights, website blocking is not a general monitoring obligation for websites, and website blocking does not undermine net neutrality.

The CoA's framework applies the CJEU's four requirements for determining whether to grant a dynamic website-blocking injunction:

1. The requested measures would not unnecessarily deprive Internet users of the possibility of lawfully accessing the information available.
2. The requested measures have the effect of preventing unauthorized access to protected subject-matter or, at least, of making it difficult to achieve and of seriously discouraging Internet users from accessing that subject matter;
3. The addressee of the injunction must have the possibility to maintain before the court that the measures taken were indeed those which could be expected of them to prevent the proscribed result; and
4. National procedural rules must provide a possibility for Internet users to assert their rights before the court once the implementing measures taken by the ISP are known.⁵⁵

First, the court noted that even if a piracy site had some lawful content, this should not preclude the use of a blocking injunction if the vast bulk of the material is copyright infringing. The court recognized that “The Pirate Bay represents only a ‘miniscule’ part of the information available on the internet,” and that the injunction was proportionate given the scale and severity of the copyright infringement facilitated by the site.⁵⁶ This means incidental lawful content (e.g., user-generated content) on a piracy site does not shield website operators from legal repercussions related to the bulk of its (illegal) content. This is a commonsense litmus test. There are so many piracy sites involved in large-scale piracy that it’s absurd to think rightsholders and policymakers should be worried about a website with just a few illegal files

Even if a piracy site has some lawful content, this should not preclude the use of a blocking injunction if the vast bulk of the material is copyright infringing.

Second, the court noted that website-blocking injunctions are reasonably effective in discouraging users from accessing sites with illegal content, such as The Pirate Bay. Recognizing the initial website-blocking injunction would not be 100 percent effective because some of The Pirate Bay users would shift to mirror and proxy sites, the court issued an injunction that is dynamic in scope, allowing regular amendments to include these mirror and proxy sites as they come to light. Some ISPs try to argue that they should not have to block websites because it is not 100 percent effective all of the time—as if it’s not worth doing anything if you can’t address everything perfectly all the time. The court’s sensible decision is based on the fact that the goal of website blocking is not to completely and immediately eliminate digital piracy, it’s to make it sufficiently difficult that it encourages casual consumers of piracy to shift to legal providers.

Third, the court weighed and balanced the human rights issues involved—the freedom of ISPs to conduct business and a rightsholder’s right to property—and determined that, given the relatively minor financial costs incurred by ISPs, the latter’s rights deserve precedence. The ISPs tried to make the case that getting them to implement website-blocking orders infringed on their freedom to conduct business (per article 16 of the Charter of Fundamental Rights of the European Union). The CoA determined that the blocking injunction, even if it imposes substantial costs on the ISP, does not unduly impinge on this right, as those costs are relatively minor in the grand scheme of the ISP’s business. Therefore, such costs are trumped by the rightsholder’s right to property (per article 17 of the Charter of Fundamental Rights of the European Union).

Fourth, the court determined that website blocking is targeted and proportionate and is not a general monitoring obligation, as it is directed at specific domain names. This is important, as opponents have tried to use a scare campaign based on the false premise that ISPs will be peering into users’ web activity.

Fifth, the court determined that website blocking does not undermine net neutrality. Net neutrality, in the context of website blocking in Europe, is a canard.⁵⁷ It does not violate net neutrality because the underlying fundamental rights can be curtailed by lawful measures.

THE WEBSITE-BLOCKING DEBATE HAS CHANGED

The growing use of website blocking in Europe and elsewhere around the world reflects the fact that the context for the debate over website blocking has changed dramatically since SOPA/PIPA.

Growing policymaker and public concern over digital content means that the SOPA/PIPA-era defense that tech firms are not responsible for taking reasonable steps to address clearly illegal material and services online does not work. It's part of the broader change in context regarding digital issues, as policymakers, and the public, increasingly expect firms to do more to address a growing list of issues, such as data privacy, cybersecurity, terrorism-related material, and disinformation. More and more countries are raising the bar for what they expect in terms of firms demonstrating that they are responsible and constructive stakeholders building a safe and prosperous digital economy. To be sure, some are raising the bar too high, and in unfair ways (e.g., raising the bar only for American or large firms).

Many critical digital intermediaries (to their credit) have also shifted from outright, active opposition to acceptance—and in some cases, active support—of website blocking. This includes ISPs and search engines in several countries. However, some intermediaries, such as website security company Cloudflare, continue to act as if expectations for greater responsibility and action do not apply to them. Cloudflare and other intermediaries continue to host major copyright-infringing services.⁵⁸

ISPs in many countries initially opposed website blocking. However, as frameworks have been designed, enacted, and tested over the years, they've seen that their initial fears were unfounded and that it is straightforward and low cost for them. A growing number of ISPs actively support website blocking, as they are also content creators and owners that face the same competitive threat posed by piracy as other content creators. The following case study on Germany is indicative of how ISPs, rightsholders, and the government are working together in many countries to create website-blocking frameworks to help address digital piracy.

ISPs and search engines in many countries have shifted from outright, active opposition to acceptance—and in some cases, active support—of website blocking, as they realize their initial fears were unfounded and that it is a straightforward way for them to support a digital economy that's based on legal content.

Similarly, some search engines (in certain countries) have moved from outright opposition to acceptance, abiding by legislation or voluntary agreements to work alongside website-blocking regimes to remove or de-index piracy sites. For example, the United Kingdom (a voluntary code of conduct), France (legislation), Russia (a memorandum of understanding), and Australia (legislation) have taken additional steps to ensure search engines play a more active role in fighting piracy. For example, Google has removed “The Pirate Bay” from its search results in Brazil, France, the Netherlands, Norway, and elsewhere.⁵⁹

Case Study: Germany's Multistakeholder Initiative to Create an Efficient Website-Blocking Framework

In 2021, Germany created the CUII, a joint initiative of rightsholders (music, film, gaming, and scientific publications sectors), industry associations, ISPs, legal experts (retired judges with knowledge of German copyright law), and the government to more efficiently manage the blocking of websites that systematically infringe on copyright, while also accounting for net neutrality requirements.⁶⁰ The first website CUII blocked was called “serienstreams,” a German-

language site that streamed TV shows from Netflix, Disney+, Sky, and others with 8 million unique visits a month.⁶¹

German ISPs recognized that it was better for them to play a constructive role alongside other stakeholders in enacting a balanced and efficient framework. Judith Steinbrecher (Bitkom, a tech trade association that includes ISPs) made this clear: “With the establishment of the clearing body [CUII], we have jointly found a way to obtain independent, resilient and at the same time extremely high-quality professional decisions on how to deal with copyright blocking claims against internet access providers. Internet blocking can only be the last resort as a measure against copyright infringement. Internet access providers cannot be more than a helping hand and therefore welcome the solution found.”⁶²

All decisions are subject to judicial review and review by Bundesnetzagentur (BNetzA), Germany’s Federal Network Agency, which is responsible for enforcing net neutrality requirements. This disproves another unwarranted criticism: that website blocking undermines net neutrality. BNetzA considers net neutrality implications in each blocking application—and in approving website blocks, shows that it doesn’t impede them.⁶³ Jochen Homann, BNetzA president, stated, “The clearance system is a fast and efficient way to block websites that are systematically infringing [on] copyright ... The new system will help to avoid the long, expensive legal proceedings that rightsholders have had to rely on up to now.”⁶⁴

KEY RECOMMENDATIONS AND ISSUES FOR THE UNITED STATES

The United States should enact legislation to allow rightsholders to ask courts for a legal injunction for ISPs to block access to piracy websites and services clearly involved in the mass distribution of copyright-infringing material. U.S. policymakers should move past the fear and misinformation campaigns of SOPA/PIPA and start the process immediately.

As a first step, Congress should take the U.S. Copyright Office up on their suggestion to conduct a detailed study of website blocking and its potential use in the United States.⁶⁵ The Copyright Office has already observed that site blocking has been “an effective tool in addressing digital piracy,” cautioning against misperceptions about claimed overreach or abuse in connection with site blocking, but noted the conflicting views among different sets of stakeholders “argue in favor of additional, dedicated study before adopting such a proposal.”

The study should analyze the cost and impact of piracy on the U.S. economy and content creators, and provide a comparative analysis of other countries’ website-blocking systems to help guide the development of legislation, similar to the EUIPO study of website blocking in the EU.⁶⁶ The study should also analyze how best to ensure website-blocking injunctions only target services involved in the mass distribution of pirated material, and not websites with incidental or minor amounts of pirated material. This latter point is critical, and while legislators were clear that SOPA/PIPA was aimed at sites “dedicated to theft of U.S. intellectual property,” to avoid similar critiques, Congress will need to ensure that future legislation clearly instructs courts to only authorize orders to block websites involved in widescale infringement. Someone accidentally posting a photo on their website that violates copyright law should not face the risk of having that site blocked. In contrast, sites dedicate to piracy should.

The following sections analyze key issues and components of a U.S. website-blocking framework.

Enact a Transparent and Balanced Framework That Targets Major (Not Incidental) Piracy Players

The features of a transparent, balanced, and efficient U.S. website-blocking framework are straightforward: a court or administrative process that allows rightsholders to present clear and detailed evidence to authorities to consider in issuing injunctions for ISPs to block access to websites and services that are blatantly, overwhelmingly, or structurally engaged in piracy. It would have relevant checks and balances, including notice requirements; rights for the website, ISPs, and interested parties to give evidence and participate in a hearing; and judicial review and oversight of all decisions. It would also allow for judicial review.

Concerns About Over-Blocking Are Misguided

Even with a case-by-case legal or administrative process in place, a common concern among policymakers when first considering website blocking is over-blocking—wherein injunctions mistakenly impact websites that are not involved in the mass distribution of pirated content. Opponents point to authoritarian governments that block access to content that is not illegal but only upsetting to those in power as evidence against any blocking. But this is akin to saying that democratic, rule-of-law nations should not have jails, because authoritarian nations lock up political prisoners. The reality is democracies can, have, and should institute checks and balances and legal requirements and metrics to prove that a site is engaged in the mass dissemination of pirated material.

Democratic, rule-of-law countries with an independent and professional judiciary can ensure that only applications that target piracy sites involved in the mass distribution of copyright-infringing material are blocked. The easy first step for a court or administrative process to avert any potential over-blocking is to consider applications on a case-by-case basis. Rightsholders would list and detail the type and amount of copyright-infringing material on each site. While challenges from mistakenly blocked sites are rare worldwide (given that cases tend to involve sites with huge amounts of infringing material), any website-blocking framework should include an avenue of redress for any sites that may have been mistakenly targeted.

The onus (rightly) is on rightsholders (not ISPs) to identify and report piracy sites, as courts in the United Kingdom and elsewhere have done. To help ensure injunctions are effective, the United States should allow rightsholders to employ technology such as INCOPRO's "Blockwatch" (which uses public information and has been recognized and endorsed by U.K. courts) to help them accurately identify and monitor the locations of websites that are subject to site-blocking orders.⁶⁷ Such technology identifies the new proxy sites piracy sites shift to in trying to circumvent the site blocking, allows rightsholders to ensure that over-blocking is avoided, and is automated in that once a target website is added, it monitors any changes in the location.

Allow Live and Dynamic Blocking Injunctions and Injunctions to Target Cyberlockers and Stream-Ripping Sites

The United States IP enforcement framework needs an adaptable website-blocking framework to fight modern piracy, which continues to change with technology and consumer preferences (e.g., the shift from downloading to streaming). Other countries recognize the importance of an adaptable system in allowing rightsholders to apply for blocking injunctions that are dynamic (to target the proxy sites piracy operators shift to after their main site is blocked) or live (so as to

block pirated streams of live events), and to target key piracy services such as stream-rippers and cyberlockers. The following section analyzes each of these adaptive uses.

Allow Dynamic Blocking Injunctions

The United States should allow dynamic injunctions to allow rightsholders to require ISPs to block both a piracy site's primary domain name and IP address and any subsequent domains they shift to. For example, freepiratedstuff.com shifts to freepiratedstuff2.com after the former is blocked.

A growing number of countries allow such dynamic injunctions:

- **Australia:** In August 2019, the Federal Court in Sydney enacted Australia's first dynamic injunction, targeting a list of 35 torrent, streaming, and related proxy sites.⁶⁸ It was also the first time a rightsholder had directly targeted proxy sites. A 2018 change in Australia's copyright law allowed dynamic injunctions to target sites that have a "primary effect" of facilitating access to the infringing content of initial piracy sites.⁶⁹
- **India:** On July 27, 2020, the Delhi High Court granted a dynamic injunction against 118 piracy sites.⁷⁰ The court allowed rightsholders to update the list of blocked websites by adding the names of mirror/redirect/alphanumeric websites piracy operators set up after ISPs blocked their primary sites.
- **Singapore:** In July 2020, Singaporean courts granted a dynamic injunction to cover 15 flagrantly infringing online locations that contained copyright-protected content from the English Premier League, Discovery, BBC, La Liga, and TVB.⁷¹
- **Sweden:** In December 2019, Sweden's Patent and Market Court issued its first dynamic injunction. ISPs are now required to "take reasonable steps" to block customers' access to identified illegal file-sharing services, not only on the listed domain names and web addresses (subject to a separate traditional blocking injunction), but, for a period of three years, on domain names and websites "whose sole purpose is to provide access to said illegal file-sharing services."⁷²

Allow Live Blocking Injunctions for Sporting and Other Live Events

The United States should allow rightsholders to apply for live and dynamic injunctions to get ISPs to block pirated streams of sporting events and other live events for a set period of time (e.g., the duration of a sports season or competition). This is necessary for live events, as legal injunctions ordering ISPs to block sites after the event is over are useless because their value is highest during the live broadcast.

The United Kingdom shows that dynamic and live injunction orders, and the use of technology, can combat the piracy of live sporting events. In 2017, the Premier League (the top level of the English soccer competition) obtained a live blocking injunction from the U.K. High Court for the duration of the season.⁷³ The Premier League initially applied for an injunction to cover all live games from March 18, 2017, until May 22, 2017. It was deemed successful, so the league applied for and received another injunction for the 2018 season. Other sports companies such as Matchroom Boxing and Queensbury Promotions have obtained injunctions to block pirated streams of their live events as well.⁷⁴ Similarly, in 2020, Ireland's High Court also granted a dynamic blocking injunction to UEFA's EURO 2020 and other matches taking place during the

2020/2021 soccer season.⁷⁵ In February 2020, the Madrid Commercial Court granted Spanish broadcaster Telefónica Audiovisual Digital (which holds the rights to the national La Liga soccer competition) a dynamic, live blocking injunction to block a list of 44 known piracy sites, which can be updated to add new entries.⁷⁶ The injunction is valid until May 25, 2022 (thus covering three seasons).⁷⁷

The United States should allow rightsholders to apply for live injunctions, as static injunctions after a live event are over are largely useless because the value of the associated rights is highest during the broadcast.

Live injunctions are necessary, as piracy providers increasingly use set-top boxes, media players, and mobile devices loaded with piracy apps to deliver infringing streams (rather than web browsers running on computers). Furthermore, media set-top boxes, such as a Kodi and Roku, can be preloaded with apps with access to large-scale libraries of pirated movies, music, and television shows.⁷⁸ Blocking pirated Internet Protocol television (IPTV) broadcasts is more complex than traditional website blocking, as the targeted servers and systems are more dynamic. During live events, content is either manually or fingerprint matched, with IP addresses extracted from DNS information related to host names in media URLs and servers hosting electronic program guides (all of which are used by IPTV piracy services).⁷⁹ For example, before and during a game of soccer, Sky UK analyzes network traffic in real time (using artificial intelligence) to identify servers providing pirated streams through set-top boxes.⁸⁰ After confirmation, Sky UK shares the details of these servers with U.K.-based ISPs to block access.

Live blocking injunctions make access to pirated streams harder, costlier, less reliable, and more of an inconvenience (by cutting in at the start of a match). While the block may only exist for the duration of the match, that is enough of a disruption for many consumers to switch to legal services providers. Mr. Mohamed Hammady, CTO at Sky UK, said, “The result is a phenomenal reduction in pirate sites in the UK.”⁸¹ The real-time blocking of media-box-based piracy services has resulted in significant disruptions to piracy operators, with some deciding to stop streaming live sporting events altogether.⁸²

Allow Blocking of Online Stream-Ripping Services and Piracy Cyberlockers

The United States should ensure that its website-blocking framework allows rightsholders to target online stream-ripping services and piracy cyberlockers, as they are major facilitators of piracy.

Stream ripping is the process of converting (or “ripping”) the audio or video data from streaming services (e.g., YouTube, Spotify, and Vimeo) into permanent downloads. Legal streaming services such as YouTube deliberately prevent users from downloading copies of streaming audio or video, but the technology used by stream-ripping services circumvents, and breaches, YouTube’s technical and copyright protections. Stream ripping is among the most significant piracy threats to the music industry. A study carried out by PRS for Music (a U.K. collecting society for members’ musical works) finds that “overall usage of stream-ripping services dramatically increased by 1390% between 2016 and 2019, overshadowing all other illegal online music activity in the UK.”⁸³

A cyberlocker is essentially a file-hosting service akin to a legitimate cloud storage service such as DropBox, but piracy operators use it to allow users to upload and download copyright-infringing content. Piracy cyberlockers allow users to upload/download illegal material for free and reward users who upload illegal content by allowing them to earn money each time their content is downloaded. Piracy operators allow users to create shareable URL links to make it easy for others to access the pirated content.⁸⁴ The United Kingdom's Intellectual Property Office studies estimate between 4 and 10 percent of infringing activity involves cyberlockers.⁸⁵ A NetNames and the Digital Citizens Alliance report that examined the 15 most popular direct-download cyberlockers and the 15 most popular streaming cyberlockers estimates that these sites earn an estimated \$96 million a year. The vast majority of the content on these sites (78–84 percent) is infringing content, and most of the money earned by cyberlockers comes from paid subscriptions (70 percent), while most of the money earned by stream ripping comes from advertising (70 percent).⁸⁶

The United States should follow the United Kingdom's recent decision to grant blocking injunctions to target these major online stream-ripping services and cyberlockers engaged in pervasive piracy. In March 2021, England's High Court granted music-industry representatives a landmark injunction to get ISPs to block access to major stream-ripping services and cyberlockers.⁸⁷ The judge determined that these sites directly infringe on copyright by performing unauthorized acts of communication to the public. Music industry representatives spent two years preparing the case against the stream-ripping platforms, producing 3,000 pages of evidence in support of their application for a blocking injunction. They also negotiated with the United Kingdom's largest ISPs to ensure they agreed with the material and the application. The ruling blocked four key stream-ripping sites, including Flyto (which averaged approximately 58 million annual U.K. visits per month before the blocks), 2Conv (approximately 25 million), Fly2mp3, and H2 Converter, among others.⁸⁸

No Silver Bullet: Integrate Website Blocking With Other Antipiracy Measures

The United States should follow the rest of the world in allowing rightsholders to use website-blocking injunctions to targeting piracy sites, but do so recognizing that it is not a silver bullet for digital piracy. It should simply be one of many tools for rightsholders to use to better protect IP and reward creativity.

Other antipiracy tools include voluntary agreements between key intermediaries in the digital economy to address shared concerns about piracy, such as with advertising agencies and major advertisers to ensure that they don't place ads on piracy services, payment providers cutting off services to piracy sites, domain name registries to block piracy site domain registrations, and search engines working with rightsholders and others to de-index and remove piracy sites from search results (e.g., the case study of Google in Australia).⁸⁹

The United States already has some of these voluntary agreements in place, but not others. Other tools include platforms voluntarily introducing new policies and procedures to prevent links to piracy sites from appearing on their platform or in auto-completed searches, and ways to combat repeat infringement. Also, platforms should create technical mechanisms to share data with rightsholders to help them more easily identify and remove infringing links.⁹⁰

Case Study: Search Engines Delisting and Downranking Blocked Piracy Sites

Similar to in the United Kingdom, Google has started removing piracy sites from search results in Australia.⁹¹ This is important, as search engines remain a major access point for people looking for pirated content, so they need to be part of the solution to ensure that people can't easily access pirated content and instead access the growing number of legal service providers. For example, in Australia, a 2020 survey of piracy behaviors shows that search engines remain the dominant way to find pirated content, especially for casual consumers of such material (36 percent of respondents). This contrasts with going directly to a known piracy site (24 percent of respondents), searches via piracy apps/services (14 percent), and going to a site recommended by friends/family (8 percent).⁹²

In 2019, Google Australia agreed to voluntarily remove (de-index) piracy websites from search results in Australia. In 2019, it did this for 832 sites. In 2020, Google also agreed to do the same for piracy proxy sites. Lucinda Longcroft, director of public policy at Google Australia, noted, "We've been working in collaboration with Creative Content Australia, the Australia New Zealand Screen Association, and the Federal Government to support more effective measures against pirate sites sharing Australian film content on the Web ... We are hopeful these measures will be a welcome step towards protecting copyright and will provide a faster solution for rightsholders."⁹³ This is indicative of the type of cooperation between rightsholders, search engines, and governments that leads to a more effective antipiracy toolbox, that together supports the creation (and consumption) of legal content.

CONCLUSION

It's time for the United States to move on from the SOPA/PIPA debate and follow much of the rest of the world in adding website blocking to its antipiracy toolbox. Future steps to fight piracy could also include new voluntary agreements and regulations to ensure other intermediaries are actively avoiding and removing piracy operators from their services. Congress and the Copyright Office should start the process with a (dispassionate) analysis and debate about what lessons the United States can learn from the rest of the world in weighing up the finer details of how a website-blocking framework could work in the United States.

APPENDIX: COUNTRIES ACTIVELY USING WEBSITE BLOCKING

In total, at least 48 countries allow website blocking for copyright infringement. Of those, 33 (not counting the EU) actively allow rightsholders to use website-blocking injunctions for copyright infringement. At least another 12 countries (e.g., Bulgaria, Croatia, Cyprus, the Czech Republic, Estonia, Hungary, Liechtenstein, Luxembourg, Malta, Poland, Slovakia, and Slovenia.) have laws that technically allow website blocking, but they aren't in use as of yet. Some countries (e.g., Vietnam and Saudi Arabia) have blocked infringing copyright sites on an ad hoc basis, as they do not have a dedicated legal or administration framework for website blocking. The following list provides a snapshot of how different countries use website blocking for copyright enforcement.

Argentina [static and dynamic]. In 2014, Argentina became the first Latin American country to block The Pirate Bay on copyright grounds.⁹⁴ The legal framework for the injunction came from Argentina's Copyright Law.⁹⁵ Upon urging from the Cámara Argentina de Productores de Fonogramas (CAPIF), an Argentinian music industry group, the Argentine National Communications Commission ordered ISPs to block access to multiple domain names and IP addresses related to the site. In all, 12 domains and 256 IP addresses had to be blocked. However, this appears to have been a one-time sting, and Argentina has not routinely issued website-blocking injunctions since.

Australia [static and dynamic]. Australian courts have allowed website blocking since 2016.⁹⁶ However, at the end of 2018, blocking efforts significantly increased after a review of the blocking policy.⁹⁷ In the largest wave of blocking in the country's history, 233 domains associated with 99 websites were blocklisted.⁹⁸ As part of the reforms made by the review, copyright owners and ISPs can privately agree to extend an injunction to include any new websites that host the same infringing material without having to go back to court for a new injunction.⁹⁹ Likewise, search engines such as Google and Bing are held responsible for removing links to blocked sites, as well as their mirrors and proxies.¹⁰⁰ Australia has instituted a rigorous regime for website blocking that increased traffic to legal streaming sites by 5 percent from 2018 to 2020.¹⁰¹

Austria [static]. Following the CJEU's 2014 ruling in *Telekabel v. Constantin Film* that permitted orders to ISPs to block certain websites, Austria began a website-blocking program of its own.¹⁰² This ability was later confirmed by the Austrian Supreme Court in 2017 after a lengthy legal battle with The Pirate Bay.¹⁰³ ISPs have requested the creation of an "independent judicial body" to confirm in advance the legality of any blocking while ensuring that a minimum of time and resources are expended on the blocking process, though this has not yet materialized.¹⁰⁴

Belgium [static and dynamic]. In 2013, the Belgian Supreme Court ruled in a long-lasting legal battle between rights holders and The Pirate Bay, confirming the lawfulness of generic IP blocking injunction orders against all national ISPs.¹⁰⁵ Since then, Belgium has been able to institute a policy of website blocking, blocking 33 websites and 450 domains on copyright grounds in 2018 alone.¹⁰⁶

Brazil [static and dynamic]. Brazil's 2019 Operation 404 campaign was the country's first instance of website blocking.¹⁰⁷ The campaign has been repeated twice more in the following years, with Operation 404 #3 occurring in July 2021. Each wave blocked hundreds of domains

associated with piracy sites. Whether these operations will continue, and Brazil will standardize a system for getting injunctions, is yet to be seen.

Canada [static]. In May of 2021, a Canadian appeals court upheld the country’s first-ever website-blocking framework.¹⁰⁸ This decision allowed ISPs to block access to the IPTV provider GoldTV for providing pirated content. The decision drew from the Canadian Copyright Act as well as the Telecommunications Act.¹⁰⁹ The decision by the Court, while welcome, does not obviate the need for an efficient and specific amendment to the Copyright Act to create a “no fault” mechanism for obtaining blocking orders such as what exists in the European Union, Singapore, and Australia. This is being studied by the Canadian Government in its current consultation on copyright reform for online intermediaries.¹¹⁰

Colombia [static]. In August 2021, Colombia’s National Copyright Directorate (Dirección Nacional de Derecho de Autor, DNDA) granted its first blocking injunction against IPTV Colombia Premium, a distributor that violated copyright by broadcasting content from different programmers without permission.¹¹¹

Denmark [static and dynamic]. The Pirate Bay was first blocked in Denmark back in 2008.¹¹² Since that early adoption of the practice, website blocking has expanded to the point where 141 piracy sites were blocked in 2019 alone.¹¹³ This increasing pressure on piracy saw visits to pirate sites drop 40 percent from 2018 to 2019. However, this impressive statistic could in part be caused by consumers finding new ways to access the sites rather than through local ISPs, namely through VPNs or pirated content on YouTube/Facebook.

Ecuador [static]. Ecuador’s National Service for Intellectual Rights (Servicio Nacional de Derechos Intelectuales, or SENADI) created a site-blocking framework that has proven effective in its initial actions against copyright-infringing sites, including piracy sites retransmitting unauthorized audio and video signals of DIRECTV Ecuador and its national league of professional soccer (LALIGA). The framework is based on legislation (the Organic Code on the Social Economy of Knowledge, Creativity and Innovation).¹¹⁴

European Union [static, dynamic, and live]. As detailed in this report, EU courts have ruled on the side of website blocking multiple times in the past decade. First in the 2014 *Telekabel v. Constantin Film* decision, the CJEU ruled that ISPs can be ordered to block access by customers to websites that make available infringing content. Later in 2017, the European Court of Justice (ECJ) ruled that the notorious The Pirate Bay may be blocked as “the making available and management of an online sharing platform must be considered to be ‘an act of communication’ for the purposes of the EU Copyright Directive.” Additionally, the ECJ has ruled that proof of illegality is unnecessary, as the law exists to prevent infringement as well as to end it.¹¹⁵

Finland [static]. Section 60c of the Finnish Copyright Act provides the legal framework for ordering an ISP to block access to infringing sites.¹¹⁶ Another pioneer of website blocking, Finland first blocked The Pirate Bay in 2011.¹¹⁷ Since then, there has been little additional action, although in 2018, two injunctions were issued against the torrent sites RARBG and YIFY.¹¹⁸ Finland’s website-blocking policy revolves around ad hoc busts, rather than a robust program of blocking piracy sites as they emerge.

France [static and dynamic]. Website blocking is available under a broad implementation of Article 8.3 of the EU Directive, and since 2015, a number of popular BitTorrent and streaming

sites have been blocked. In November 2019, the Paris Court ordered ISPs to block a number of notorious cyberlocker sites, including Nippyspace.com. In 2021, France's National Assembly passed a law focused on combatting live sporting event piracy.¹¹⁹ The law permits rightsholders and broadcasters to obtain immediate injunctions from a judge to block sites illegally streaming a live event. These injunctions apply for 12 months and also cover any “mirror” sites. France also requires search engines to delist pirate sites.¹²⁰

Germany [static]. To facilitate future blocking, in 2021, Germany established a new body (called CUII, as detailed in this report) made up of retired judges with knowledge of German copyright law to review complaints and issue website-blocking orders without needing to go through a court.¹²¹ In 2018, a German court issued a provisional injunction that a German ISP (Vodafone Kabel) block access to illegal streaming website Kinox.to. Even though Kinox.to did not directly distribute the infringing material, it was still considered liable “for a willful and causal breach of duty” to restrict piracy.¹²²

Greece [static]. Website blocking is available under the implementation of Article 8.3 of the EU Copyright Directive, and in 2017, Greece adopted legislation introducing an administrative procedure for website blocking. In 2018, Greece issued its first website-blocking orders against blatant piracy sites such as The Pirate Bay.¹²³ Earlier in 2021, 47 additional domains were added to the blocklist.¹²⁴ The Greek procedure does not require court orders; instead, a special commission at the Greek Ministry of Culture and Sports called EDPPI receives and handles requests from rightsholders.

Iceland [static]. In 2015, Iceland issued website-blocking orders against The Pirate Bay and Deildu following a court case the previous year authorized injunctions against intermediaries (e.g., ISPs).¹²⁵ The ability to issue these injunctions was later upheld by Iceland's Supreme Court in 2018. Although website blocking has now been established as a legal practice in Iceland, its use is still relatively limited.

India [static and dynamic]. In India, websites have been blocked on the basis of copyright infringement using Section 69A of the Information and Technology Act 2000 (as amended in 2008), Information Technology (Procedure and Safeguards for Blocking for Access of Information by Public) Rules 2009, and Civil Procedure Rules. In 2019, the Delhi High Court created the mechanisms to allow rightsholders to request dynamic blocking injunctions.¹²⁶ These injunctions order ISPs to shut down piracy sites as well as their many “mirror” sites as they pop up. Over 13,000 sites are currently blocked in India following applications to the Calcutta High Court, the Delhi High Court, and, most recently, as a result of a submission to the Maharashtra Digital Crime Unit.

Indonesia [static and dynamic]. In Indonesia, website blocking is available based on government powers, and the procedure was further specified in a copyright amendment act and accompanying regulation adopted in 2015. Beginning in 2019, the Indonesian regulator KOMINFO began a massive wave of website blocking in conjunction with the Video Coalition of Indonesia. Over the course of 2019–2020, over 2,300 piracy sites were blocked, averaging 60 sites blocked every 10 days. Due to these efforts, Indonesia has the lowest levels of illicit streaming device usage in the Asia-Pacific, second only to Singapore. In the year following the start of this “rolling” site blocking, visits to piracy sites fell by 55 percent.¹²⁷

Ireland [static, dynamic, and live]. In 2020, the High Court of Ireland granted UEFA (the governing body of soccer in Europe) a live and dynamic blocking injunction for the duration of the competition season.¹²⁸ The Court performed an assessment, finding that (i) the injunction was necessary; ii) the costs involved were not excessive or disproportionate and the order itself should not be unduly complicated; (iii) the cost-sharing proposals were fair and reasonable; (iv) the order respected the fundamental rights of the parties affected, including Internet users; and (v) the duration of the proposed injunction and the provisions for review were reasonable. Furthermore, in 2018, an Irish court granted an injunction to block eight major piracy websites.¹²⁹ Those eight websites had received a minimum estimated total of 6,334,215 visits from users in Ireland in October 2017 alone.

Israel [static and dynamic]. In 2019, Israel reformed its copyright law for “indirect infringement” to warrant a website-blocking injunction. Indirect copyright infringement is “making available [pirated material] to the public,” so blogs and websites that link to pirated content may also be blocked.¹³⁰ The reforms also directly allow courts to order ISPs and other intermediaries to restrict infringing websites, thereby ensuring that website blocking is a viable practice for copyright holders.

Italy [static, dynamic, and live]. In Italy, website blocking is available under the implementation of Article 8.3 of the EU Copyright Directive, criminal law, and a special administrative procedure (AGCOM Regulation) that came into effect at the end of March 2014. Under the regulation, AGCOM (the national communications regulatory authority) has the power to order ISPs to block access to infringing websites upon consideration of a complaint filed by a rightsholder and there is a “fast-track” procedure for websites responsible for massive copyright infringements. In 2020 and 2021, Italian courts granted dynamic blocking injunctions to both Italy’s top soccer league (Lega Nazionale Professionisti Serie A) and the Serie BKT (Serie B) competition. The injunctions were for the duration of the season.¹³¹ In 2016, Italian authorities ordered the largest bulk website blocking in the country’s history, blocking access to 152 pirated sporting and film sites. According to Italian lawyer Fulvio Sarzana, a legal expert in this area, the order “covers roughly the first four pages of results on Google with regard to the search terms streaming, football, and films.”¹³²

Latvia [static]. In 2019, a new law came into effect that allows the Latvian National Electronic Media Council (NESMI) to issue a website-blocking order to an ISP without the need of a court order.¹³³ The names and domains of all blocked sites are published on a government website and remain on the national blocklist for six months.

Lithuania [static]. In April 2019, amendments to the Lithuanian Copyright Act came into force, which provided for a new administrative procedure allowing rightsholders to obtain a website-blocking order within a month.¹³⁴ Rightsholders send a takedown notice to the site operator and the hosting provider, and the operator and/or hosting provider has five days in which to remove the notified content and also ensure the same content is not re-uploaded (i.e., provide for “stay-down”). If the content is not taken down, the rightsholder can apply to the Radio and Television Commission of Lithuania to issue a decision ordering ISPs to block their users’ access to the site. The Commission has 14 days to issue the decision, which is subsequently approved by a Lithuanian court within a three-day window.

Malaysia [static and dynamic]. In Malaysia, website blocking exists on the basis of Section 263 of the Malaysian Communication and Multimedia Act 1998, which allows the Malaysian Communications and Multimedia Commission (MCMC) to issue orders requiring all registered ISPs to block access to copyright-infringing websites. In February 2020, Malaysia began blocking the IP addresses of servers found to be hosting pirated content.¹³⁵ Previously, only sites that provided illegal content through Android TV boxes were targeted.¹³⁶ A 2020 study finds that Malaysia’s robust website-blocking practices have led to a 64 percent decrease in consumers accessing piracy websites. In 2019, fully 61 percent of Malaysian online consumers reported having visited piracy sites, but by 2020, that number had dropped to 22 percent.¹³⁷

Netherlands [static, dynamic, and live]. In 2020, The Amsterdam Court of Appeal (CoA) issued a dynamic blocking injunction against two Dutch ISPs aimed at blocking access to “mirror sites” of blatant piracy sites such as The Pirate Bay. The order cited the 2017 CJEU decision that sites such as The Pirate Bay may be blocked on IP-protection grounds.¹³⁸ Furthermore, Dutch courts have granted FAPL (the organizer of the Premier League competition of English professional soccer) a dynamic injunction to ask ISPs to block illegal streaming platforms before and during matches.¹³⁹ In 2021, Dutch rightsholders and ISPs created a landmark website-blocking agreement stating that if a court orders one ISP to block a site, the other ISPs will do the same.¹⁴⁰ This follows the CoA’s final decision in regard to The Pirate Bay (as previously detailed). The Dutch government was involved in the development of the agreement, including the Authority for Consumers & Markets (ACM), to ensure that the plan would not violate net neutrality regulation (which it has stated it doesn’t).

Norway [static]. In 2015, Norway first ordered local ISPs to block the top-level domains of multiple torrent file sharing sites notorious for piracy—specifically The Pirate Bay.¹⁴¹ However, aside from the six sites blocked in this order, it does not appear that Norway has maintained a program of blocking piracy websites, either through established mechanisms or ad hoc requests.

Peru [static]. In 2020, Peru’s Instituto Nacional de Defensa de la Competencia y de la Protección de la Propiedad Intelectual (INDECOPI) issued blocking injunctions requiring ISPs to block access to Y2mate.com (the most popular stream-ripping site in the country) and streams associated with a local piracy-based set-top box provider (America TVGO).¹⁴²

Portugal [static, dynamic, and live]. In 2015, Portugal set up a voluntary process in an agreement between ISPs, rightsholders, and the Ministry of Culture and the Association of Telecommunication Operators to block websites engaged in large-scale piracy.¹⁴³ The voluntary procedure involves the governmental body responsible for cultural affairs (IGAC) which reviews rightsholders’ complaints, which can be filed in respect of “predominantly copyright infringing websites.” Within 15 days after the filing of the complaint, IGAC can order ISPs to block access to the websites, and those blocks must remain in place for one year. In December 2018, the memorandum of understanding was amended to allow for the “live blocking” of sports.

Romania [static]. In 2018, a Romanian court sided with rightsholders and agreed that ISPs should block (through DNS blocks) access to dozens of piracy sites.¹⁴⁴

Russia [static and dynamic]. In 2017, Russian telecoms regulator Rozcomnadzor ordered local ISPs to block 8,000 pirate websites, a fourfold increase over 2016.¹⁴⁵ Russia allows

rightsholders to block pirate sites and any mirror sites. Rozcomnadzor claims that the blocking of piracy websites contributed to the growth of cinema box office revenues by 10.9 percent.¹⁴⁶

Saudi Arabia [ad hoc]. Saudi Arabia first began website blocking by blocking access to The Pirate Bay in 2014. However, the country currently does not have an established legal framework for ordering injunctions against ISPs.¹⁴⁷ In 2020, Saudi authorities announced that the kingdom “continues” efforts to minimize IP violations by blocking 231 sites that violated IP law.¹⁴⁸

Singapore [static and dynamic]. In 2014, important amendments to the Copyright Act were adopted, allowing rightsholders to obtain an injunction against access providers in respect to infringing websites (“flagrantly infringing online locations”). Following a 2018 order to block 53 piracy sites comprising 154 unique web addresses, in 2020, an additional 17 sites and 41 domains were ordered blocked.¹⁴⁹ Singapore currently has the lowest rate of pirated content viewership in the Asia-Pacific (just 17 percent). In July 2018, the Singapore High Court confirmed the availability of dynamic site blocking orders.

South Korea [static]. South Korea is one of the most prolific site blockers in the Asia-Pacific region.¹⁵⁰ Website blocking is available under an administrative procedure involving government authorities. As of early 2021, over 180 domains had been blocked, including popular BitTorrent sites and cyberlockers. In January 2019, a new center was launched by the Korea Communications Standards Commission to deal with site-blocking applications more quickly as part of its overall mission to tackle piracy.

Spain [static, dynamic, and live]. In April 2021, a new blocking protocol was signed by rightsholders, ISPs, and the government to strengthen the protection of IP rights on the Internet, including the use of dynamic site blocking. The protocol was endorsed by Spain’s Ministry of Culture. The protocol creates a new procedure for rightsholders to seek swift website blocks of new mirror domains whose exclusive or main purpose is to facilitate access to infringing websites that are already subject to site-blocking orders. Basically, it targets mirror or subdomains whose purpose is to circumvent or avoid existing court-ordered blocking measures. The protocol creates a new entity, the Technical Committee, to implement and monitor the protocol. It includes representatives from ISPs and rightsholder groups. The protocol itself is subject to review. In 2020, Spanish authorities ordered ISPs to dynamically block streams primarily of pirated soccer matches.¹⁵¹ The order also named 44 pirate sites, requiring that their URLs, domain names, and IP addresses be blocked within 72 hours. As part of the dynamic blocking system, it allows broadcasters to notify ISPs of new sites, URLs, domains, and IP addresses every week for blocking without having to refer to the courts for permission.

Sweden [static and dynamic]. Although previously refusing to block piracy sites such as The Pirates Bay, as of 2020, Swedish courts have approved an extendable, dynamic injunction against four major piracy sites.¹⁵² This is the first instance of dynamic blocking in Sweden, and it allows rightsholders to expand the blocklist whenever these same piracy sites shift to new URLs.

Thailand [static and dynamic]. In 2020, Thailand’s Department of Intellectual Property (DIP), the Ministry of Digital Economy and Society (DES) and the National Broadcasting and Telecommunications Commission (NBTC) unveiled new website-blocking provisions for piracy sites that violate section 20 (3) of the Computer Crimes Act (CCA). Under the new provisions, ISPs have 15 days to comply with the court orders and block sites, including proxy sites.¹⁵³

United Kingdom [static, dynamic, and live]. Since 2011, the United Kingdom has blocked hundreds of websites.¹⁵⁴ As with other European countries, protecting the copyright of Premier League matches is a priority for the United Kingdom, and the ability to issue dynamic and live blocking orders was renewed in 2018.¹⁵⁵ U.K. courts have also granted live and dynamic injunctions to Matchroom, which hosts live streams of professional boxing matches.¹⁵⁶ As detailed in this report, U.K. courts have also granted injunctions targeting piracy cyberlockers and stream-ripping sites.

Uruguay [static]. In April 2018, Fox Networks Group Latin America obtained a website-blocking injunction in Uruguay against the website Rojadirecta.¹⁵⁷

Vietnam [ad hoc]. In 2019, Vietnam's Authority of Broadcasting and Electronic Information (ABEI) ordered a telecommunications company to block access to the website xoilac.tv that was transmitting sporting events without a license. However, Vietnam currently does not have an established legal framework for ordering injunctions against ISPs, so it appears that the blocking order was made based on Article 5(3) of the Joint Circular 07/2012 (on obligations of intermediary service providers in protection of copyright and related rights on the internet and telecom network environments). While this was a positive development, there is still significant uncertainty as to the scope of this provision and the availability of website blocking as a remedy, and a transparent documented process that sets out how to submit sites for blocking is needed.¹⁵⁸

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About the Author

Nigel Cory is an associate director covering trade policy at the Information Technology and Innovation Foundation. He focuses on cross-border data flows, data governance, intellectual property, and how they each relate to digital trade and the broader digital economy. Cory has provided in-person testimony and written submissions and has published reports and op-eds relating to these issues in the United States, the European Union, Australia, China, India, and New Zealand, among other countries and regions. He has also completed research projects for international bodies such as the Asia Pacific Economic Cooperation and the World Trade Organization. Cory previously worked as a researcher in the Southeast Asia Program at the Center for Strategic and International Studies. Prior to that, he worked for eight years in Australia's Department of Foreign Affairs and Trade, which included positions working on G20 global economic and trade issues and the Doha Development Round.

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