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LGBTIQ Website Censorship in Six Countries











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OutRight Action International works at a global, regional and national level to eradicate the persecution, inequality and violence lesbian, gay, bisexual, transgender, intersex, and queer (LGBTIQ) people face around the world. From its offices in seven countries and headquarters in New York, OutRight builds capacity of LGBTIQ movements, documents human rights violations, advocates for inclusion and equality, and holds leaders accountable for protecting the rights of LGBTIQ people everywhere. OutRight has recognized consultative status at the United Nations.

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The Citizen Lab is an interdisciplinary laboratory based at the Munk School of Global Affairs & Public Policy, University of Toronto, focusing on research, development, and high-level strategic policy and legal engagement at the intersection of information and communication technologies, human rights, and global security.

We use a "mixed methods" approach to research combining practices from political science, law, computer science, and area studies. Our research includes: investigating digital espionage against civil society, documenting Internet filtering and other technologies and practices that impact freedom of expression online, analyzing privacy, security, and information controls of popular applications, and examining transparency and accountability mechanisms relevant to the relationship between corporations and state agencies regarding personal data and other surveillance activities.

An information booklet on the Citizen Lab can be found at https://citizenlab.ca/wp-content/up-loads/2018/05/18033-Citizen-Lab-booklet-p-E.pdf

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The Open Observatory of Network Interference (OONI) is a free software project that aims to empower decentralized efforts in increasing transparency of Internet censorship around the world. Our mission is to ensure a free and open Internet by increasing transparency of Internet censorship around the world. We believe that everyone should have equal and open access to information. We aim to help create and defend an Internet where human rights – particularly freedom of expression and access to information – are promoted and protected around the world. We know that we can't do this alone. This is why we have built a decentralized, citizen-led, Internet censorship observatory. We create free and open source network measurement tools that anyone can use to measure Internet censorship. We openly publish measurements to provide a public archive on network interference and to increase transparency of Internet censorship around the world.

All of our methodologies, tools, and measurements are entirely open, transparent, and peer-reviewed. By increasing transparency of internet censorship, we aim to support public debate on information controls and promote social justice on the Internet.

You can contact the OONI team by sending an email to contact@openobservatory.org.

Encrypted emails can be sent using the following PGP key:

pub 4096R/6B2943F00CB177B7 2016-03-23 Key fingerprint = 4C15 DDA9 96C6 C0CF 48BD 3309 6B29 43F0 0CB1 77B7 uid [ultimate] OONI - Open Observatory of Network Interference sub 4096R/8EBD2087374399AB 2016-03-23

For real-time communication, you can reach us on Slack https://slack.ooni.org/ or IRC ircs://irc.oftc. net:6697/#ooni.



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Glossary

Annotation	A text pattern that matches a single previously observed blocking behavior. For example, if a block page includes the text "Blocked Due To National Policy," an annotation will be made with that text and website results that contain this text pattern will be grouped together and be considered an indication of a block.
ASN	An Autonomous System Number (ASN) is a unique identifier of an autonomous system (AS). An Internet Service Provider (ISP) usually has an officially registered ASN (and can have more than one ASN). For example, "AS30722" is the ASN of "Vodafone Italia." The same acronym of ASN can also be used to refer to an "autonomous system network," which refers to the actual block of Internet addresses assigned and used in a specific AS.
Block	The intentional control or suppression of what can be accessed, published, or viewed on the Internet by an Internet Service Provider, often conducted to be in compliance with government orders to block and/or in compliance with national legislation.
Block page	A block page (or "Access Denied Page") is a web page that is displayed when a user attempts to access a website they are not permitted to view. When a block page is served by an Internet Service Provider (ISP), the user cannot view the content of the website they are trying to access. Instead, they view a web page known as the block page that informs them that they are not allowed to access the intended website.
Block list	A block list is a list of Internet resources (such as websites and IP addresses) which are blocked from user access. Some governments occasionally publish official block lists (or they are leaked), which contain lists of websites that are legally prohibited in a country. Internet Service Providers (ISPs) are then ordered to block access to all websites included in such block lists, commonly involving hundreds (or thousands) of URLs that contain content which is considered illegal in the respective country.
Domain name	A domain is a name that is commonly attributed to websites when they are created, so that they can more easily be accessed and remembered. For example, "twitter.com" is the domain of the Twitter website.

Censorship	In this report, we use the term 'censorship' to refer to all politicized actions surrounding blocking access to Internet content (see Block definition).
DNS	DNS stands for "Domain Name System" and it maps domain names to IP addresses. A domain is a name that is attributed to websites so that they can be more easily accessed and remembered. However, computers cannot connect to Internet services through domain names. Instead, they do so using IP addresses, the digital address of each service on the Internet. This is similar to the physical world, where you would need the address of a house (rather than the name of the house itself) in order to visit it. The Domain Name System (DNS) is responsible for transforming a human-readable domain name (e.g., "twitter.com") into its numerical IP address counterpart ("104.198.14.52"), allowing your computer to access the intended website.
DNS injection	DNS injection occurs when DNS queries are intercepted and fake DNS answers are injected in response. When Internet Service Providers (ISPs) receive government orders to block specific websites, they sometimes adopt this technique of intercepting DNS traffic and replying with a spoofed response for the banned sites to prevent access.
DNS lookup	Computers cannot connect to Internet services through domain names (e.g., "twitter. com"), but based on IP addresses (the digital address of a service). A DNS lookup occurs when you try to access a website in your browser, as a request is forwarded to a DNS resolver, requesting the corresponding IP address to the domain name you entered.
DNS resolver	A DNS resolver is a server that is responsible for transforming host/domain names (such as "twitter.com") into IP addresses ("38.229.72.16"). Internet Service Providers (ISPs), amongst other service providers (such as Google), run DNS resolvers that can be queried to receive the IP address of a given website.
Filtering	A term typically used to refer to limiting or blocking access to content on the Internet (see Block definition).
Global test list	A list of internationally relevant websites (e.g., "facebook.com") that are tested for censorship by tools like OONI Probe. The global test list used in this report is hosted and managed by the Citizen Lab, one of the report's authors.
HTTP blocking	HTTP blocking is an umbrella term used to describe various forms of HTTP interference. When Internet Service Providers (ISPs) receive government orders to block specific websites, HTTP blocking is a common censorship technique that they may adopt. There are many ways that they can implement censorship on the HTTP protocol, such as the following:
	• Serving a block page: In this case, the ISP intercepts the user's request to access a specific website (e.g., "facebook.com") and serves the user a block page instead, which informs the user that they are not allowed to access the requested website.
	• HTTP failure: The user's HTTP request (to access a specific Internet service) fails because it is intercepted by an HTTP transparent proxy, or the ISP resets the connection or hijacks the (unencrypted) connection to redirect it, and preventing it from reaching the intended server.
HTTP injection	A method of website blocking where an incorrect HTTP response, typically a block page, is sent to a user who requested a blocked site. As this incorrect response is typically sent nearer to the user, it arrives quicker than any legitimate response. This leads to the incorrect response being displayed in the users browser rather than the legitimate response.

HTTP request	Every time you visit a website, your browser sends a request ("HTTP request") through the HTTP protocol to the server that is hosting the website. A server normally replies with a "HTTP response" which includes the content of the website it is hosting.
HTTPS	The Hypertext Transfer Protocol Secure (HTTPS) is the HTTP protocol over an encrypted channel. Over the last few years, most major websites on the Internet started supporting HTTPS (such as "https://www.facebook.com/") so that the transmission of data (such as passwords to login to websites) over the HTTP protocol is encrypted.
IP address	An Internet Protocol (IP) address is a unique numerical address that identifies a device or service on the Internet. An IP address distinguishes a system from all other systems on the Internet and serves as a digital address for a system, enabling other systems on the Internet to reach it. To connect to the Internet, every device is assigned an IP address.
IP blocking	IP blocking is a form of Internet censorship that is implemented by preventing the target IP address from being reachable or actively resetting the connection (i.e., injecting TCP RST packets) to the IP:Port pair.
ISP	An Internet Service Provider (ISP) is an organization that provides services for accessing and using the Internet. ISPs can be state-owned, commercial, community-owned, non-profit or otherwise privately owned. Vodafone, AT&T, Airtel, and MTN are examples of ISPs.
LGBTIQ	Lesbian, gay, bisexual, transgender, intersex, and queer people.
Local test list	A list of websites that are only relevant to a specific country and which are tested for censorship by tools like OONI Probe. These lists are hosted and managed by the Citizen Lab.
Network anomaly	A network anomaly is network behavior that deviates from what is standard, normal, or expected. Within the OONI context, network anomalies are testing results which deviate from what is expected based on the methodologies of OONI Probe tests. ¹ OONI Probe test results, collected from the network of the user, are automatically compared with test results collected from a non-censored network. If the results do not match, then the OONI Probe test result in question is flagged as an "anomaly," indicating potential censorship.
Network measurement	Network measurement is the process of measuring certain attributes of a network. Within the OONI Probe testing context, a single measurement is the result of an OONI Probe test of a single URL.
Protocol	Protocols are a set of rules or procedures for transmitting data between electronic devices (such as computers) on the Internet. These rules determine how information will be structured and how it will be sent and received over the Internet. The Internet consists of various types of protocols, such as the Internet Protocol (IP) which is used to direct data packets to a specific computer or server.
Server Name Indication (SNI)	SNI is an optional feature of SSL/TLS that allows a client to specify the common name of the site they are trying to reach. This common name is sent unencrypted and is often used as a method of blocking encrypted websites.
SOGIE	Sexual orientation, gender identity, and gender expression.

¹ Open Observatory of Network Interference (OONI), OONI Probe network measurement tests, https://ooni.org/nettest/.

TCP connection	The Transmission Control Protocol (TCP) is one of the main protocols on the Internet. To connect to a website, your computer needs to establish a TCP connection to the address of that website. TCP works on top of the Internet Protocol (IP), which defines how to address computers on the Internet. When speaking to a machine over the TCP protocol, you use an IP and port pair (e.g., 10.20.1.1:8080).					
Vantage point	A network vantage point is a unique network location from which Internet measurements are performed. In the context of OONI Probe measurements, we consider a vantage point to be a unique network and country pair, such as the vantage point of "Vodafone in Italy."					



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Executive Summary

Overview

Online spaces are critical for safely identifying information and resources, establishing social connections, and engaging in rights advocacy and movement-building. For marginalized populations in particular, including lesbian, gay, bisexual, transgender, intersex, and queer (LGBTIQ) "It is like an unspoken conversation between us and governments—we find a way because the Internet is so creative in distributing information. They can block, and we can find another medium . . . our goal is to make information as reachable as possible—the Internet is so big, so vast. We can find options."

- Khalid Abdel-Hadi, Founder of My.Kali e-magazine

people, the ability to virtually connect and securely communicate is a lifeline. Yet, state-sponsored online censorship is on the rise globally, targeting LGBTIQ activists, human rights defenders, journalists, and political dissidents, among others.

Website censorship is often implemented alongside other restrictions (e.g., libel lawsuits and arbitrary arrests) that constrain civil liberties and curtail human rights movements. Countries that are engaging in censorship are in violation of international human rights norms and principles. In 2018, the UN Human Rights Council (HRC) affirmed "that the same rights that people have offline must also be protected online, in particular freedom of expression."² Moreover, Article 19(3) of the International Covenant on Civil and Political Rights (ICCPR) stipulates that restrictions on freedom of expression can occur only in limited circumstances and must adhere to the principles of legality, legitimacy, and necessity.³ Of the six countries studied in this report, Indonesia, Russia, and Iran have ratified the ICCPR.⁴

² UN Human Rights Council, The Promotion, Protection and Enjoyment of Human Rights on the Internet, A/HRC/38/L.10/ Rev.1, (July 6, 2018), https://documents-dds-ny.un.org/doc/UNDOC/GEN/G18/215/67/pdf/G1821567.pdf?OpenElement.

³ International Covenant on Civil and Political Rights, December 16, 1966, U.N.T.S. 999, https://www.ohchr.org/en/profession-alinterest/pages/ccpr.aspx.

⁴ International Covenant on Civil and Political Rights, March 23, 1966, U.N.T.S. 14668, https://treaties.un.org/pages/ViewDetails. aspx?src=TREATY&mtdsg_no=IV-4&chapter=4&clang=_en.

As digital technology continues to advance, website censorship, along with efforts to circumvent it, is dynamic. This leads to a persistent game of cat-and-mouse between governments and users, both of whom are trying to stay ahead of the other. Governments are also applying ever-more sophisticated means to curtail the work of rights activists around the world, including LGBTIQ activists, using Internet blocking, bandwidth "throttling," surveillance, and other means.⁵

OutRight Action International, the University of Toronto's Citizen Lab, and the Open Observatory of Network Interference (OONI) collaborated to conduct this research on LGBTIQ website censorship and its impact on LGBTIQ communities. This report is focused on the following countries: Indonesia, Malaysia, Iran, Russia, Saudi Arabia, and the United Arab Emirates (UAE). These countries are known for having some of the most challenging environments for the promotion and protection of human rights in the world. In addition to repressive laws, non-democratic rule, and lack of transparency and accountability, online censorship in these jurisdictions hampers the efforts of civil society who are fighting to create a more equal and just society. Furthermore, as LGBTIQ people often must contend with stigma, as well as societal, religious, or family condemnation, censorship increases their isolation and inhibits efforts to publicize rights violations and abuse. Nonetheless, LGBTIQ individuals continue to press forward in fighting for equality and mobilizing others in their community despite risking fines, assault, or imprisonment.

Purpose

The objectives of our research are as follows.

- 1. Document which LGBTIQ websites are blocked in the six countries;
- 2. Investigate how website censorship impacts local LGBTIQ communities and their movements to secure justice and equality; and
- 3. Determine how local Internet Service Providers (ISPs) implement website blocking.

Methodology

We use a "mixed methods" approach in our study, consisting of network measurement via the OONI platform, literature research, and remote semi-structured interviews.

Network Measurement: We used OONI's technology to examine LGBTIQ website censorship in the six countries between June 1st, 2016 and July 31st, 2020. Called OONI Probe, this free and open-source software measures various forms of Internet censorship, including website blocking.6 We collected data from the OONI Web Connectivity test and examined this dataset for instances of deliberate blocking on consumer-facing, commercial ISPs.⁷ For each instance of deliberate blocking identified, we created an annotation that could be used through an iterative process to identify further instances of blocking using the same method. The final product was a collection of URLs identified as blocked in our six countries of interest.

⁵ Mozilla defines network throttling as "an intentional slowing down of internet speed. In web performance, network throttling, or network condition emulation, it is used to emulate low bandwidth conditions experienced by likely a large segment of a site's target user base." See: "Network Throttling - MDN Web Docs Glossary: Definitions of Web-Related Terms," MDN, accessed April 20, 2021, https://developer.mozilla.org/ en-US/docs/Glossary/Network_throttling.

⁶ Open Observatory of Network Interference (OONI), OONI Probe, https://ooni.org/install/.

⁷ Open Observatory of Network Interference (OONI), OONI Web Connectivity test, https://ooni.org/nettest/ web-connectivity/

Literature Research: We conducted a literature review covering each country. Peer-reviewed articles, human rights reports, media accounts, and organizational reports informed the case studies.

Interviews: Two interviewers conducted a total of fifteen semi-structured interviews with key informants from, or with expertise on, each of the six countries. Through these interviews, we identified challenges in accessing online LGBTIQ-related information, common approaches to censorship circumvention, and the impact of website censorship on LGBTIQ rights and movement-building.

Limitations

This study does not necessarily reflect the full extent of LGBTIQ website censorship in each of these countries, but rather provides an *indication* of LGBTIQ website censorship based on available OONI measurements. This is because the number and type of LGBTIQ websites tested in each country varied during our analysis period. In addition, since our measurement findings depend on OONI Probe tests run by local volunteers, there is not only variance in the testing coverage across networks within countries, but also across countries as well.

Different countries have different ISP markets with a diverse number of registered ASNs, while ISPs in each country implement Internet censorship in different ways to be in compliance with different laws and regulations. An effort was made to make sure the testing lists used in this study were comprehensive. Nonetheless, there may be gaps in terms of topics not covered by the lists, and therefore not seen in the results. For more details on these limitations, please review the "Limitations" section in the Methodology appendix.

Key Overall Findings

Below are some of the cross-cutting findings from our research:

- Self-censorship is common, especially where punitive actions against LGBTIQ communities (e.g., arbitrary arrest and detention) are intensifying. Such actions are often undertaken in the name of safeguarding national security, protecting children or minors, or preserving traditional or religious norms and values.
- In all six countries, LGBTIQ-related content may also be wrongly construed as pornography and therefore subject to laws outlawing such content. As a result, users carefully avoid publishing or accessing information that may be construed as violating these laws, which contributes to self-censorship.
- LGBTIQ users in at least three of the six countries are at risk of online entrapment by local authorities or other malevolent actors. Members of law enforcement in Iran, Russia, and Saudi Arabia have posed as gay or trans people online to entrap LGBTIQ individuals, putting them at risk of arrest, exploitation, and threats of violence.⁸ The presence of LGBTIQ apps on a user's phone has also been used as grounds for intimidation and prosecution.
- Online threats result in LGBTIQ activists having to continually educate themselves about new and safe methods to communicate online and circumvent censorship. In addition, activists must learn about how current and emerging

^{8 &}quot;Chechnya LGBT: Dozens 'Detained in New Gay Purge," BBC News, January 14, 2019, sec. Europe, https:// www.bbc.com/news/world-europe-46871801; Shima Houshyar, LGBT Rights in Iran (Middle East Report Online, October 21, 2015), https://merip.org/2015/10/lgbt-rightsin-iran/; Interview with a digital protection expert in the region, October 27, 2020.

technology could possibly help or harm them. This is difficult to do where access to information is already challenging, as in remote or rural areas.

- LGBTIQ website censorship does not necessarily correlate with criminalization of homosexuality, but it does relate to efforts to limit the exercise of fundamental human rights by LGBTIQ people. Neither Indonesia nor Russia criminalize homosexuality, yet in both countries, censorship targeting LGBTIQ content online is significant due to legislation curtailing "anti-gay propaganda" and restrictions against "obscene" content. In Malaysia, Iran, Saudi Arabia, and the UAE, laws criminalizing homosexuality have been used to justify censorship.
- There are differences in terms of local and international websites that were found blocked. In Malaysia and Indonesia, all local LGBTIQ websites tested were accessible, while international LGBTIQ-websites were blocked. Iran, Russia, Saudi Arabia, and the UAE blocked access to local, regional, and international LGBTIQ sites.
- ISPs in all six countries serve block pages that notify users that a website is censored. The technical means by which ISPs serve block pages, however, vary across countries and in some cases, among ISPs within the same country. ISPs in Indonesia and Malaysia use DNS hijacking, Iranian ISPs primarily use DNS injection, Russian ISPs primarily use HTTP transparent proxies (although some also use DNS hijacking), Saudi Arabian ISPs use transparent proxies, and ISPs in the UAE use either HTTP injection or transparent HTTP proxies using Netsweeper, depending on configuration.

- Government efforts to block access to online content require the support of private-sector actors. As private companies own and operate many different parts of the Internet, from physical infrastructure to platforms, their cooperation is required to implement online controls. In both Saudi Arabia and the UAE, ISPs blocked websites using WireFilter, a company based in Riyadh, while in the UAE, ISPs use Netsweeper, a Canadian company.
- In four of the six countries, the most frequently blocked LGBTIQ websites were those primarily aimed at the "Culture" category. This category is composed of websites that aim to build a community (e.g., sports, Pride, or personal blogs) and provide information about art and culture. Most URLs in our test lists belong in the "Culture" category, which contributes to its higher representation in our results.
- The highest blocking consistency was found in Saudi Arabia, where most LGBTIQ URLs were found blocked more than 75 percent of the times tested, but blocking appeared to be inconsistent in many settings. We observed inconsistency in which websites were blocked (or not) across countries and, in some cases, by different ISPs within the same country.
- The highest number of LGBTIQ URLs found blocked was in Iran. In total, seventy-five unique LGBTIQ URLs were detected as blocked in the country, followed by the UAE where fifty-one unique LGBTIQ URLs were found to be blocked. Iran appears to have a uniform censorship apparatus, as most ISPs not only blocked the same websites, but also use the same set of censorship techniques.

• Russia had the highest number of networks that block LGBTIQ URLs. We detected the blocking of LGBTIQ websites on 172 distinct Autonomous System (AS) networks.⁹ Iran has the second highest prevalence of blocking, with LGBTIQ websites being blocked on eighty-four AS networks. In Indonesia, LGBTIQ websites were blocked on forty-three AS networks, while in the UAE, LGBTIQ websites were found blocked on only three AS networks. These results may reflect the diversity of each country's ISP market as some of these countries have a larger and more diverse ISP market (and therefore have more AS networks) than others.

Summary of Technical Findings

Our technical findings, along with information on the criminalization of LGBTIQ-related activities, are summarized for each country in the following table.

	Indonesia	Malaysia	Iran	Russia	Saudi Arabia	UAE
Criminalization of same-sex relations	No	Yes	Yes	No	Yes	Yes
Other legislation used to curtail LGBTIQ human rights (e.g., so- called gay propaganda laws, pornography laws, anti-cross-dressing laws)	Yes	Yes	Yes	Yes	Yes	Yes
Unique LGBTIQ URLs blocked	38	6	75	32	26	51
International LGBTIQ sites blocked	Yes	Yes	Yes	Yes	Yes	Yes
Local/Regional LGBTIQ sites blocked	No	No	Yes	Yes	Yes	Yes
Number of AS networks where LGBTIQ site blocking detected	43/97 (44.33%)	8/41 (19.51%)	84/104 (80.77%)	172/1012 (17.00%)	12/23 (52.17%)	3/12 (25.00%)
Top ISP where most LGBTIQ site blocking detected	*Teleko- munikasi Indonesia (Telkom)	Telekom Malaysia (TM Net)	Shatel	*MGTS	*Saudi Telecom (STC)	*du

* Denotes majority or complete state ownership of that ISP.

⁹ Autonomous System Networks (ASNs) are logical divisions given to computer networks on the Internet. They are officially registered and given to commercial entities such as telecom companies, Internet service providers (ISPs), educational institutions, or large businesses among others. In our analysis, AS networks are used to organize where filtering is observed. The AS networks where annotations appear regularly indicates which service providers have filtering policies in place.

	Indonesia	Malaysia	Iran	Russia	Saudi Arabia	UAE
How block pages are primarily served	DNS hijacking	DNS hijacking	DNS injection	HTTP transparent proxies	WireFilter technology	WireFilter & Netsweeper technologies
Number of blocking annotations	84	4	6	148	2	9
Average percentage of blocking consistency	> 50%	> 50%	> 50%	< 2%	> 75%	~ 25%
Censorship technology detected	No	No	No	No	WireFilter	WireFilter, Netsweeper
Other findings	Variance in the blocking of LGBTIQ websites across Indonesian ISP networks	Potential "censorship leakage" from Indonesia (involving fifteen other unique URLs)	Uniform Centralized censorship apparatus	Ads served in some block pages	All ISPs in Saudi Arabia consistently implement Internet censorship in the same way	Many of the blocked LGBTIQ websites are currently non- operational

Table 1: What is blocked and where

* Denotes majority or complete state ownership of that ISP.

Table 1 summarizes this report's technical findings and provides information on the criminalization or allowance of LGBTIQ-related activities in each of the six countries of interest.

Key Findings by Country

Indonesia

- Growing influence of conservative Islam in Indonesia and the implementation of legislation targeting pornography result in LGBTIQ Internet content being routinely, if inconsistently, blocked or censored.
- In total, we found that thirty-eight unique LGBTIQ URLs were blocked at least once during our testing in Indonesia. Blocked URLs include websites that create a sense of community (e.g., Transgender Map), conduct advocacy (e.g., the International Lesbian, Gay, Bisexual, Trans and Intersex Association (ILGA)), and provide dating services (e.g., Grindr).

"So, in the end, we need to censor ourselves. Self-censoring is now our habit in order to keep some information on the table . . . we don't post images. That is the strategy we are practicing in our daily lives to maintain information in digital and online spaces."

– Lini Zurlia, ASEAN SOGIE Caucus

- None of the LGBTIQ websites found blocked in Indonesia are in Bahasa Indonesia or appear to be intended for an Indonesia-specific audience.
- The extent of LGBTIQ website blocking varied across Indonesian ISPs. Most blocks were observed on Telekomunikasi Indonesia (Telkom), which is the largest ISP in Indonesia and majority owned by the Indonesian government, followed by Indosat Ooredoo (Indosat), a private company.
- Given Indonesia's censorship regime, LGBTIQ activists and communities have to devise circumvention and self-censorship strategies and increase their reliance on social media.

Malaysia

- The Malaysian Internet ecosystem is one of the most vibrant in the Southeast Asia region, but the continuing influence of conservative Islam has led to persistent denial of LGBTIQ rights.
- Section 233 of the Communications and Multimedia Act of 1998 has been used to block LGBTIQ websites. In addition to the Penal Code's Section 377A which criminalizes sodomy, Sharia law has been used arbitrarily to target LGBTIQ individuals.
- A total of twenty-one unique URLs relevant to LGBTIQ communities were found blocked through our testing. It appears that many are blocked, however,

"LGBT organizing is impacted by censorship as every time an event/ forum is organized, there's always the threat of infiltration/raid, though this didn't stop LGBTs from pushing back and building movements using online spaces. E.g. hashtag organizing – #CampurLGBT ("MixLGBT") has been effective in promoting inclusion and pushing back against #TolakLGBT ("RejectLGBT")"

– Thilaga, Queer Activist and Founding Member of the advocacy group Justice for Sisters

as a result of some form of "censorship leakage" from Indonesia. In-country experts suggested that the more visibility LGBTIQ content receives, the more likely the authorities are to censor it.

- At least two websites that are relevant to LGBTIQ communities were consistently blocked (e.g., Gay Star News and Planet Romeo). Websites targeting domestic audiences, such as Queer Lapis and Justice for Sisters, however, remain accessible in Malaysia.
- As websites require a lot of set-up time and resources, LGBTIQ people and organizations in Malaysia commonly use apps instead, namely Telegram and WhatsApp, to connect with each other, self-organize, and share local language-specific content.

Russia

- State-sponsored censorship targeting or affecting LGBTIQ populations has largely been driven by an infamous law known as the "anti-gay propaganda" law, which purports to protect minors and the socalled "traditional family." Claims of pornography are often used to crack down on any media containing LGBTIQ content.
- In response to escalating persecution (e.g., in Chechnya), many LGBTIQ organizations have been forced to shut down, limit their online presence, or practice self-censorship. Anxiety over personal safety has resulted in LGBTIQ people remaining quiet in the face of widespread attacks.

"I believe that from the very beginning when this propaganda law was adopted, the main goal was exactly to silence any public discussion about the LGBT community, or LGBT rights, or violations of LGBT rights. Basically all this censorship has created an atmosphere of fear, and it concerns all social areas."

– "SZ", Russian LGBTIQ Activist

- Digital literacy skills were identified as some of the essential skills needed by LGBTIQ individuals to stay safe in Russia (e.g., to preserve one's anonymity online, remove messages and search history, and use encrypted messaging applications). The need is most acute in remote areas where attacks against LGBTIQ individuals are intensifying.
- Thirty-two unique LGBTIQ-related URLs were blocked in Russia. Many of these URLs included news media, cultural, and human rights sites. Most websites, however, presented blocking less than two percent of times tested, while only `bluesystem.ru` and `deti-404.com` presented blocking more than 70 percent of times tested.
- ISPs in Russia implement standardized censorship methods. Most ISPs in Russia blocked LGBTIQ-related URLs through the use of HTTP transparent proxies, while a smaller number of ISPs served block pages though DNS hijacking.

Iran

• A strict government-enforced system of social, religious, and legal norms that is defined by Shi'a jurisprudence has contributed to human rights violations against LGBTIQ individuals. The absence of education about gender and sexuality in Iran results in a gap in people's knowledge regarding sexual orientation, and gender identity and expression.

- LGBTIQ individuals are targeted through the Internet in the form of surveillance and harassment, especially since the passing of the Computer Crimes Law, which significantly expanded state surveillance and censorship powers. Entrapment through dating apps is also a persistent concern.
- Seventy-five unique LGBTIQ-related URLs were found blocked in Iran. Blocked URLs in Iran include many human rights, cultural, and news websites covering LGBTIQ-related topics. Many blogging platforms are also blocked; therefore, blogs discussing LGBTIQ topics hosted on these platforms are inaccessible as well.

"Because of censorship, there's a big gap of education on SOGIESC. When they think they are different, they come to the idea that they are "trans" even though they are homosexuals. Families – don't have enough information on how to support, how to react. Lack of information also impacts health care of LGBT [people]."

– Shadi Amin, Director of 6rang, an Iranian Lesbian and Transgender network

- Internet censorship in Iran can be considered as both advanced and erratic. It is advanced because Iranian ISPs use Deep Packet Inspection (DPI) technology and generally implement SNI-based filtering. Iranian ISPs also started blocking "DNS over TLS" (or DoT). And it is erratic because ISPs alternate between blocking and unblocking sites over time, which may make Internet censorship more subtle and harder to detect.
- Widespread censorship has harmed the ability of LGBTIQ people to organize and advocate for human rights, as well as access critical information about health and well-being. The push towards establishing a national Internet (the National Information Network) and adopting national messaging apps (e.g., Soroush and Bale) are projected to further restrict online freedom.

Saudi Arabia

- LGBTIQ website censorship in Saudi Arabia is implemented alongside many other rights violations. Homosexuality and non-normative gender expression, for example, are criminalized in the country.
- Self-censorship is common among LGBTIQ communities in Saudi Arabia due to threats of harassment, intimidation, and arrests. Attacks against LGBTIQ individuals are often perpetrated by those affiliated with the ruling class and by the conservative members of Saudi society.
- LGBTIQ advocates and individuals have had to exist and work covertly in the country to

"Censorship challenges people's ability to find resources—to connect and be connected, and to ask for help ... It also sends a message from the government that [being LGBTIQ] is still taboo, it is still wrong...Instead, we want you to be unaware, to be uneducated. We don't want you to know about your rights or your body or sexuality."

– A digital security expert in the region

avoid prosecution. Entrapment, especially through dating apps, remains a serious risk.

- Twenty-six unique LGBTIQ-related URLs were found blocked in Saudi Arabia. Most of these include internationally-relevant LGBTIQ sites, although a few local LGBTIQ sites were seen blocked as well.
- All ISPs in Saudi Arabia consistently implement Internet censorship in the same way, regardless of ISP. Block pages served by ISPs in Saudi Arabia contain the tag "Server: Wirefilter" in the response, suggesting that the filtering was implemented through the use of WireFilter, a Saudi Internet filtering tool.

United Arab Emirates

• The United Arab Emirates (UAE) has been referred to as "one of the most liberal countries in the Gulf," although political parties are banned and its population has limited civil liberties. A 2018 UN report recorded numerous rights violations, including imprisonment and trials for those who criticize government institutions, as well as the use of torture against prisoners, discrimination against women, and lack of protection for foreign workers.

"It is not easy [for LGBTIQ people] to communicate-to find each other, to work together, to coordinate. And all of this is because of censorship."

– A digital security expert in the region

- While there is some variation across the different emirates, the UAE restricts freedom of expression online by blocking content considered prohibited by Sharia law, perceived as blasphemous, offensive or contrary to the Islamic faith, and/or considered liberal, secular, and atheistic.
- Because of the UAE's highly controlled online environment, self-censorship is common. Furthermore, our interviewees indicated that many within the LGBTIQ community believe that they are being surveilled.
- Fifty-one unique LGBTIQ-related URLs were found blocked in the UAE. Very few local websites covering LGBTIQ topics exist in the UAE. Therefore, local LGBTIQ communities depend on foreign LGBTIQ websites to access relevant information, but many of those are blocked.
- We detected the use of filtering technologies to block websites in the UAE, including by Saudi Arabia's WireFilter and Canada's Netsweeper.

OutRight Action International's Recommendations

The six countries featured in our report represent a range of socio-cultural, religious, legal, political, and technological realities. Internet capacity, access, and regulation likewise vary from country to country. The following recommendations, therefore, are not necessarily applicable to all countries, but rather, are meant to serve as broad advocacy avenues, which would need to be tailored further according to national context and nuance.

For UN Agencies, International NGOs, and Donor Partners

- Document and publicize Internet censorship where it occurs, demonstrating how and where such censorship directly violates international standards, laws, and treaties such as the 2018 Human Rights Council resolution on "the promotion, protection, and enjoyment of human rights on the Internet," and Article 19(3) of the International Covenant on Civil and Political Rights.
- Provide support to national and regional LGBTIQ human rights organizations to ensure that they are sufficiently resourced and technically equipped to undertake regular holistic safety and security education and training, to provide up-to-date information on new technology and recommended digital safety and security measures, to reinforce personal safety measures, and to protect emotional and psychological well-being.
- In consultation with LGBTIQ human rights defenders on other tailored approaches to mitigate the impact of censorship. These might include support to social media campaigns, programs to enhance access to health and mental health services and information or legal support.
- In consultation with LGBTIQ activists, determine when and how to convene regional and international efforts to raise awareness about the nature, extent, and impact of censorship targeting LGBTIQ-related content, organizations, and individuals in specific countries.
- In consultation with LGBTIQ advocates, demand that governments engaged in censorship be transparent about their rationale for and selection and duration of censored sites and when or if they intend to reduce or eliminate censorship.

For the Private Sector

- Companies that develop and manufacture Internet filtering technology should assess and minimize the impact of the use of their technologies on human rights defenders, including LGBTIQ organizations and individuals, as part of complying with international frameworks such as the Guiding Principles on Business and Human Rights endorsed by the UN Human Rights Council.
- Make circumvention or other secure digital technologies available online to all human rights defenders, including LGBTIQ human rights organizations at reduced or no cost to support their human rights advocacy efforts.
- Provide self-training kits/tools online on the use of emerging digital technologies that may enable circumvention of censorship and educate individuals on how to stay safe online.

For National Governments and Policymakers

- Hold private sector companies operating from their jurisdiction accountable to the international frameworks such as the Guiding Principles on Business and Human Rights.
- Promote and defend the right to free and uncensored internet access in international spaces as part of the fundamental human rights and civil liberties outlined in human rights resolutions and treaties, including the right to freedom of opinion and expression, the right to freedom of association, and the right to privacy in the digital age, among others.
- If engaging in censorship, be transparent about the rationale for and selection and duration of censored sites and when or if censorship will be reduced or eliminated.

For LGBTIQ Activists and Community Members

- Use safe and anonymous browsing and sharing tools, such as Virtual Private Networks, the Tor Browser, and OnionShare.
- Conduct frequent digital safety and security assessments to identify new potential digital security breaches quickly and minimize threats to LGBTIQ activists and community members.
- Standardize in funding proposals the inclusion of budgets for digital safety and security training and options/tools to circumvent censorship (such as Virtual Private Networks).
- Seek out support and training from experts who focus on holistic safety and security, including digital safety and security for human rights defenders, such as Frontline Defenders, the Tor Project, the Digital Defenders Partnership, and other experts.
- Play a watchdog role in monitoring and exposing companies selling censorship techniques and tools to governments for the purposes of Internet censorship, and highlighting the international norms and standards that are being violated.
- Through safe partnerships and alliances, as needed, document state-sponsored censorship and bring visibility to violations of international human rights norms and standards at national, regional, and global levels.



Introduction

Access to information and the ability to connect virtually (and physically) can save lives, support and empower communities, create agency, and advance human rights movements. For marginalized populations, including lesbian, gay, bisexual, transgender, intersex, and queer (LGBTIQ) people, online spaces are especially critical for safely identifying information and resources, connecting with community, and engaging in human rights advocacy and movement-building.¹⁰ Yet, state-sponsored Internet censorship is on the rise globally, targeting human rights defenders, journalists and the media, and political activists, among others.¹¹

Censorship of LGBTIQ content takes many forms, including the filtering of text or images within messaging apps, the blocking of applications and social media platforms or accounts, and censorship of LGBTIQ content on websites. In this report, we analyze specifically the impact of LGBTIQ website censorship on communities and movement-building efforts in six countries: Indonesia, Iran, Malaysia, Russia, Saudi Arabia, and the United Arab Emirates (UAE), where such censorship is common. Our goals for this research are the following:

- Examine which LGBTIQ websites are blocked in each of these countries.
- Determine how, technically-speaking, local Internet Service Providers (ISPs) implement the blocking.
- Investigate how website censorship impacts local LGBTIQ communities and their efforts to build movements that fight for justice and equality.

Three organizations–OutRight Action International,¹² the University of Toronto's Citizen Lab,¹³ and the Open Observatory of Network Interference (OONI)¹⁴–conducted this research, with each organization

¹⁰ The Global Commission on HIV and the Law, "HIV and the Law: Risks, Rights & Health – 2018 Supplement" (UNDP, July 2018): 23-4, https://reliefweb.int/sites/reliefweb.int/files/resources/HIV-and-the-Law-supplement-FINAL.pdf.

¹¹ Freedom House, Freedom on the Net 2020: The Pandemic's Digital Shadow (Washington, DC: Freedom House, 2020), https://freedomhouse.org/sites/default/files/2020-10/10122020_FOTN2020_Complete_Report_FINAL.pdf.

¹² OutRight Action International, https://outrightinternational.org/.

¹³ The Citizen Lab, Munk School of Global Affairs & Public Policy, University of Toronto, https://citizenlab.ca/.

¹⁴ Open Observatory of Network Interference (OONI), https://ooni.org/.

bringing its own unique skill set and expertise. OutRight Action International is a global human rights organization that seeks to advance LGBTIQ equality, while the Citizen Lab conducts evidence-based research on Internet censorship and surveillance around the world, and OONI monitors Internet censorship globally through its network measurement tools and datasets.

The report includes an executive summary, an explanation of our methodology, analyses of our findings in the six countries, and an overall conclusion.

Rationale and Environmental Overview

This research documents the discrimination that LGBTIQ individuals face online (in addition to challenges offline), with a particular focus on website censorship. It is important to note, however, that website censorship is just one facet of a range of restrictions on freedom of expression that affect LGBTIQ populations. Website restrictions work in combination with other efforts to constrain civil liberties and threaten human rights movements. This is especially the case in the six countries that are the focus of this report, where civil society is under increasing pressure, as the space to exercise the rights of free speech, assembly, and privacy is steadily shrinking. Efforts to promote and protect human rights have also been adversely impacted by the advent of the coronavirus (COVID-19) pandemic. At least forty-five governments around the world further control online content through increased censorship and punishment for online speech, as well as through instituting new surveillance and artificial intelligence (AI) interventions that go beyond acceptable disease containment measures.¹⁵

Countries that are engaging in censorship are violating internationally-recognized human

rights principles. The Special Rapporteur on the promotion and protection of the right to freedom of opinion and expression, Frank La Rue, noted in a 2011 report submitted to the UN General Assembly that, even though there are legitimate instances where restricting access to certain kinds of information (e.g., child sexual abuse material) is important to protect human rights, states' efforts to "restrict, control, manipulate and censor" online content "without any legal basis, or on the basis of broad and ambiguous laws, without justifying the purpose of such actions; and/or in a manner that is clearly unnecessary and/or disproportionate to achieving the intended aim" would be incompatible with states' obligations under international human rights law.16 Article 19(3) of the International Covenant on Civil and Political Rights (ICCPR) also stipulates that restrictions on freedom of expression can occur only in limited circumstances and must adhere to the principles of legality, legitimacy, and necessity.¹⁷ Of the six countries studied in this report, Indonesia, Russia, and Iran have ratified the ICCPR.¹⁸

In July 2018, the UN Human Rights Council (HRC) resolution on "The promotion, protection, and enjoyment of human rights on the Internet," affirmed "that the same rights that people have offline must also be protected online, in particular freedom of expression."¹⁹ Through this resolution, states are called upon to ensure equal and open Internet access, and to protect groups consistently targeted and censored in the

¹⁵ Freedom House, Freedom on the Net 2020: The Pandemic's Digital Shadow.

¹⁶ United Nations Office of the High Commissioner for Human Rights, Report of the Special Rapporteur on the Promotion and Protection of the Right to Freedom of Opinion and Expression, Frank La Rue, A/HRC/17/27, (May 16, 2011): 8, https:// ap.ohchr.org/documents/dpage_e.aspx?si=A/HRC/17/27.

¹⁷ International Covenant on Social and Political Rights, December 16, 1966, U.N.T.S. 999, https://www.ohchr.org/en/ professionalinterest/pages/ccpr.aspx.

¹⁸ International Covenant on Civil and Political Rights, March 23, 1966, U.N.T.S. 14668, https://treaties.un.org/pages/ViewDetails.aspx?src=TREATY&mtdsg_no=IV-4&chapter=4&clang=_en.

¹⁹ UN Human Rights Council, The Promotion, Protection and Enjoyment of Human Rights on the Internet, A/HRC/38/L.10/ Rev.1, (July 6, 2018), https://documents-dds-ny.un.org/doc/ UNDOC/LTD/G18/203/73/pdf/G1820373.pdf?OpenElement.

digital space. States are to foster "an enabling online environment that is safe and conducive to engagement by all, without discrimination and with consideration for individuals facing systemic inequalities, in order to promote the full enjoyment of human rights for all." The resolution also condemned "all undue restrictions of freedom of opinion and expression online that violated international law, and notes with concern that such restrictions have a significant impact on women and girls and other individuals who may face multiple and intersecting forms of discrimination."20 Although women and journalists were mentioned among groups who consistently experience "forms of discrimination" in the digital space, violations based on sexual orientation and gender identity or expression (SOGIE) were not explicitly mentioned. As demonstrated in this report, SOGIE is among the top categories of content that are targeted by online censorship.²¹

The ever-advancing nature of digital technology means that website censorship, along with efforts by users to circumvent it, is dynamic, leading to a persistent game of leapfrog between governments and civil society, both of whom are trying to stay ahead of one another. Indeed, activists whom we interviewed stressed the importance of continuing to educate themselves about new, safe methods to communicate and circumvent censorship, as well as how current and emerging technology could possibly help or harm them. At the same time, governments are applying ever more sophisticated means to curtail the work of human rights activists around the world (including but not limited to those who work to advance LGBTIQ rights) and deploying various means to control access to information, including by Internet filtering, bandwidth throttling, and surveillance.²²

Censorship of LGBTIQ content does not necessarily correlate with the criminalization of same-sex relations. Among the six countries, neither Indonesia nor Russia criminalize samesex relations. Yet, our findings suggest that the threats faced by LGBTIQ individuals and attacks against LGBTIQ content remain significant. Malaysia, Iran, Saudi Arabia, and the UAE have laws that criminalize same-sex relations, and they have been used to justify censorship.

Our findings illuminate that government efforts to block access to online content often cannot be implemented without support of private sector actors. Private companies own and operate many different parts of the Internetfrom cell towers and submarine cables (e.g., Alcatel-Lucent Submarine Networks SAS), to platforms (e.g., Google and Facebook), applications (e.g., WhatsApp, WeChat), and service providers (e.g., ISPs). As a result, their cooperation is required to implement online controls. In other words, although governments may mandate censorship, private companies are, in many cases, those who implement it in practice. Governments and ISPs may use networking equipment developed by private companies to identify, categorize, and block content. In some instances, these companies may even provide lists of websites that can be easily blocked by countries or ISPs. For example, the Canadian company Netsweeper created an "alternative lifestyles" category, which included LGBTIQ websites (this category has since been removed).²³ In the course of our investigation, we found that companies are often involved in the entire censorship lifecycle. For instance, Netsweeper and a Saudi filtering company,

²⁰ Ibid.

²¹ Office of the United Nations High Commissioner for Human Rights, Born Free and Equal: Sexual Orientation and Gender Identity in International Human Rights Law, HR/ PUB/12/06/Rev.1 (2012), https://www.ohchr.org/Documents/Publications/Born_Free_and_Equal_WEB.pdf.

²² Mozilla defines network (or bandwidth) throttling as "an intentional slowing down of internet speed. In web perfor-

mance, network throttling, or network condition emulation, it is used to emulate low bandwidth conditions experienced by likely a large segment of a site's target user base." See: "Network Throttling - MDN Web Docs Glossary: Definitions of Web-Related Terms," MDN, accessed April 20, 2021, https://developer.mozilla.org/en-US/docs/Glossary/Network_throttling.

²³ Jordan Pearson, "Netsweeper Says It's Stopped 'Alternative Lifestyles' Internet Censorship," Vice News, January 21, 2019, https://www.vice.com/en/article/3kgznn/netsweeper-says-its-stopped-alternative-lifestyles-censorship.

Sewar Technologies Ltd. (which manufactures a product called WireFilter), are being used in the UAE and Saudi Arabia to block access to certain online content.

Beyond Internet censorship, private sector products and platforms may be exploited to further violate human rights. Members of law enforcement in Iran, Russia, and Saudi Arabia have posed as gay or trans people online in order to root out LGBTIQ individuals, thereby putting these individuals at risk of arrest, exploitation, and violence.²⁴ The presence of LGBTIQ apps on a user's phone has also been used as grounds to intimidate, threaten, and arrest them.²⁵ While Grindr, for example, has responded to these incidents with updated safety features, its continued use by law enforcement for entrapment purposes demonstrates that these improvements are insufficient to fully protect its users.²⁶

Private companies themselves have been directly impacted by online censorship. Governments in the six countries covered by this report have cut off access to a wide array of platforms and applications, including dating apps, news media websites, messaging platforms, and social media websites. In 2019, Iranian state authorities ordered ISPs to block access to the Android app store and Google Play Store.²⁷ Some companies, who are opposed to censorship, have pushed back, but ultimately they must abide by the prevailing laws and regulations to continue to operate in a given jurisdiction. For example, Google removed 73 LGBTIQ-related apps from its Play Store in January 2018 upon request by Indonesian authorities; an official from Indonesia's Ministry of Communication and Information Technology stated that "the contents of the apps contradicted cultural norms and contained pornographic content."²⁸

LGBTIQ communities in the six countries face persistent persecution and discrimination. Interviews with experts and community members working on LGBTIQ issues in these countries uncovered the prevalence of self-censorship among LGBTIQ individuals. Self-censorship is especially common among LGBTIQ human rights activists, service providers, and journalists, among others. State-sponsored censorship, combined with fines, arbitrary arrests, torture, and executions of LGBTIQ individuals, create a chilling effect that is detrimental to movement building, social connection, access to health and safety information, and human dignity.²⁹

Research Questions

In our research on LGBTIQ website censorship and its impact, we asked the following research questions:

1. Which LGBTIQ websites are blocked in Indonesia, Iran, Malaysia, Russia, Saudi Arabia, and the UAE?

²⁴ Interview with a digital protection expert in the region, October 27, 2020; "Chechnya LGBT: Dozens 'Detained in New Gay Purge,"; Shima Houshyar, LGBT Rights in Iran (Middle East Report Online, October 21, 2015), https://merip. org/2015/10/lgbt-rights-in-iran/.

²⁵ Apps, Arrests and Abuse in Egypt, Lebanon and Iran, Summary report (Article 19, February 2018): 16, https:// www.article19.org/wp-content/uploads/2018/02/ LGBTQ-Apps-Arrest-and-Abuse-report_22.2.18.pdf.

^{26 &}quot;Discreet App Icon (DAI)," Grindr Help Center, accessed November 20, 2020, https://help.grindr.com/hc/ en-us/articles/360016894174-Discreet-App-Icon-DAI-.

²⁷ Freedom House, Iran, Freedom on the Net 2020 (Freedom House, 2020), under "B. Limits on Content," https://freedom-house.org/country/iran/freedom-net/2020.

²⁸ Ed Davies Silviana Cindy, "New Indonesia Web System Blocks More than 70,000 'negative' Sites," *Reuters*, February 19, 2018, https://www.reuters.com/article/us-indonesia-communications-idUSKCN1G30KA.

²⁹ Mikhail Tumasov (Chair of the Russian LGBT Network), in discussion with the interviewer, March 18, 2020; Lini Zurlia (member of the Association of Southeast Asian Nations (ASEAN) Sexual Orientation, Gender Identity and Expression (SOGIE) Caucus), in discussion with the interviewer, May 12, 2019; Interview with SZ (LGBTIQ activist), April 25, 2019; Interview with a digital protection expert in Saudi Arabia, October 27, 2020; Interview with "Mohammed" (pseudonym), March 10, 2020; Thilaga (queer activist and founder of Justice for Sisters), in discussion with the interviewer, July 29, 2020; LI and CS, (active members in LGBTQI+ communities in the UAE), in discussion with the interviewer, August 6, 2020.

- 2. How are LGBTIQ websites blocked by local ISPs in each country? Which censorship techniques are employed? And how does blocking vary across local networks?
- 3. What are the companies that are facilitating website censorship in the six countries?
- 4. How do censorship techniques targeting LGBTIQ websites compare across the six countries?
- 5. How does LGBTIQ website censorship affect LGBTIQ communities and efforts to promote LGBTIQ equality in each country?
- 6. In light of website censorship and other forms of restrictions, what tactics are employed by LGBTIQ communities and activists in response?

Case Studies

Focusing on six countries enabled us to perform in-depth, country-specific analyses of relevant OONI measurement and to supplement these findings with qualitative data collected through literature research and interviews. Interviews are particularly useful to corroborate and contextualize the technical findings obtained from OONI network measurement tests.

Indonesia, Malaysia, Iran, Russia, Saudi Arabia, and the UAE were chosen as case studies primarily because:

- Research and media reports suggest relatively low tolerance towards LGBTIQ people in these countries.³⁰
- Previous research has found that all six countries have blocked LGBTIQ-related websites (see OONI's past research in Indonesia, Malaysia, and Iran), which

provides a baseline for comparison;³¹

- ISPs in all six countries are known to serve block pages, which notify users that access to websites are restricted, enabling the automatic detection and confirmation of LGBTIQ website blocking (e.g., we can analyze relevant data based on block page fingerprints and annotations);
- We have partner organizations in all six countries, which enabled us to perform further OONI Probe testing and conduct interviews.³²

These countries represent some of the most challenging digital environments for LGBTIQ people in the world. Often, censorship of LGBTIQ websites occurs in combination with a broader clamp down on pro-democracy movements and expanded policing of online dissent. Government officials and the more conservative segment of society in these countries also often share underlying prejudices that LGBTIQ people are "disordered" and therefore constitute a threat to national security or "traditional values." In Russia, for example, censorship targeting LGBTIQ content is based on the infamous "anti-gay propaganda" law, created in the name of "protecting minors." The law bans access to all LGBTIQ content by young people (those under the age of eighteen), including closed groups and online forums.33 In subsequent sections of this report, we explain our research methodologies, and outline our research into the blocking of LGBTIQ websites

³⁰ Lucas Ramon Mendos, State-Sponsored Homophobia: Global Legislation Overview Update (Geneva: ILGA World, December 2019): 9, https://ilga.org/downloads/ILGA_ World_State_Sponsored_Homophobia_report_global_ legislation_overview_update_December_2019.pdf.

³¹ Kay Yen Wong et al., The State of Internet Censorship in Indonesia (Open Observatory of Network Interference, May 23, 2017), https://ooni.org/post/indonesia-internet-censorship/; Maria Xynou et al., The State of Internet Censorship in Malaysia (Open Observatory of Network Interference, December 20, 2016), https://ooni.org/post/malaysia-report/; Maria Xynou et al., Internet Censorship in Iran: Network Measurement Findings from 2014-2017 (Open Observatory of Network Interference, ASL19, Article 19, and Small Media, September 28, 2017), https://ooni.org/post/iran-internet-censorship/.

^{32 &}quot;OONI Probe."

³³ Rowena Mason, "David Cameron Met Stephen Fry to Discuss Russian Gay Rights Row," *The Guardian*, August 18, 2013, sec. World news, http://www.theguardian.com/world/2013/ aug/18/david-cameron-stephen-fry-russia-gay-rights.

in Indonesia, Malaysia, Russia, Iran, Saudi Arabia, and the UAE. In the report's conclusion, we summarize our findings on LGBTIQ website blocking across the six countries. In the future, we hope to expand this study not only to examine LGBTIQ website blocking in other countries around the world, but also potentially other forms of online censorship, such as the blocking of mobile applications and social media accounts, and the filtering of text or images within messaging apps.

Research Methods and Questions

As investigating Internet filtering and its impact on movement building is an interdisciplinary endeavor, we have adopted a "mixed methods" approach to the research conducted for this report. We combined network measurement data with literature research and remote semi-structured interviews. These methods are further explained below.

Network Measurement

Since 2012, OONI has deployed a free and open-source software–called OONI Probe– which is designed to measure various forms of Internet censorship on different networks (hence, "network measurement"), including website blocking.³⁴ When OONI Probe users run network measurement tests, their test results are immediately and automatically sent to OONI servers, processed, and openly published.³⁵ OONI has published hundreds of millions of network measurements from more than 239 countries and territories since 2012, and continues to do so daily in near real-time.

Because OONI hosts one of the largest open datasets on Internet censorship around the world, we used its technology to examine

35 "OONI Data," Open Observatory of Network Interference, accessed October 25, 2020, https://ooni.org/data/.

LGBTIQ website censorship.³⁶ OONI's tools and methodologies also provide flexibility in determining which LGBTIQ websites to test, and the ability to coordinate further testing directly with OONI Probe communities in the selected countries.³⁷ For this report, we collected data from the OONI Web Connectivity test in Indonesia, Iran, Malaysia, Russia, Saudi Arabia, and the UAE between June 1, 2016 and July 31, 2020.³⁸

We examined this dataset for instances of deliberate blocking on consumer-facing, commercial ISPs. For each instance of deliberate blocking identified, we created an annotation that could be used through an iterative process to identify further instances of blocking using the same method. The final product of this process was a collection of URLs identified as blocked in the six countries of interest. Further details on our methodology are available in the "Network Measurement Methodology" section of this report.

Literature Research

We engaged in literature research (e.g., relevant reports, academic articles, and policy briefs) to further document the political context and the history of LGBTIQ rights and advocacy in our countries of interest.

Interviews

As a means of identifying the impact of censorship on LGBTIQ communities and movement building and to add context to the network measurement findings, we conducted fifteen remote semi-structured interviews with experts and community members from or working on LGBTIQ issues in Indonesia, Iran, Malaysia, Russia, Saudi Arabia, and the UAE.

^{34 &}quot;OONI Probe."

³⁶ Ibid.

³⁷ Citizen Lab, "Test Lists Repository", accessed October

^{25, 2020,} https://github.com/citizenlab/test-lists.

^{38 &}quot;Web Connectivity."

Information Controls Overview

The censorship described in this report serves as an example of 'information controls,' which the Citizen Lab defines as "actions conducted in or through information and communication technologies that seek to deny, disrupt, secure, or monitor information for political ends."³⁹ Other forms of information controls include mass and targeted surveillance, disinformation campaigns, and slowing down connections to specific websites.

Censorship can take a number of forms and impact different user bases. An Internet Service Provider (ISP) blocking access to a specific website would impact customers of that ISP, while shutting down Internet access in a given area would affect access across multiple ISPs operating in that area.⁴⁰ At the far end of sophistication of state-sponsored censorship is the creation of national "Intranets," which are closed, localized Internet systems that essentially block access to the global Internet and can rigidly control content, actively surveil users, and quickly identify violations. Among this report's case studies, two countries–Russia and Iran–have been developing their own closed Internet systems.⁴¹

Commonly, ISPs implement censorship to restrict access to information for users of their service, using technical methods to block access to websites, or to restrict the functionality of applications. This is significant as more applications rely on network communications for back end functions and features in addition to distribution. Additionally, content moderation—such as a social media platform removing content that does not conform to their community guidelines—has important

³⁹ See Deibert, Ronald J., and Masashi Crete-Nishihata. "Global Governance and the Spread of Cyberspace Controls." Global Governance 18, no. 3 (2012): 339–61. Accessed November 26, 2020. http://www.jstor.org/stable/23269961.

⁴⁰ In 2019 alone, there were at least 213 shutdowns in 33 countries. See Berhan Taye, Targeted, Cut off, and Left in the Dark: The #KeepItOn Report on Internet Shutdowns in 2019 (Access Now, February 24, 2020): 9, https://www.accessnow.org/cms/assets/uploads/2020/02/KeepItOn-2019-report-1.pdf.

⁴¹ Michael Rubin, "Evolution of Iranian Surveillance Strategies Toward the Internet and Social Media," in *The Digital Age, Cyber Space, and Social Media: The Challenges of Security and Radicalization.*, ed. Syed Munir Khasru, vol. 1 (Dhaka: Institute for Policy, Advocacy and Governance, 2020), https://www.aei.org/articles/evolution-of-iranian-surveillance-strategies-to-ward-the-internet-and-social-media/; Jane Wakefield, "Russia 'successfully Tests' Its Unplugged Internet," BBC News, December 24, 2019, sec. Technology, https://www.bbc.com/news/technology-50902496.

implications for the accessibility of information, but is beyond the scope of this report.

This report focuses on the blocking of websites by network operators providing services to consumers, and we consider blocking by schools, libraries or private workplaces to be out of scope.

How are Websites Blocked?

In this report, we have analyzed network measurement data in an effort to identify instances of deliberate blocking of web content. There are a few core techniques that are used by network administrators to block access to web content for users on a specific network. These methods vary in terms of technical complexity, the risk of collateral damage from blocking non-targeted content, transparency to users, and ease of circumvention. While the same methods can be used to block other resources (such as mobile applications), we focus here on their application to block websites.

The primary censorship methods we will discuss here are IP blocking, DNS hijacking, DNS injection, and HTTP response injection (explained below).

IP Blocking

A network administrator can restrict access to a targeted website by preventing all network traffic from reaching the IP (Internet Protocol) address where the website in question is hosted. This is typically done by configuring a router to drop any traffic destined for that IP address. As this technique can be configured with common networking hardware, it is one of the easiest ways to block websites. This type of filtering is generally not transparent to users, who would typically see an error message similar to what they might see if they tried to visit a non-responsive website. This method of blocking poses the greatest risk for collateral damage to other websites, as many websites can be hosted at the same IP address, and blocking access to such an IP would block all the websites hosted at that IP. As shared web hosting and content distribution networks are increasingly prevalent in modern web hosting environments, collateral damage from IP blocking becomes more common.

DNS Hijacking

Another common method of web filtering is blocking using a DNS (Domain Name System) server, also known as "DNS hijacking." DNS hijacking occurs when invalid DNS responses are returned for attempts to resolve the domain name of a targeted website. Larger networks, such as network service providers, host their own recursive DNS servers. These servers are used to translate domain names (such as "www.example.com") to IP addresses (such as "66.70.203.130"). The administrator of such a DNS server can edit its configuration so that requests for the IP address of certain domains will receive responses that differ from the authoritative response.42 This would lead users to either a block page, which may communicate to visitors that the website is blocked and the rationale as to why it is blocked, or to a non-responsive IP address, which means that the website is inaccessible, but users are not informed that access to that website has been made unavailable.

Like IP blocking, DNS hijacking is also straightforward for network administrators to implement, as configuring their DNS servers is a standard task. However, this type of DNS blocking is simple for users to circumvent. In many cases a user can configure their device to use another DNS server, such as the ones provided by Google or Cloudflare, thus bypassing the block.

^{42 &}quot;Setting up a DNS Firewall on Steroids," DNSMasterChef, accessed March 19, 2021, https://navytitanium.github.io/DNSMasterChef/.
DNS Injection

To avoid the ease with which DNS hijacking can be circumvented by users, network administrators can use DNS injection instead. This type of blocking uses dedicated hardware to identify DNS requests and inject the desired response back to the user. Using an alternative DNS server does not help in this instance as the injected response is linked to the specific website as opposed to the DNS server.

This method requires special hardware or software to implement. Furthermore, it can be computationally expensive to spoof reply packets at a high volume of traffic, and can lead to unintended or unexpected network side effects, particularly in cases of misconfiguration.

HTTP Response Injection

Injecting incorrect responses does not apply solely to DNS requests. Network devices can often craft incorrect replies for other types of network traffic as well, such as HTTP requests. This can be done using an intermediary device that is in or on the network between the user (or a copy of their traffic) and the site they are requesting. If the HTTP request contains a blacklisted IP address, domain name, or keyword, then a specially-crafted HTTP response is sent back to the user. This incorrect response can either forward to a block page or interrupt the network connection, which appears to the user as a network error.

HTTP injection is commonly-employed by ISPs because, even though special investment is required, it can be configured to avoid overblocking, is somewhat difficult for users to circumvent, and does not typically have the network side effects that DNS injections may display.

Technique	Set Up Needed For ISP	What Does the User See?	How Can it be Circumvented?
IP Blocking	Easy, just reconfigure existing hardware/ software	Network error	Use of Tor, VPN, or secure proxies.
DNS Hijacking	Easy, just reconfigure existing hardware/ software.	Block page or network error.	Change the DNS server used.
DNS Injection	Requires special hardware/software	Block page or network error.	Use of Tor, VPN, or secure proxies.
HTTP Response Injection	Requires special hardware/software	Block page or network error.	Use of Tor, VPN, or secure proxies.

This table summarizes some characteristics of the aforementioned basic techniques for network filtering:

Table 1: Techniques for network filtering.



Highlights

- There are at least thirty-eight unique URLs relevant to the LGBTIQ community that are blocked in Indonesia.
- LGBTIQ websites are routinely, if inconsistently, blocked in Indonesia. As a result, LGBTIQ individuals devise circumvention and self-censorship strategies, as well as increase their reliance on social media.
- Online censorship conducted by the Communications and Information Technology Ministry (Kominfo) has routinely targeted LGBTIQ websites, including those belonging to organizations providing support and resources to the Indonesian LGBTIQ community.
- Variation was found in the blocking of LGBTIQ websites across Indonesian Internet Service **Providers (ISPs).** Most blocks were observed on Telekomunikasi Indonesia (Telkom), the largest ISP in Indonesia, which is majority owned by the Indonesian government, followed by Indosat Ooredoo (Indosat), a private corporation.
- None of the LGBTIQ websites found blocked in Indonesia are in Bahasa Indonesia nor are they intended for an Indonesia-specific audience.

Population (2020)	273,523,61543
Internet penetration (2020)	64.1 percent ⁴⁴
Growth of internet population (2010-2018)	29 percent ⁴⁵
Active social media users (by platform)	Facebook: 50.1 percent penetration rate (January 2020) ⁴⁶
Mobile subscriptions (per 100 inhabitants) [2018]	119.3447
ICCPR ratification	Yes
ECSR ratification	Yes
Freedom on the Net ranking (2015)	58/100; Partly free ⁴⁸
Freedom on the Net ranking (2020)	49/100; Partly free ⁴⁹
Consensual same-sex relations	Legal ⁵⁰

Table 1: Selected Indonesian LGBTIQ, demographic and iInternet penetration indicators

^{43 &}quot;Asia Internet Stats by Country and 2020 Population Statistics: Indonesia," Internet World Stats, accessed October 25, 2020, https://www.internetworldstats.com/asia.htm#id.

⁴⁴ Ibid.

^{45 &}quot;Percentage of Individuals Using the Internet, 2000-2018," International Telecommunications Union, December 2019, https://www.itu.int/en/ITU-D/Statistics/Documents/statistics/2019/Individuals_Internet_2000-2018_Dec2019.xls.

^{46 &}quot;Asia Internet Stats by Country and 2020 Population Statistics: Indonesia."

⁴⁷ International Telecommunications Union. "Mobile-Cellular Telephone Subscriptions, 2000-2018." International Telecommunications Union, December 2019. https://www.itu.int/en/ITU-D/Statistics/Documents/statistics/2019/Mobile_cellular_2000-2018_Dec2019.xls.

⁴⁸ Freedom on the Net 2015; Please note that Freedom House flipped their Freedom on the Net (FOTN) Internet Freedom Score since their 2015 report, switching a score of 100 from signifying "least free" to "most free." 2015 FOTN scores thus have been flipped to map to the current scoring system.

⁴⁹ Freedom House, "Indonesia," in Freedom on the Net 2020 (Freedom House, 2020), https://freedomhouse.org/country/in-donesia/freedom-net/2020.

⁵⁰ Note: In Indonesia, Aceh province criminalizes consensal same-sex relations through Sharia law, and a federal level ban is pending. See: Mendos, State-Sponsored Homophobia, 11.

Background

Indonesia has seen a steady increase in Internet users over the last twenty years. Data from 2018 suggests that more than 64 percent of Indonesia's over 270 million people are using the Internet, while 20 million people came online for the first time between 2019 and 2020.51 The rise in connectivity, however, is accompanied by a growing influence of conservative Islam in this Muslim-majority country. This trend has led to a rise in statesponsored Internet censorship, fueled by the push to sanction beliefs and behavior perceived as antithetical to Islamic teaching.⁵² In spite of this, the 2020 Pew Research Center's Global Attitudes Survey reported some improvement in attitudes towards homosexuality in Indonesia. Whereas only 3 percent of those surveyed in 2007 believed that homosexuality should be accepted by Indonesian society, this rate had grown to 9 percent by 2019.53

Information and communication technologies (ICTs) play a crucial role in facilitating LGBTIQ rights education and advocacy. Some of the more established LGBTIQ organizations have provided support for those facing psychosocial and sexual wellbeing issues through Internet chat rooms and instant messaging, in addition to telephone hotlines and in-person counselling sessions. Furthermore, our interviews with in-country experts revealed that LGBTIQ individuals increasingly use social media as their primary means of communication.⁵⁴ As a result, access to social platforms has become crucial for individuals seeking information on sexual and reproductive health, and to find romantic or sexual partners.⁵⁵ Yet, our analysis suggests that LGBTIQ Internet content is still being routinely, if inconsistently, censored, forcing LGBTIQ activists and communities to devise circumvention and self-censorship strategies.

As activism shifts online due to the COVID-19 pandemic, attacks against LGBTIQ individuals have intensified. Multiple sources interviewed reported that LGBTIQ people consider learning about and practicing advanced digital security methods as a must. These security methods are necessary not only because of surveillance concerns on platforms such as Facebook and WhatsApp, but also to protect themselves from malicious actors who infiltrate online LGBTIQ events and other spaces.⁵⁶

While the COVID-19 pandemic has affected Indonesians' livelihoods across the board, the trans community has been reported to be one of the hardest hit, particularly those who work in the beauty or esthetics industry.⁵⁷ The trans community's hardship is compounded by the fact that transgender people in Indonesia struggle to obtain basic documentation (e.g., national identity cards or KTP) to access public services.⁵⁸ Censorship of LGBTIQ content

^{51 &}quot;Asia Internet Stats by Country and 2020 Population Statistics: Indonesia"; Simon Kemp, Digital 2020: Indonesia (DataReportal, 2020), https://datareportal.com/reports/digital-2020-indonesia.

⁵² Maria Platt, Sharyn Graham Davies, and Linda Rae Bennett, "Contestations of Gender, Sexuality and Morality in Contemporary Indonesia," Asian Studies Review 42, no. 1 (January 2, 2018): 6, https://doi.org/10.1080/10357823.2017.1 409698; Freedom House, "Indonesia," in Freedom on the Net 2019 (Freedom House, 2020), https://freedomhouse.org/ country/indonesia/freedom-net/2020.

⁵³ Jacob Poushter and Nicholas O. Kent, *The Global Divide* on Homosexuality Persists (Pew Research Center, June 2020): 18, https://www.pewresearch.org/global/2020/06/25/ global-divide-on-homosexuality-persists/.

⁵⁴ Being LGBT in Asia: Indonesia Country Report (Bangkok: United Nations Development Programme, USAID, 2014): 35, https://www.undp.org/content/dam/rbap/docs/ Research%20&%20Publications/hiv_aids/rbap-hhd-2014blia-indonesia-country-report-english.pdf.

⁵⁵ Riska Carolina (sexuality law specialist and part of the Support Group and Resource Center on Sexuality Studies (SRGC)), in discussion with the interviewer, July 22, 2020; Rebecca Nyuei (co-founder of Jaringan Transgender Indonesia (JTID)), in discussion with the interviewer, September 13, 2020.

⁵⁶ Carolina, interview; Nyuei, interview.

⁵⁷ Graeme Reid, LGBTQ Inequality and Vulnerability in the Pandemic (Human Rights Watch, June 18, 2020), https:// www.hrw.org/news/2020/06/18/lgbtq-inequality-and-vulnerability-pandemic.

^{58 &}quot;Stigma and Discrimination: LGBTQ+," *Reprodukasi*, accessed March 26, 2021, https://www.reprodukasi.org//en/stigma-and-discrimination-lgbtq.

further harms those hardest hit by the pandemic by denying them access to opportunities (e.g., job postings), social connection, health information, and support services.

Public Opinion and Legal Situation for LGBTIQ People in Indonesia

Indonesia has a history for being tolerant of queerness, particularly gender identities known as "waria," who may be transgender.⁵⁹ The founding of the first "waria" organization in the capital city of Jakarta in 1969, the Jakarta Waria Association (Himpunan Waria Djakarta), marked the start of the LGBTIQ movement in the country. Another "waria" association was established in 1978 in Surabaya, the secondlargest city in Indonesia after Jakarta, which also hosted the first Pride celebration in 1999, while the first Indonesian Lesbian and Gay Congress was held in the city of Yogyakarta in 1993.⁶⁰

Yogyakarta is the birthplace of the "Yogyakarta Principles" (YP). Adopted in 2006 (and further updated in 2017), the YP contains principles for the application of international human rights law in relation to sexual orientation and gender identity, thus firmly establishing that LGBTIQ rights are human rights.⁶¹ Despite the adoption of this landmark document in Indonesia, the fundamental human rights of LGBTIQ people have come increasingly under attack due to rising religious conservatism,62 the prevalence of discriminatory attitudes, and the misuse of science. The Indonesian Psychiatrists Association (PDSKJI) classifies homosexuality, bisexuality, and transsexualism as "mental disorders that can be cured through proper treatment."63 Treatments touted as solutions to what the PDSKJI considers "disorders" include so-called "conversion therapy."⁶⁴ In other cases, forced exorcisms are commonly undertaken in the country, as many believe that homosexuality is a result of a persion being possessed by an evil spirit.65

One of the most religiously conservative provinces in Indonesia is Aceh in Sumatra Island. The province enabled the expansion of Sharia (Islamic law) as a component of its special autonomy arrangement, which was established as part of a 2005 peace agreement that put an end to a separatist insurgency that lasted over thirty years.⁶⁶ Since then, the

⁵⁹ Baden Offord, "Arrested Development! Singapore, Indonesia, and Malaysia," in The Lesbian and Gay Movement and the State: Comparative Insights into a Transformed Relationship, ed. Manon Tremblay, David Paternotte, and Carol Johnson (Farnham, Surrey; Burlington, VT: Ashgate, 2011): 12.

⁶⁰ Khanis Suvianita, "Human Rights and the LGBTI Movement in Indonesia," Asian Journal of Women's Studies 19, no. 1 (January 1, 2013): 127–38, https://doi.org/10.1080/12259276.2 013.11666145.

⁶¹ Kamilia Manaf, Dewi Nova Wahyuni, and Ikram Baadila, Queering Internet Governance in Indonesia: An Exploratory Research in Indonesia (Institut Pelangi Perempuan, Association for Progressive Communication, and Ford Foundation, 2014), https://www.apc.org/sites/default/files/Queering_ Internet_Governance_in_Indonesia_final_research_book_. pdf; The Yogyakarta Principles Plus 10: Additional Principles and State Obligations on the Application of Inernational Human Rights Law in Relation to Sexual Orientation, Gender Identity, Gender Expression, and Sex Characteristics to Complement the Yogyakarta Principles, November 10, 2017, http://

yogyakartaprinciples.org/wp-content/uploads/2017/11/A5_yogyakartaWEB-2.pdf.

⁶² Simon Butt, "Religious Conservatism, Islamic Criminal Law and the Judiciary in Indonesia: A Tale of Three Courts," *The Journal of Legal Pluralism and Unofficial Law* 50, no. 3 (September 2, 2018): 25, https://doi.org/10.1080/07329113.20 18.1532025.

⁶³ Athira Nortajuddin, "Indonesia's Controversial Conversion Therapy," The ASEAN Post, February 22, 2021, https://theaseanpost.com/article/indonesias-controversial-conversion-therapy.

⁶⁴ Ibid.

⁶⁵ AFP, "Forced Exorcisms Touted as 'cure' for LGBT Indonesians," *The Bangkok* Post, May 7, 2020, https://www. bangkokpost.com/world/1914080/forced-exorcisms-touted-as-cure-for-lgbt-indonesians.

⁶⁶ Gayatri Suroyo Greenfield Charlotte, "Strict Sharia Forces Gays into Hiding in Indonesia's Aceh," Reuters, December 28, 2014, https://www.reuters.com/article/us-indonesia-religion-gay-idUSKBN0K600W20141228; Michelle Ann Miller, Rebellion and Reform in Indonesia: Jakarta's Security and Autonomy Policies, 1st ed. (New York: Routledge, 2009): 177, https://books.google.ca/books?id=ZrRkq1zGbA0C&dq=aceh+special+autonomy&lr=&source=gbs_navlinks_s; Craig Thorburn, "Building Blocks and Stumbling Blocks: Peacebuilding in Aceh, 2005–2009," Indonesia, no. 93 (2012): 86, https://doi.org/10.5728/indonesia.93.0083.

province has passed the most comprehensive anti-LGBTIQ legislation in the country, the anti-homosexuality law of 2014.⁶⁷ This law criminalizes acts of same-sex relations, punishing those caught with either "100 lashes, 100 months in jail or a fine of 1,000 grammes of gold."⁶⁸ In November 2020, two gay men received seventy-seven lashes after a vigilante mob caught them allegedly engaging in same-sex relations.⁶⁹

Members of the People's Representative Council, Indonesia's legislative body, have proposed discriminatory laws against the LGBTIQ community and other minority groups. The draft "Family Resilience" bill was proposed in early 2020, for example, which regards homosexuality as a deviance. This bill requires LGBTIQ people to report to the authorities for "rehabilitation," and for families to report LGBTIQ individuals to government agencies in charge of "family resilience" matters.⁷⁰ The "Family Resilience" bill was rejected by the House of Representatives in November 2020, as five parties controlling a combined twothirds of chamber seats voted in opposition.71 The 2019 draft revision of the Penal Code also criminalizes sex outside of marriage, which effectively makes homosexual relationships illegal, as gay marriage is not yet recognized in the country.⁷² Many parliamentarians

72 "Indonesia: Draft Criminal Code Disastrous for Rights," *Human Rights Watch*, September 18, 2019, https://

reportedly hold close ties to the "Family Love Alliance" (AILA), a conservative group of academics and activists that has aimed to pass anti-LGBTIQ legislation since 2016.⁷³

In January 2020, a local version of the Family Resilience bill was proposed in Bogor, a city that is a part of the Jakarta metropolitan area.⁷⁴ At the same time, another part of the Jakarta metropolitan area, Depok, announced similar policy plans, specifically naming the intention to raid residences of LGBTIQ individuals and establish a center to rehabilitate "victims" of the LGBTIQ community.⁷⁵ A member of a support group for LGBTIQ Indonesians stated in an interview that these proposals sparked a social justice movement called "Reform Corrupted" ("Reformasi Dikorupsi)," referring to the failure of democratic reform in Indonesia.⁷⁶

Many Indonesian government officials have made anti-LGBTIQ comments publicly.⁷⁷ In October 2020, a spokesperson for the National Police said that those who are found to have engaged in same-sex relations would be met with firm punishment.⁷⁸ A military spokesperson echoed these sentiments in a written statement, stating that being LGBTIQ is considered to be "against military

76 Carolina, interview.

77 Kyle Knight and Shayna Bauchner, "These Political Games Ruin Our Lives": Indonesia's LGBT Community Under Threat (Human Rights Watch, August 10, 2016), https://www. hrw.org/report/2016/08/10/these-political-games-ruinour-lives/indonesias-lgbt-community-under-threat.

78 Fiqih Prawira Adjie, "Amnesty Condemns TNI for Anti-LBGT Campaign Following Soldier's Dismissal, Imprisonment," *The Jakarta* Post, October 18, 2020, https://www.thejakartapost. com/news/2020/10/17/amnesty-condemns-tni-for-anti-lbgt-campaign-following-soldiers-dismissal-imprisonment.html.

⁶⁷ Greenfield, "Strict Sharia Forces Gays into Hiding in Indonesia's Aceh."

⁶⁸ Reuters Staff, "Indonesia's Aceh Introduces Whipping as Punishment for Gay Sex," *Reuters*, September 27, 2014, https://www.reuters.com/article/indonesia-sex-idINKCN0HM05920140927.

^{69 &}quot;77 Lashes for a Gay Couple in Indonesia," *Human* Rights Watch, January 28, 2021, https://www.hrw.org/news/2021/01/28/77-lashes-gay-couple-indonesia.

^{70 &}quot;Crackdown Against LGBTIQ People Intensifies In Indonesia," OutRight Action International, February 20, 2020, https://outrightinternational.org/content/crackdown-against-lgbtiq-people-intensifies-indonesia.

^{71 &}quot;The House Drops a Bill That Will Require Indonesians to Turn in Gay Family Members," *Jakarta Globe*, November 24, 2020, https://jakartaglobe.id/news/the-house-drops-a-billthat-will-require-indonesians-to-turn-in-gay-family-members.

www.hrw.org/news/2019/09/18/indonesia-draft-criminal-code-disastrous-rights.

⁷³ Carolina, interview.

⁷⁴ Jonta Saragih, "OPINION: A crackdown against LGBT+ people in Indonesia is underway", Openly by Thomson Reuters, February 23, 2020, https://www.openlynews.com/ i/?id=b4eb4f1f-fef7-467f-bee9-d2053dbe3738.

^{75 &}quot;Idris Instruksikan Perangkat Daerah Tingkatkan Upaya Pencegahan Perilaku LGBT," Depok, January 2020, https:// berita.depok.go.id/photo/idris-instruksikan-perangkat-daerah-tingkatkan-upaya-pencegahan-perilaku-lgbt-1136.

discipline and a serious violation that must not occur within the Indonesian Military (TNI)."⁷⁹ Concerns over surveillance and potential threats by law enforcement also exist. The Israeli newspaper Haaretz reported in 2018 that surveillance software created by Israel's Verint Systems was used to create a database of LGBTIQ activists in Indonesia.⁸⁰ Meanwhile, there were also reports of transgender people being placed in detention facilities in line with their gender assigned at birth, putting them at risk of harassment and sexual abuse.⁸¹

Mainstream mass religious groups have amplified anti-LGBTIQ sentiment by calling for legislation to ban "LGBTIQ activities" in Indonesia.⁸² In January 2015, the Indonesian Ulema Council (MUI), issued a *fatwa* (a legal ruling or decree on Islamic law given by a Muslim religious leader) declaring that samesex sexual relations are *haram* (forbidden).⁸³ Although MUI is not a state agency, the Council has significant religious, political, and legal authority in Indonesia.⁸⁴ MUI argued that "sexual intercourse can only be done by a married couple, which is a man and a woman," and further claimed that their decision was aimed to address acts of sodomy, rape, and child molestation.⁸⁵

Policies against LGBTIQ communities can vary at the national and sub-national (e.g., municipal or provincial) levels. As Lini Zurlia, of the ASEAN SOGIE Caucus noted, "censorship [of the LGBTIQ community] depends on the local context within the country."86 That is, if discriminatory efforts or legislation failed at the national level, then local actors may try to implement similar policies in their jurisdiction. For example, although the Film Censorship Board (LSF) in 2019 approved the release of an awardwinning film with LGBTIQ content, titled Memories of My Body, local Islamist leaders in various cities in Java, Kalimantan (Borneo), and Sumatra Islands effectively prevented its screening.⁸⁷ In the same year, the city of Depok also banned this film from all of its theatres, as its mayor argued that it "may influence people, especially the younger generation, to carry out and justify sexually deviant behavior," which "goes against religious values."88

In light of increasing attacks, a number of LGBTIQ organizations in Indonesia have shifted to the online space. They now publish newsletters or magazines, books, and other materials that are uploaded onto websites, blogs, and Facebook, which is made

⁷⁹ Dewi Elvia Muthiariny, trans., "TNI Vows Firm Actions Against Soldiers Linked to LGBT," *Tempo*, October 15, 2020, sec. news, https://en.tempo.co/read/1396403/tni-vowsfirm-actions-against-soldiers-linked-to-lgbt.

⁸⁰ Hagar Shezaf and Jonathan Jacobson, "Revealed: Israel's Cyber-Spy Industry Helps World Dictators Hunt Dissidents and Gays," *Haaretz*, October 10, 2018, https://www.haaretz.com/ israel-news/.premium.MAGAZINE-israel-s-cyber-spy-industry-aids-dictators-hunt-dissidents-and-gays-1.6573027.

⁸¹ Resty Woro Yuniar, "Anger after Indonesian Trans Woman Influencer Placed in Male Jail Cell," *South China Morning Post*, November 26, 2020, sec. This Week in Asia, https://www. scmp.com/week-asia/lifestyle-culture/article/3111384/anger-indonesia-after-trans-woman-instagram-influencer.

^{82 &}quot;MUI Wants Law to Ban LGBT Activities," *The Jakarta* Post, February 17, 2016, https://www.thejakartapost.com/ news/2016/02/17/mui-wants-law-ban-lgbt-activities.html.

⁸³ Grace Poore, "Indonesia: Fatwa Prescribes Death Penalty for Same-Sex Relations," OutRight Action International (blog), March 25, 2015, https://outrightinternational.org/content/indonesia-fatwa-prescribes-death-penalty-same-sex-relations.

⁸⁴ Syafiq Hasyim, "Fatwas and Democracy: Majelis Ulama Indonesia (MUI, Indonesian Ulema Council) and Rising Conservatism in Indonesian Islam," TRaNS: Trans-Regional and -National Studies of Southeast Asia 8, no. 1 (May 2020): 21–35, https://doi.org/10.1017/trn.2019.13.

⁸⁵ Ibid., 21-35.

⁸⁶ The ASEAN SOGIE Caucus defines itself as "a network of diverse human rights activists in Southeast Asia that aims for the inclusion of SOGIE (sexual orientation, gender identity and expression) in the ASEAN Human Rights Mechanisms (...)." See: Secretariat, "What Is the ASEAN SOGIE Caucus?," *The ASEAN SOGIE Caucus*, accessed September 16, 2020, https://aseansogiecaucus.org/9-ascs-work/2-what-is-the-asean-sogie-caucus; Zurlia, interview.

⁸⁷ Andreas Harsono, Quasi Ban Imposed on Award-Winning Indonesian Film (Human Rights Watch, May 12, 2019), https://www.hrw.org/news/2019/05/12/quasi-ban-imposed-award-winning-indonesian-film.

⁸⁸ Oktaviana Maria and Christian Lee, "Garin Nugroho's Award-Winning 'Memories of My Body' Banned in Depok," *Jakarta Globe*, April 26, 2019, https://jakartaglobe.id/news/garin-nugrohos-awardwinning-memories-of-my-body-banned-in-depok/.

possible due to the presence of tech-savvy younger activists in the more recentlyfounded organizations. Also, some of these organizations were established due to the convergence of like-minded individuals who met in Internet chat rooms or on mailing lists, as well as in Facebook groups.⁸⁹

Despite having a vibrant community, LGBTIQ individuals continue to face stigmatization, including on social media platforms. Riska Carolina, a researcher and sexuality law specialist in Indonesia, stated that popular users on YouTube (also known as "influencers") often engage in hate speech against LGBTIQ people. LGBTIQ communities face harassment on platforms such as Twitter and the LINE messaging app.⁹⁰ As a result, self-censorship online and in public is common. LGBTIQ activists have shied away from hosting public rallies, especially after experiencing a crackdown and retaliation against their community. For example, in 2016, photos of LGBTIQ people who joined these rallies were shared on Islamist news websites, and they subsequently received online threats.⁹¹ Since then, LGBTIQ activists in Indonesia have chosen to march in coalition with other movements to reduce their vulnerability to attacks.92

LGBTIQ rights are further constrained by the Law on Electronic Information and Transactions (EIT Law) of 2008 (No. 11/2008) and the Law on Pornography of 2008 (No. 44/2008). These laws broadly limit free expression online, particularly those that use "pictures, sketches, illustrations, photographs, writings, sound, sound image, moving animation, cartoons, conversations, gestures, or other forms of message through various forms of communication media and/or performances in public,

which contain obscenity or sexual exploitation."93 Aside from pornography, the EIT Law has also been used to target content containing "sex education, LGBT issues, provocative attire, free speech advocacy, and those using circumvention software."94 A revised version of the EIT Law was passed in October 2016 (No. 9/2016), which included multiple provisions that have been criticized for expanding the government's role in controlling information flows.95 The Institute for Criminal Justice Reform (ICJR) described the changes to the EIT Law as "only legitimizing the interests of the government to curb critical attitude[s] of Indonesian society by adding new government powers."96 Additionally, the Indonesian Broadcasting Commission (KPI) released a declaration in 2016 prohibiting media broadcasters from portraying male sexual and gender diversity on air, and shortly thereafter banned transgender people from appearing on television.97

In 2016, Commission I of the People's Representative Council requested the Communications and Information Technology Ministry (Kominfo) to take "preventive measures against LGBTIQ propaganda through

⁸⁹ United Nations Development Programme and USAID, Being LGBT in Asia: Indonesia Country Report, 35.

⁹⁰ Carolina, interview.

⁹¹ Zurlia, interview.

⁹² Ibid.

⁹³ Ronald Deibert, John Palfrey, Rafal Rohozinski, and Jonathan Zittrain, eds. "Indonesia," in Access Contested: Security, Identity, and Resistance in Asian Cyberspace. (The MIT Press, 2011): 313. https://doi.org/10.7551/mitpress/9780262016780.001.0001.

⁹⁴ Article 19 and ICTWatch, "Navigating Indonesia's Information Highway" (London: Article 19, 2013): 34, https://www. article19.org/data/files/Indonesia_Report_ENGLISH.pdf.

^{95 &}quot;Revised ITE Law Could Hamper Freedom of Expression: Researcher," *The Jakarta* Post, October 31, 2016, https://www. thejakartapost.com/news/2016/10/31/revised-ite-lawcould-hamper-freedom-of-expression-researcher.html.

^{96 &}quot;Response to the Revision of Information and Electronic Transaction Law (ITE Law): Five Crucial Issues in the ITE Law That Threaten Freedom of Expression in Indonesia," Institute for Criminal Justice Reform, October 28, 2016, https://icjr. or.id/response-to-the-revision-of-information-and-electronic-transaction-law-ite-law-five-crucial-issues-in-the-ite-lawthat-threaten-freedom-of-expression-in-indonesia/.

⁹⁷ Lucas Ramon Mendos, "State-Sponsored Homophobia: Global Legislation Overview Update" (Geneva: ILGA World, December 2019): 60, https://ilga.org/downloads/ILGA_ World_State_Sponsored_Homophobia_report_global_legislation_overview_update_December_2019; Nyuei, interview.

the Internet."⁹⁸ This pressure led the Ministry to announce that it was drafting a bill to ban websites that promote LGBTIQ activities. At the time of this report's writing, the bill remains pending. The Commission's then-chairperson Mahfudz Siddiq said that such a bill is required because "LGBTIQ issues can damage national security, identity, culture and the faith of Indonesians."⁹⁹ Anti-LGBTIQ lobbyists have blamed the rise in LGBTIQ visibility and activism in Indonesia on the popularity of gay dating applications like Grindr and Blued.¹⁰⁰

Rebecca Nyuei, a co-founder of the Indonesian Transgender Network (Jaringan Transgender Indonesia), argued that Kominfo blocks LGBTIQ content online due to its supposed "negative effects on citizens."¹⁰¹ The blocking of LGBTIQ content is further justified and implemented through Kominfo's so-called "Healthy Internet" program, which seeks to filter content it considers incompatible with Indonesia's social and cultural norms.¹⁰² Riska Carolina also explained that the Indonesian government blocks "everything that spreads LGBT propaganda," and what the government typically considers as "LGBT propaganda" is pornography.¹⁰³

Blocked websites can typically be accessed in Indonesia through the use of virtual private networks (VPNs). Carolina echoed the views of other interviewees, who noted that those who wish to circumvent online censorship in Indonesia commonly use VPNs, though many people do not have the resources to pay for fee-based VPN services. Meanwhile, free VPNs are not considered secure by some users and thus using them entail risks.¹⁰⁴ Online content restrictions, therefore, have inadvertently resulted in Internet users learning about ways to circumvent them.

Access Restrictions to LGBTIQ Content Online in Indonesia

Kominfo maintains a database of blocked URLs, known as "Trust Positif" (or Trust+), which facilitates the management of block lists among Indonesia's over five-hundred ISPs.¹⁰⁵ All ISPs in Indonesia are required to block websites in the Trust Positif database, and if they fail to do so, they would face sanctions from Kominfo.¹⁰⁶ Citizens are also encouraged to help enhance the Trust Positif database by submitting offending URLs via email or through a complaint form on Kominfo's website.¹⁰⁷ As of 2018, Kominfo has also implemented a web crawler called "Cyber Drone 9," that searches and feeds publiclyavailable "negative content" (as defined by the EIT Law) into the Trust Positif database.¹⁰⁸

108 Cloudflare describes a web crawler as a tool that "downloads and indexes content from all over the Internet. The goal of such a bot is to learn what (almost) every webpage on the web is about, so that the information can be retrieved when it's needed. They're called "web crawlers" because crawling is the technical term for automatically accessing a website and obtaining data via a software program." See "What Is a Web Crawler? | How Web Spiders Work," Cloudflare, accessed September 16, 2020. https:// www.cloudflare.com/learning/bots/what-is-a-web-crawler/. "Negative content" is defined by Kominfo's Ministerial Regulation No. 9/2014 as content related to gambling, fraud, copyright violations, terrorism / radicalism, ethnicity, religion, race, and other social divisions (SARA), hoaxes, and separatism / dangerous organizations. See Yohana Santoso,

[&]quot;Government Drafts Ban on LGBT Websites," *The Jakarta* Post, March 5, 2016, https://www.thejakartapost.com/news/2016/03/05/government-drafts-ban-lgbt-websites.html.
Ibid.

¹⁰⁰ Oliver Slow, "LGBTQ Rights Gain Energy in SE Asia," US News & World Report, November 26, 2018, https://www.usnews.com/news/best-countries/articles/2018-11-26/lgbtqmovements-slowly-gain-momentum-across-southeast-asia.

¹⁰¹ Nyuei, interview.

¹⁰² Adi Renaldi, "Indonesia Wants to Ban Gay Dating Apps, Again," Vice (blog), February 5, 2018, https://www.vice. com/en_asia/article/7x7ped/indonesia-wants-to-bangay-dating-apps-again.

¹⁰³ Carolina, interview.

¹⁰⁴ Ibid.

¹⁰⁵ Kay Yen Wong et al., The State of Internet Censorship in Indonesia.

¹⁰⁶ Aditya Panji, "Kuasa Besar Pemerintah Blokir Konten Internet," CNN Indonesia, October 10, 2014, https://www. cnnindonesia.com/teknologi/20141010173708-213-6060/ kuasa-besar-pemerintah-blokir-konten-internet.

¹⁰⁷ Ronald Deibert et al., "Indonesia," 312.

In January 2020, Kominfo disclosed that more than 50 percent of censorship requests submitted in 2019 were related to the broadlydefined category of "pornography."¹⁰⁹

Rights activist Lini Zurlia stated that websites, Facebook pages, and other online groups and domains that use the words "lesbian," "gay," "bisexual," or "transgender" began to be blocked by Kominfo in 2016-17, as they were deemed to be "pornographic" and in violation of the EIT Law.¹¹⁰ In addition to keyword-based blocking, Zurlia said that the media reported on Kominfo's creation of a block list of IP addresses for LGBTIQ-related websites.¹¹¹ Following these reports, LGBTIQ activists contacted Kominfo to clarify that websites with LGBTIQ keywords or domain names do not always contain pornography. Their effort resulted in a change in Kominfo's policy to include the actual content of pages and websites when making censorship considerations.¹¹² Yet, activists continued to see Kominfo's censorship algorithm searching for and blocking websites with the words "lesbian" or "gay" and for images suggesting same-sex intimacy. As a result, LGBTIQ organizations in Indonesia decided as a strategy to not use the words "gay" or "lesbian" in their online content.

109 "Pornography Dominates Negative Content Reported to Ministry in 2019," *The Jakarta* Post, January 10, 2020, https:// www.thejakartapost.com/life/2020/01/10/pornography-dominates-negative-content-reported-to-ministry-in-2019.html.

112 Ibid.

Zurlia further added that if Kominfo "sees a man kissing a man or a woman kissing a woman, they will automatically block the website or page, but if the website or page does not contain an image that could be considered pornographic, then it will remain uncensored."¹¹³

"So, in the end, we need to censor ourselves. Self-censoring is now our habit in order to keep some information on the table . . . we don't post images. That is the strategy we are practicing in our daily lives to maintain [the accessibility of] information in digital and online spaces."¹¹⁴ - Lini Zurlia, ASEAN SOGIE Caucus

Online censorship conducted by Kominfo has routinely targeted non-pornographic websites, including those belonging to organizations providing support and resources to the Indonesian LGBTIQ community, such as the Support Group and Resource Center on Sexuality Studies (SGRC). Riska Carolina, who is a part of the SGRC, disclosed that access to the SGRC website ('sgrcui.wordpress.com') was blocked in Indonesia. After Kominfo sent SGRC a letter informing them of the blocking,115 SGRC requested a meeting to discuss this decision, but Kominfo never responded. SGRC's website was unblocked shortly thereafter. This incident indicated some responsiveness by Kominfo to demands for free expression from the LGBTIQ community.¹¹⁶

Several technology companies have caved in to pressure emanating from the government and the more conservative segment of Indonesian society. In 2019, an Instagram account posting comic strips with gay Muslim characters disappeared after Kominfo officials

[&]quot;Melindungi Keluarga Dari Konten Negatif Dunia Maya," Kementerian Komunikasi Dan Informatika Republik Indonesia, June 13, 2016, http:///content/detail/7606/melindungi-keluarga-dari-konten-negatif-duniamaya/0/sorotan_media; Ayu Yuliani, "Mengenal Ais, Mesin Pengais Konten Internet Negatif Milik Kominfo," Kementerian Komunikasi dan Informatika Republik Indonesia, January 3, 2018, https://www. kominfo.go.id/content/detail/12252/mengenal-ais-mesin-pengais-konten-internet-negatif-milik-kominfo/0/sorotan_media; Fatimah Kartini Bohang, "Mesin Pengais Konten Negatif Difungsikan, Tim 'Trust Positif' Kominfo Dilebur," KOMPAS.com, January 3, 2018, https://tekno.kompas.com/ read/2018/01/03/13593927/mesin-pengais-konten-negatif-difungsikan-tim-trust-positif-kominfo-dilebur.

¹¹⁰ Zurlia, interview.

¹¹¹ Ibid.

¹¹³ Ibid.

¹¹⁴ Ibid.

¹¹⁵ The site has never been tested with OONI Probe and we

are, therefore, unable to confirm this blocking.

¹¹⁶ Carolina, interview.

asked the company, which is owned by Facebook, to take it down. Kominfo claimed that Instagram removed the account, but Instagram denied any involvement.¹¹⁷ In 2018, Google agreed to take action against Blued, a popular dating app for gay men, and seventytwo other LGBTIQ-themed apps, so that they can no longer be downloaded in the country through the Google Play Store.¹¹⁸

Measurements on the Open Observatory of Network Interference (OONI) platform showed that access to Blued's website ('www.blued. com') is blocked on at least eight ISP networks in Indonesia, though it may have been accessible on other networks.¹¹⁹ Testing conducted by OONI also showed the blocking of Grindr's website in Indonesia ('www.grindr.com'). Conversations with our interviewees confirmed that Grindr cannot be used in Indonesia without a VPN and that access to ILGA's website ('ilga.org') is blocked, corroborating our findings on its blocking, as discussed in the "Technical Analysis" section below. Although many LGBTIQ dating apps are inaccessible in Indonesia, Hornet dating app's co-founder Sean Howell stated that their servers are yet to be blocked in the country.¹²⁰ Riska Carolina also confirmed the accessibility of the Her dating app, which is primarily used by lesbians and bisexual women. Her dating app's website ('weareher.com') has only been tested twice in Indonesia with OONI Probe, but both instances of testing showed that it was

accessible on the relevant networks during the times it was tested (November 2019 and July 2020).¹²¹ It is possible, however, that access to `weareher.com` or the Her app is blocked on other networks. The BeeTalk app (similar to Tinder) and China's WeChat censor the term "waria" (a gender identity) in usernames and profiles. BeeTalk justified this censorship by claiming that warias conduct prostitution on their platform.¹²² Rebecca Nyuei also explained in an interview that individuals with WeChat accounts that include the term "waria" in their profiles are unable to use the "people nearby" feature, and that fellow WeChat contacts cannot see their profile either.¹²³

Although LGBTIQ website censorship occurs in Indonesia, its impact may be limited due to the fact that, as Rebecca Nyuei explains: "[LGBTIQ Indonesians] don't usually use websites. They are more on social media–Instagram, TikTok, and Twitter–and they follow queer and trans influencers . . . Queer influencers, so long as they don't talk about government, will continue to exist and will not be blocked."¹²⁴ Nevertheless, individuals whom we have interviewed believe that censorship of LGBTIQ online content in Indonesia is likely to persist, in light of the country's increasingly conservative environment. Our interviewees are also certain,

- 123 Nyuei, interview.
- 124 Nyuei, interview.

¹¹⁷ Shannon Liao, "Indonesia Claims It Got Instagram to Pull a Gay Comics Account," *The Verge*, February 13, 2019, https:// www.theverge.com/2019/2/13/18223467/indonesia-instagram-pull-gay-comics-account.

¹¹⁸ Shannon Power, "Gay Dating App Blued 'shocked' to Be Banned in Indonesia," *Gay Star News*, February 6, 2018, https://www.gaystarnews.com/article/gay-dating-appblued-shocked-banned-indonesia/.

^{119 &}quot;OONI measurements collected from Indonesia on the testing of `www.blued.com'", Open Observatory of Network Interference, accessed October 29, 2020, https://explorer. ooni.org/search?until=2020-10-07&domain=www.blued. com&probe_cc=ID

¹²⁰ Sean Howell (co-founder of Hornet dating app), in discussion with the interviewer, August 26, 2020.

^{121 &}quot;OONI measurement collected from Indonesia on the testing of `weareher.com`," Open Observatory of Network Interference, accessed November 19, 2020, https://explorer. ooni.org/measurement/20191120T000158Z_AS7713_ZZD13yk25Omc3jYO2DO63AUyVXqK2YLWHYad4J3g77AU7ShTNh?input=https://weareher.com/; "OONI measurement collected from Indonesia on the testing of `weareher.com`," Open Observatory of Network Interference, accessed November 19, 2020, https://explorer.ooni.org/measurement/20200723T073016Z_ AS17670_B6XffQnPjAuIAtt8He93FKEzPWRQcPJeB3gGCLfh6N-8mKMjzbE?input=https://weareher.com/; OONI Explorer (OONI measurements collected from Indonesia on the testing of `weareher.com`, accessed October 29, 2020), https://explorer.ooni.org/search?until=2020-10-07&domain=weareher. com&probe_cc=ID.

¹²² Fadli Muhammad, "Polisi Ungkap Dugaan Praktik Prostitusi Online Via Aplikasi BeeTalk," PojokSumut, September 19, 2018. https://sumut.pojoksatu.id/baca/polisi-ungkap-dugaan-praktik-prostusi-online-via-aplikasi-beetalk.

however, that the LGBTIQ community, along with other rights activists, will continue to push back against these restrictions.¹²⁵

Technical Analysis of LGBTIQ Website Blocking in Indonesia

Summary of Technical Findings

Our findings are based on an analysis of OONI measurements collected from Indonesia between June 1, 2016 to July 31, 2020.¹²⁶ We summarize our findings below.

- There are at least thirty-eight unique URLs relevant to the LGBTIQ community that were found blocked in Indonesia. Blocked URLs include websites that seek to create a sense of community (e.g., Transgender Map), conduct human rights advocacy (e.g., the International Lesbian, Gay, Bisexual, Trans and Intersex Association (ILGA)), and provide dating services (e.g., Grindr).
- None of the LGBTIQ websites found blocked in Indonesia are in Bahasa Indonesian or are intended for an Indonesia-specific audience. LGBTIQ websites found blocked in Indonesia are all in the English language and intended for a global audience. This finding may reflect a lack of local language LGBTIQ content and/or an overwhelming focus on international content in our testing lists.
- Variation exists in the blocking of LGBTIQ websites across Indonesian ISP networks. LGBTIQ websites were found

blocked across forty-three local networks in Indonesia, out of ninety-seven local networks tested. Different ISPs blocked access to different websites at different moments in time. Most blocks were observed on Telekomunikasi Indonesia (Telkom), Indonesia's largest ISP that is majority owned by the government, followed by Indosat Ooredoo (Indosat).

 The blocking of LGBTIQ sites was confirmed by the presence of block pages. Block pages are served by Indonesian ISPs by means of DNS hijacking. The use of block pages is considered to be a more transparent way of conducting censorship, because users would be informed of the censorship and, in some cases, its legal basis.

Analysis of LGBTIQ Website Blocking in Indonesia

Internet filtering in Indonesia is supported by a database of URLs that local ISPs are required to block, which is maintained by the Ministry of Communication and Information Technology (MCIT or Kominfo). This database, called Trust Positif (or Trust+), is offered as a service to ISPs to ease the management of block lists among Indonesia's over five-hundred ISPs. The Trust Positif database contains LGBTIQ websites, as well as sites from other content categories.127 Kominfo has also implemented a web crawler, called "Cyber Drone 9," that searches and feeds publicly-available "negative content" (as defined by the Electronic Information and Transactions (EIT) Law) into the Trust Positif database.¹²⁸

¹²⁵ Nyuei, interview.

¹²⁶ Citizen Lab, "Analysis of OONI measurements collected from Indonesia," accessed October 26, 2020, https://github. com/citizenlab/lgbtiq-report-data/blob/main/id.csv; OONI Explorer (OONI Measurements Collected from Indonesia, accessed October 26, 2020), https://explorer.ooni.org/ search?until=2020-10-02&probe_cc=ID.

¹²⁷ Ronald Deibert et al., "Indonesia," 312.

¹²⁸ Santoso, "Melindungi Keluarga Dari Konten Negatif Dunia Maya"; Yuliani, "Mengenal Ais, Mesin Pengais Konten Internet Negatif Milik Kominfo"; Bohang, "Mesin Pengais Konten Negatif Difungsikan, Tim 'Trust Positif' Kominfo Dilebur."

In total, we found **thirty-eight unique URLs in our LGBTIQ testing lists that were blocked** at least once within the course of our testing in Indonesia. This confirmation was made possible due to block pages being served by ISPs, which informed users of Indonesian ISPs that those sites were blocked.¹²⁹ ISPs serve block pages by means of DNS hijacking, which occurs when, upon looking up the address of a particular domain, the queried DNS resolver intentionally returns an incorrect answer.¹³⁰

When a block page is served by means of DNS hijacking, Internet users would see an image in their web browser (rather than the content of the censored site), like the one shared below (**Image 1**). Serving block pages is considered a more transparent form of Internet censorship, since Internet users are informed that access to the website is intentionally blocked. In some cases, the block pages even refer to relevant regulations that justify the blocks.



Image 1: Block page served by First Media in Indonesia.

Rebecca Nyuei, the co-founder of the Indonesian Transgender Network (JTID), corroborated our technical findings on the variation of blocked LGBTIQ websites across networks in Indonesia. Nyuei also found that many English language or foreign LGBTIQ websites, such as Transgender Europe, are not blocked in Indonesia, while the International Lesbian, Gay, Bisexual, Trans,

and Intersex Association's (ILGA) website is blocked. This difference is likely because the latter is more popular among LGBTIQ communities in Indonesia.¹³¹ Platforms like Netflix are also accessible in Indonesia, even though they host LGBTIQ-related content.

^{129 &}quot;Block Page," in OONI Glossary (Open Observatory of Network Interference), accessed October 25, 2020, https://ooni.org/support/glossary/#block-page.

^{130 &}quot;DNS Hijacking," in OONI Glossary (Open Observatory of Network Interference), accessed October 25, 2020, https://ooni. org/support/glossary/#dns-hijacking.

¹³¹ Nyuei, interview.

Examples of Blocked LGBTIQ Websites in Indonesia

Grindr

Grindr is arguably one of the most popular social networking and online dating sites for LGBTIQ communities, especially gay, bisexual, queer, and transgender men. Its website was amongst the sites confirmed blocked in this study. As part of OONI Probe testing of `www.grindr.com` during our analysis period, more than half of all collected measurements presented signs of blocking, as observed on at least eighteen local networks.

Grindr's app may have been blocked around April 2017, when it was reported by Indonesian news media, but we are unable to confirm this, as OONI Probe does not include a test specific to the app (rather, OONI Probe only tests the website `www.grindr.com`).¹³²

LGBTIQ Funders

Online censorship of LGBTIQ websites in Indonesia not only targets LGBTIQ human rights advocacy, but the funding of those activities as well. More specifically, we observed the blocking of `lgbtfunders.org`, a network of more than seventy-five foundations, corporations, and funding institutions that collectively award funds devoted to LGBTQ issues.¹³³ This site, however, was only tested once in Indonesia during our analysis period, thereby limiting our confidence regarding its blocking.

IFGE

The International Foundation for Gender Education ('www.ifge.org'), which promotes acceptance for transgender people and advocates for freedom of gender expression, is among the sites that presented a relatively high blocking frequency (700 times) in comparison to the number of times it was tested (981 times) in Indonesia. Blocking occurs even though this site does not appear to have been updated since 2012. The blocking of IFGE's website was previously reported by OONI in 2017, when an analysis of OONI measurements collected between 2016 to 2017 presented block pages.¹³⁴ These block pages were served through DNS hijacking.¹³⁵ Our recent analysis also shows that access to `www.ifge.org` has remained blocked on many local networks in Indonesia over the past several years.

ILGA

The International Lesbian, Gay, Bisexual, Trans, and Intersex Association's (ILGA) is a worldwide federation of more than 1,600 organizations from over 150 countries and territories campaigning for LGBTIQ people's human rights.¹³⁶ ILGA's activities have been restricted by Indonesian authorities in the past. In 2010, the ILGA Asian Regional Congress in Indonesia was dispersed by police under pressure from militant Islamist groups, and was subsequently justified by authorities on the grounds of security.137 We observe the blocking of `ilga.org` on twenty-four different local networks in Indonesia throughout our analysis period. Access to `ilga.org` was blocked 469 times in comparison to the 1,550 times that it was tested with OONI Probe in Indonesia during our analysis period. The higher frequency of testing in comparison to the frequency of blocking demonstrates that access to `ilga. org' was not consistently blocked across all networks in Indonesia.

¹³² Dina Listiorini and Sharyn Graham Davies, "Online Dating Apps Blocked," *Inside Indonesia*, April 18, 2017, https://www.insideindonesia.org/online-dating-apps-blocked.

^{133 &}quot;About & Mission," Funders for LGBTQ Issues, accessed October 25, 2020, https://lgbtfunders.org/about/about-mission/.

¹³⁴ Kay Yen Wong et al., The State of Internet Censorship in Indonesia; "Block Page."

^{135 &}quot;DNS Hijacking."

¹³⁶ International Lesbian, Gay, Bisexual, Trans and Intersex Association, "About Us," ILGA World, June 29, 2017, https:// ilga.org/about-us.

¹³⁷ Knight and Bauchner, "'These Political Games Ruin Our Lives': Indonesia's LGBT Community Under Threat."

Number and Categories of LGBTIQ Websites Blocked in Indonesia

The chart below (**Figure 1**) illustrates the number and categories of LGBTIQ sites that are blocked in Indonesia as part of this study. (See explanation of categories in **Table 1** below.)

Figure 1 shows that the majority of blocked LGBTIQ websites in Indonesia fall under the "Culture" category (thirteen URLs in total). Most URLs in our test lists belong in the "Culture" category, which contributes to its higher representation in our results.¹³⁸ Six "Human Rights" websites, six "Dating" websites, and three "News Media" websites were blocked as well, among other content categories. (For more details regarding the composition of the testing lists, please see the Appendix: Methodology.)



Figure 1: Blocking of different types of LGBTIQ websites in Indonesia, based on analysis of OONI measurements collected between June 1, 2016 to July 31, 2020.

Categories of LGBTIQ Websites Blocked in Indonesia

We have created the table below (**Table 2**) for the thirty-eight unique URLs that were found to be blocked to (a) explain our categorization of LGBTIQ websites, (b) show the number of blocked URLs found in each category in more than 50 percent of times tested, and (c) provide examples of relevant blocked domains. Each URL is included under only one category.

¹³⁸ It is possible that there are URLs that fall outside of the "Culture" category that may have been blocked than what is represented in our findings, due to our limited selection of LGBTIQ sites.

Category	Number (Out of 38 URLs)	Description	Sample Domains Blocked
Culture and Community	13	Websites that seek to create a community (includes sports, religion, Pride celebration websites, personal blogs), as well as art and culture websites.	tsroadmap.com, queernet.org
Dating	6	Websites that focus on finding romantic or sexual partners.	grindr.com, blued.com
Human Rights	6	Websites that mention human rights as a primary focus of their mission or work on a topic that can be seen as a human rights issue.	ilga.org, nclrights.org
News Media	3	Websites that focus on providing news (mainstream or otherwise)	out.com, pridesource.com
Non-Operational or 404	3	Sites that were non-operational during secondary categorization.	glas.org, samesexmarriage.ca
Groups	2	Websites that focus on chat groups or social networking.	shoe.org, boyahoy.com
Pornography	2	Websites relating to hardcore or softcore pornography.	bglad.com, gayscape.com
Sexual Health	1	Websites that focus on health issues, sexual or otherwise. Includes so-called "conversion therapy" and "ex-gay" websites.	gayhealth.com
Political Reform	1	Websites relating to politics or critical political viewpoints.	glil.org
Economics	1	Websites that focus on economy or workplace issues.	lgbtfunders.org

Table 2: All LGBTIQ website categories seen blocked in Indonesia more than 50 percent of times tested.

Blocking of HTTP and HTTPS LGBTIQ Websites

Among the thirty-eight unique LGBTIQ URLs that were confirmed to be blocked, 68 percent of them (or twenty-six URLs) use an HTTP address, while 32 percent of them (or twelve URLs) were HTTPS. Some countries only block one (typically HTTP) and not the other (typically HTTPS) because their blocking system may not support both. This circumstance may lead to cases where circumvention can be simply a case of avoiding the HTTP version. This situation is not the case in Indonesia, however, as the filtering is implemented using DNS, so both HTTP and HTTPS URLs are present on the block list.

Several blocked sites (such as `ilga.org` and `www.grindr.com`) were observed to be blocked in both the HTTP and HTTPS versions. Among the blocked HTTPS sites, we also saw `www. planetromeo.com,` an online dating site for LGBTIQ communities, which has also been blocked in Malaysia.¹³⁹ The HTTPS version of `pridesource.com,` a news outlet for LGBTIQ communities worldwide, was also found blocked.

¹³⁹ Sinar Project, "Online LGBT Censorship Malaysia," Sinar Project, accessed October 25, 2020, https://sinarproject.org/ digital-rights/updates/online-lgbt-censorship-malaysia.

HTTP Websites Blocked in Indonesia

The following table (**Table 3**) shares the HTTP websites that were found blocked in Indonesia as part of this study. The more times a URL presents blocking ("Times Blocked") in comparison to the total number of times tested during our analysis period ("Times Tested"), the more confident we are with regards to its blocking. Entries that have been tested five or fewer times are highlighted in red.

URL	Category	Annotation percentage	Times Tested	Times Blocked
http://amygoodloe.com/lesbian-dot-org/	Human Rights	0.55 percent	1100	6
http://bisexual.org/	Culture and Community	15.79 percent	38	6
http://boyahoy.com/	Groups	45.83 percent	24	11
http://ilga.org/	Human Rights	30.26 percent	1550	469
http://lesbian.org/	Culture and Community	100.00 percent	4	4
http://lgbtfunders.org	Economics	100.00 percent	1	1
http://queernet.org/	Culture and Community	100.00 percent	2	2
http://transsexual.org/	Culture and Community	67.81 percent	1171	794
http://www.advocate.com	News Media	3.45 percent	811	28
http://www.bglad.com/	Pornography	64.29 percent	1078	693
http://www.bisexual.org	Culture and Community	96.83 percent	126	122
http://www.gay.com/	Culture and Community	66.31 percent	739	490
http://www.gayegypt.com/	Non-operational	70.55 percent	988	697
http://www.gayhealth.com/	Sex Education	64.09 percent	1011	648
http://www.gayscape.com/	Pornography	66.86 percent	1011	676
http://www.glas.org/	Non-operational	100.00 percent	2	2
http://www.glbtq.com	Culture and Community	99.15 percent	117	116
http://www.glil.org/	Political Criticism	64.63 percent	998	645
http://www.grindr.com/	Dating	52.49 percent	983	516
http://www.ifge.org/	Human Rights	71.36 percent	981	700
http://www.lesbian.org/	Culture and Community	100.00 percent	121	121
http://www.nclrights.org/	Human Rights	47.88 percent	259	124
http://www.queernet.org/	Culture and Community	71.04 percent	884	628
http://www.samesexmarriage.ca/	Non-operational	68.75 percent	880	605
http://www.scruff.com/	Dating	8.53 percent	129	11
http://www.tsroadmap.com/	Culture and Community	61.09 percent	884	540

Table 3: HTTP URLs from Indonesia that were seen blocked at least once during the course of study.

HTTPS Websites Blocked in Indonesia

In addition to the blocking of HTTP sites, we also observed the blocking of the encrypted HTTPS version of LGBTIQ sites, as demonstrated through the following table (**Table 4**). The more times a URL presented blocking ("Times Blocked") in comparison to the total amount of times tested during our analysis period ("Times Tested"), the more confident we are with regards to its blocking. Entries that have been tested five or fewer times are highlighted in red.

URL	Category	Annotation percentage	Times Tested	Times Blocked
https://bisexual.org/	Culture	55.51 percent	1135	630
https://ilga.org/	Human Rights Issues	66.67 percent	3	2
https://pridesource.com/article/top-10- international-lgbt-stories-of-2018/	News Media	78.26 percent	23	18
https://www.blued.com/	Online Dating	84.00 percent	25	21
https://www.gay.com/	Culture	62.36 percent	271	169
https://www.grindr.com/	Online Dating	66.67 percent	3	2
https://www.ilga-europe.org/	Human Rights Issues	45.86 percent	266	122
https://www.nifty.org/	Culture	80.77 percent	26	21
https://www.out.com/	News Media	44.12 percent	272	120
https://www.planetromeo.com/	Online Dating	18.06 percent	886	160
https://www.scruff.com/	Online Dating	26.07 percent	771	201
https://www.shoe.org/	Groups	50.75 percent	268	136

Table 4: HTTPS URLs from Indonesia that were seen blocked at least once during the course of the study.

Testing and Blocking Frequency of LGBTIQ Websites in Indonesia

Within the thirty-eight unique URLs found to be blocked, six were tested by in-country OONI Probe users less than five times. As such, they represent a lower confidence of blocking compared to other URLs, which were tested anywhere between 23 and 1,550 times, and were found blocked between 6 and 794 times. Among the LGBTIQ-related URLs tested, 71 percent were seen blocked in 50 percent of measurements or more. The more times a URL presented blocking, in comparison to the total amount of times tested during our analysis period, the more consistent that blocking was.

In many cases, the higher frequency of testing (e.g., between six and 1,550 times) in comparison to the frequency of blocking (e.g., between six and 694 times) can be explained based on the following reasons:

• Variation in blocking across ISPs.

Not all ISPs in Indonesia block access to the same sites. Therefore, some measurements collected from some networks may have shown that a tested URL was accessible, while other measurements collected from other networks showed that that URL was blocked.

• Blocking was implemented in different moments in time for different URLs. Not all LGBTIQ sites in Indonesia were blocked at the same time. ISPs generally update their

internal block list over time to block access to URLs that were previously accessible (e.g., to be in compliance with new government orders).

Previous OONI Research on Indonesia

OONI's 2017 report on "The State of Internet Censorship in Indonesia" documented LGBTIQ websites that were found blocked at the time of testing.¹⁴⁰ LGBTIQ websites that were blocked in 2017 **and** found blocked in this study include:

`www.glil.org`,
`www.bglad.com`,
`www.tsroadmap.com`,
`www.gayegypt.com`,
`www.glbtq.com`,
`www.glbtq.com`,
`www.gayhealth.com`,
`www.gay.com`,
`www.bisexual.org`,
`www.lesbian.org`,
`www.samesexmarriage.ca`,
`transsexual.org`,
`www.gayscape.com`.

The self-describing domains of some of the above-mentioned websites-such as 'www. gay.com', 'www.lesbian.org', 'www.bisexual. org`, `transsexual.org`-suggest that the authorities in charge of censorship might have developed their block list based on LGBTIQ-relevant keywords.¹⁴¹ Furthermore, even though `www.gay.com` now redirects to `lalgbtcenter.org` and `www.bisexual. org' now redirects to 'bi.org' when accessed from a web browser, the original domain of these sites ('gay.com' and 'bi.org') are still in the Trust Positif block list and Indonesian ISPs still block access to them.¹⁴² This occurrence suggests that Trust Positif and Indonesian ISPs have not updated their

142 "TrustPositif," TrustPositif, accessed October 25, 2020, https://trustpositif.kominfo.go.id/.

block lists (or at least have not removed these sites) in recent years.

Beyond the above-mentioned LGBTIQ sites, we discovered the blocking of nine additional LGBTIQ sites in Indonesia. Given the relatively limited testing these nine sites received between 2017 and at the time of writing, it is unclear when the blocking began.

`amygoodloe.com/lesbian-dot-org/`
(although this web page is now unavailable),
`boyahoy.com`,
`ilga.org`,
`lgbtfunders.org`,
`www.advocate.com`,
`www.glas.org`,
`www.grindr.com`,
`www.nclrights.org`,
`www.scruff.com`

Blocking on AS Networks in Indonesia

Autonomous System (AS) Networks are logical divisions given to computer networks on the Internet. They are officially registered and given to commercial entities such as telecom companies, ISPs, educational institutions, or large businesses, among others. In this analysis, AS networks are used to organize where filtering is observed. The AS networks where annotations appear regularly indicates which service providers have filtering policies in place. This division is not always clearly divided, however, as an ISP may have more than one AS network, such as when mergers or rebranding occurs, as well as when size dictates splitting up a network. It is important to note when interpreting this data that AS networks vary widely in size. A single AS network may be allotted for an office that represents 256 addresses or for ISPs that represent hundreds of thousands of addresses.

¹⁴⁰ Kay Yen Wong et al., The State of Internet Censorship in Indonesia.

^{141 &}quot;Block list."

In total, we observed the blocking of LGBTIQ websites on forty-three different AS networks in Indonesia, each of which returned at least one blocking annotation. Indonesia has a relatively large total number of AS networks due to its diverse ISP market, resulting in many AS networks being registered since there are many entities applying for them.

The top five networks where we observed the most blocking include:

- Telkom Indonesia (Two ASNs: AS7713 and AS17974)
- Three Indonesia (AS45727)
- Link Net (AS23700)
- Telkomsel (AS23693)
- XL (AS24203).

The networks listed in the table below (**Table 5**) blocked anywhere from twenty-five to thirty URLs on at least one occasion.

Variety of Filtering Behaviors in Indonesia

We present the filtering behaviors seen in Indonesia, which describe in detail the technical means by which the blocks are served.

In total, eighty-four different annotations were present, indicating a wide variety of filtering behaviors and diversity of block pages returned to the user when content is blocked. This diversity can also be explained by the variety in the ISP market in the country.

Within the top ten annotations seen, all return false DNS responses (DNS hijacking), as a part of their filtering behavior. The table on the following page **(Table 6)** shares the annotations that were detected the most on Indonesian networks, along with the amount of blocked URLs based on each annotation, and information about the relevant blocking behavior.

Rank	AS Number	AS Name	ISP	# of URLs Blocked
1	AS7713	Telekomunikasi Indonesia	Telkom Indonesia ¹⁴³	30
2	AS17974	Telekomunikasi Indonesia	Telkom Indonesia	29
3	AS45727	THREE-AS-ID	Three Indonesia ¹⁴⁴	28
4 (tie)	AS23700	Fastnet-AS-ID	Link Net ¹⁴⁵	26
4 (tie)	AS23693	TELKOMSEL-ASN-ID	Telkomsel ¹⁴⁶	26
5	AS24203	XL Axiata	XL ¹⁴⁷	25

Table 5: Top five networks by the amount of unique URLs they filter. AS number to name mapping and ISP domains a re from the ipinfo.io database.

143 Telkom (website), PT Telkom Indonesia, accessed October 25, 2020, https://telkom.co.id/sites.

144 Tri Indonesia (website), Tri Indonesia, accessed October 25, 2020, https://tri.co.id/.

145 Link Net (website), PT Link Net, accessed October 25, 2020, http://www.linknet.co.id/.

146 Telkomsel (website), Telkomsel, accessed October 25, 2020, https://www.telkomsel.com/.

147 XL Axiata (website), XL Axiata, accessed October 25, 2020, https://www.xl.co.id/id.

Annotation (with Sample OONI Measurements)	# of URLs	Behavior
dns_isp_id_sehat_telkom_uzone ¹⁴⁸	35	DNS resolution to IP 36.86.63.185 (PT Telekomunikasi Indonesia) followed by forward to `http://internetpositif.uzone.id/`
nat_id_trustpositif_forward_2 ¹⁴⁹	24	DNS resolution to IP 36.86.63.185 (PT Telekomunikasi Indonesia)which loads page from `http://block.uzone.id/`
nat_id_trustpositif_block_3150	24	DNS resolution to IP 36.86.63.185 (PT Telekomunikasi Indonesia) followed by forward to `http://positif.uzone.id/space/index.php`
dns_isp_id_sehat_tri_ip ¹⁵¹	24	DNS resolution to the CNAME restricted.tri.co.id which resolves to IP 116.206.10.31 (PT Hutchison 3 Indonesia) which forwards to URL: `http://restricted.tri.co.id/HTML-restricted-tri-co-id.html`
dns_isp_id_sehat_xl_block ¹⁵²	24	DNS resolution to the CNAME block page.xl.co.id which resolves to IP 112.215.197.131 (PT XL Axiata Tbk) and times out.
dns_isp_id_sehat_tri_blockpage ¹⁵³	23	DNS resolution to IP 180.214.232.61(Hutchison CP Telecommunications) which retrieves URL `http://restricted.tri. co.id/index.html`
dns_isp_id_sehat_telkom_bltsel_ cname ¹⁵⁴	23	DNS resolution to the CNAME mypage.blocked.bltsel which resolves to IP 114.121.254.4 (PT. Telekomunikasi Selular) and returns a Telkomsel branded block page.

¹⁴⁸ OONI Explorer (Sample OONI measurement collected from Indonesia, displaying the `dns_isp_id_sehat_telkom_uzone` annotation, accessed October 26, 2020),

https://explorer.ooni.org/measurement/20171025T095349Z_AS131709_vvCnDreaVjMN1MQ2imNyl4ynBG4EhIZRdWHJIBKgOex-JSnaWcb?input=http://www.bglad.com

¹⁴⁹ OONI Explorer (Sample OONI measurement collected from Indonesia, displaying the `nat_id_trustpositif_forward_2` annotation, accessed October 26, 2020),

https://explorer.ooni.org/measurement/20180528T130640Z_AS7713_A2RVHOGPmVoYQ5U9Fe3WNCMkJcH7D2kCmPboBZDEfgt6XjE8OM?input=http://www.samesexmarriage.ca.

¹⁵⁰ OONI Explorer (Sample OONI measurement collected from Indonesia, displaying the `nat_id_trustpositif_block_3` annotation, accessed October 26, 2020),

https://explorer.ooni.org/measurement/20171121T103829Z_AS17974_QgZkCjksBNucHe11XDLxKXIC3MTW32OamXngJCJrLaoou-WNoEM?input=http://www.ifge.org.

¹⁵¹ OONI Explorer (Sample OONI measurement collected from Indonesia, displaying the `dns_isp_id_sehat_tri_ip` annotation, accessed October 26, 2020),

https://explorer.ooni.org/measurement/20200329T090119Z_AS45727_GqQe4DZduLsSaYZB6qnqeMpsNgJn7dTvEaoEFZ0eGG-mjyBoQG4?input=https://www.scruff.com/.

¹⁵² OONI Explorer (Sample OONI measurement collected from Indonesia, displaying the `dns_isp_id_sehat_xl_block` annotation, accessed October 26, 2020),

https://explorer.ooni.org/measurement/20180324T031959Z_AS24203_oRMW0HPO6Z2u3lkA8d4uROtqX2fuKU6XH8ARB0Jt-GanxPSHX3L?input=https://www.scruff.com/.

¹⁵³ OONI Explorer (Sample OONI measurement collected from Indonesia, displaying the `dns_isp_id_sehat_tri_blockpage` annotation, accessed October 26, 2020),

https://explorer.ooni.org/measurement/20170307T194134Z_AS45727_gEN976jgNQgOx6CuLiiYDb2flPY8CpNtRPcnrHTwjggcat-s4At?input=http://www.gay.com.

¹⁵⁴ OONI Explorer (Sample OONI measurement collected from Indonesia, displaying the `dns_isp_id_sehat_telkom_bltsel_ cname` annotation, accessed October 26, 2020),

https://explorer.ooni.org/measurement/20190105T203947Z_AS23693_6yZuFqZ8scphfZBc8aArxSXv6d6RZqbPPnhEktsXG-fqSpYN7NS?input=http://www.queernet.org.

Annotation (with Sample OONI Measurements)	# of URLs	Behavior
dns_isp_id_sehat_ netsafeindosat_2 ¹⁵⁵	22	DNS resolution to the CNAME netsafe.indosatooredoo. com which resolve to IP 114.6.128.8 (INDOSAT Internet Network Provider) and forwards to the URL `http://netsafe. indosatooredoo.com/if`
nat_id_trustpositif_block_1 ¹⁵⁶	22	DNS resolution to IP 1.2.3.4 which should fail normally but returns page from domain `http://block.uzone.id` which in turn forwards to URL `http://internetpositif.uzone.id/page/`
dns_isp_id_sehat_smartfren ¹⁵⁷	22	DNS resolution to CNAME internetsehat.smartfren.com which resolves to IP 115.178.182.58 (PT WIRELESS INDONESIA) which returns a block page with trustpositif.kominfo.go.id branding.

Table 6: The top ten seen blocking behaviors by the number of unique URLs blocked in Indonesia.

Conclusion

Indonesia is the birthplace of the "Yogyakarta Principles," which reaffirmed that LGBTIQ rights are human rights. Despite this landmark document, the fundamental human rights of LGBTIQ people have come increasingly under attack with rising religious conservatism, discriminatory attitudes held by government officials, and the misuse of science. The Indonesian Psychiatrists Association (PDSKJI) still classifies homosexuality, bisexuality, and transsexualism as "mental disorders." Several technology companies have caved in to government pressure and removed LGBTIQ accounts or apps. In 2019, an Instagram account posting comic strips with gay Muslim characters disappeared after Kominfo officials asked the company to take it down, while in 2018, Google removed seventy-three LGBTIQ-themed apps, so that they can no longer be downloaded in the country through the Google Play Store.¹⁵⁸

There are at least thirty-eight unique URLs relevant to the LGBTIQ community that were found blocked in Indonesia. LGBTIQ websites were found blocked across forty-three local networks in Indonesia, out of ninety-seven local networks tested. Most blocks were observed on Telekomunikasi Indonesia (Telkom), the largest ISP that is majority owned by the Indonesian government, followed by Indosat Ooredoo (Indosat).

Unlike other countries, Indonesia makes its Trust Positif website block list public. ISPs in Indonesia are also considered to be more transparent about their censorship, as they serve block pages that clearly inform Internet users that access to certain websites is blocked. Block pages are served by

¹⁵⁵ OONI Explorer (Sample OONI measurement collected from Indonesia, displaying the `dns_isp_id_sehat_netsafeindosat_2` annotation, accessed October 26, 2020),

https://explorer.ooni.org/measurement/20180111T032529Z_AS4761_2l16dMgzTvsYsM1MWNt0SgFcA7dJi7uUnJececc3Gvx-EF525tU?input=http://www.grindr.com/.

¹⁵⁶ OONI Explorer (Sample OONI measurement collected from Indonesia, displaying the `nat_id_trustpositif_block_1` annotation, accessed October 26, 2020),

https://explorer.ooni.org/measurement/20200213T053902Z_AS17974_igK3SmCYSdqnVjV2OxZ1VCUnsaECgo8Dh7S6C-fU0AQgWg5nPQU?input=http://www.queernet.org/.

¹⁵⁷ OONI Explorer (Sample OONI measurement collected from Indonesia, displaying the `dns_isp_id_sehat_smartfren` annotation, accessed October 26, 2020),

https://explorer.ooni.org/measurement/20191229T003732Z_AS18004_JI2BzWJrjBZuKZN32BaJHNsOSGjE6PPvdisr4Hasr1QS1Jn-w0G?input=http://www.samesexmarriage.ca/.

¹⁵⁸ Power, "Gay Dating App Blued 'shocked' to Be Banned in Indonesia."

means of DNS hijacking, which can potentially be easy to circumvent (in comparison to other forms of censorship). Notably, none of the LGBTIQ websites found blocked in Indonesia are in Bahasa Indonesia nor are they intended for an Indonesia-specific audience. Finally, there is variation in LGBTIQ websites that are blocked on different networks in Indonesia. This variation makes it difficult for Internet users to be informed of which websites are censored on each network and why, which negatively impacts fundamental rights to access information and free expression online.





Highlights

- In Malaysia, the proliferation of online LGBTIQ content and activism is made possible by the Internet and social media platforms. Interviews with in-country experts suggested, however, that the more visibility LGBTIQ content receives, the more likely the authorities are to censor it.
- At least two websites that are relevant to LGBTIQ communities were consistently **blocked**. Specifically, URLs related to Gay Star News and Planet Romeo, which were blocked in more than 50 percent of times tested.
- Although this study uncovered the blocking of twenty-one unique URLs that are relevant to LGBTIQ communities, it seems that most of them are the result of some form of "censorship leakage" from Indonesia.
- LGBTIQ websites targeting domestic audiences, such as Queer Lapis and Justice for Sisters, remain accessible in Malaysia.
- As websites require a lot of set-up time and resources, LGBTIQ people and organizations in Malaysia commonly use apps instead, namely Telegram and WhatsApp, to connect with each other, self-organize, and share local language-specific content.

Population (2020)	32,365,999 ¹⁵⁹
Internet Penetration	81.4 percent ¹⁶⁰
Growth of Internet Population (2010-2018)	25 percent ¹⁶¹
Active social media users	Facebook: 68 percent penetration rate (December 2018) ¹⁶²
Mobile subscriptions (per 100 inhabitants [2018]	134.53 ¹⁶³
ICCPR Ratification	No
ECSR Ratification	No
Freedom on the Net ranking (2015)	57/100; Partly free ¹⁶⁴
Freedom on the Net ranking (2020)	58/100; Partly free ¹⁶⁵
Consensual same-sex relations	Not legal ¹⁶⁶

Table 1: Selected Malaysian LGBTIQ, demographic and internet penetration indicators

^{159 &}quot;Asia Internet Stats by Country and 2020 Population Statistics: Malaysia," Internet World Stats, accessed July 21, 2020, https://www.internetworldstats.com/asia.htm#my.

¹⁶⁰ Ibid.

¹⁶¹ International Telecommunications Union, "Percentage of Individuals Using the Internet, 2000-2018."

¹⁶² Ibid.

¹⁶³ International Telecommunications Union, "Mobile-Cellular Telephone Subscriptions, 2000-2018."

¹⁶⁴ Freedom House, Freedom on the Net 2015; Please note that Freedom House flipped their Freedom on the Net (FOTN) Internet Freedom Score since their 2015 report, switching a score of 100 from signifying "least free" to "most free." 2015 FOTN scores thus have been flipped to map to the current scoring system.

¹⁶⁵ Freedom House, "Malaysia," in Freedom on the Net 2020 (Freedom House, 2020), https://freedomhouse.org/country/malaysia/freedom-net/2020.

¹⁶⁶ Mendos, State-Sponsored Homophobia: Global Legislation Overview Update.

Background

Malaysia is known for having a hybrid legal system with "a gray line between secularity and Islamicity."167 Each of Malaysia's thirteen states have established their own Sharia (Islamic law) courts to adjudicate on issues related to Islamic legislation.¹⁶⁸ Sharia courts are responsible for matters related to "Muslim personal law," including "family law, charitable property, religious revenue, places of worship, religious offenses such as adultery and other forms of sexual misconduct, defamation, non-payment of alms, and consumption of liquor."169 Religious authorities in Malaysia are known to regularly raid LGBTIQ-friendly venues, including bars, saunas, and parks, to enforce Sharia law.¹⁷⁰ Malaysia inherited from British colonial rule Section 377A of its penal code, which punishes "carnal intercourse against the order of nature."¹⁷¹ This provision has been used to punish consensual same-sex relations with mandatory whipping and up to twenty years in prison.¹⁷²

The struggle for equal rights in the country is often framed as a battle between Western and Asian cultures-with the latter entailing the exclusion of LGBTIQ individuals.¹⁷³ For example,

168 Farid S Shuaib, "The Islamic Legal System in Malaysia." Washington International Law Journal 21, no. 1 (January 1, 2012): 85. https://core.ac.uk/download/pdf/267981974.pdf.

169 Hamid, "Shifting Trends of Islamism and Islamist Practices in Malaysia, 1957-2017," 367.

170 Valerie A. Earnshaw et al., "Stigma Toward Men Who Have Sex with Men Among Future Healthcare Providers in Malaysia: Would More Interpersonal Contact Reduce Prejudice?," AIDS and Behavior 20, no. 1 (January 1, 2016): 98-106, https://doi.org/10.1007/s10461-015-1168-x.

171 Penal Code (Act 574), § 377A (1997), https://www.icj.org/ wp-content/uploads/2012/12/Malaysia-Penal-Code-Act-1936-1997-eng.pdf.

172 Alok Gupta, This Alien Legacy: The Origins of "Sodomy" Laws in British Colonialism (New York: Human Rights Watch, 2008): 50, https://www.hrw.org/sites/default/files/reports/ lgbt1208web.pdf.

173 Sarah Gnu, "Some Asian Governments Claim LGBTQ Culture Is a Western Invention: Here's Why That's Garbage," in 2019, then-prime minister (PM) Mahathir Mohamad asserted that "the LGBT lifestyle was a shift in the Westerners' moral values and they wanted to force that lifestyle on other countries."¹⁷⁴ Malaysian policymakers have also used vague concepts such as "traditional values" to justify their discriminatory attitudes against LGBTIQ people.¹⁷⁵ The infamous criminal charges of same-sex relations against former deputy prime minister Anwar Ibrahim in 1998, which led to his imprisonment, were also based on a state-sponsored demonization of homosexuality as deviant behavior.176

Image 1: Dr. Mahathir bin Mohamad, Prime Minister of Malaysia. Photo courtesy of Chatham House.



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Long-standing anti-LGBTIQ sentiments have made advocacy and movement building in the country especially difficult. Thilaga, a queer activist and a founding member of the advocacy group Justice for Sisters whom we interviewed, remarked that LGBTIQ communities are "impacted by censorship, [because] every

175 Cai Wilkinson et al., "LGBT Rights in Southeast Asia: One Step Forward, Two Steps Back?," IAFOR Journal of Asian Studies 3, no. 1 (Summer 2017): 5-17, https://doi.org/10.22492/ijas.3.1.01.

176 Baden Offord, "Arrested Development! Singapore, Indonesia, and Malaysia," 8.

¹⁶⁷ Ahmad Fauzi Abdul Hamid, "Shifting Trends of Islamism and Islamist Practices in Malaysia, 1957–2017," Southeast Asian Studies 7, no. 3 (2018): 368, https://doi.org/10.20495/seas.7.3_363.

Vice News, May 6, 2019, https://www.vice.com/en/article/ kzmpyy/some-asian-governments-claim-lgbtq-culture-is-awestern-invention-heres-why-thats-garbage.

¹⁷⁴ Bernama, "We Are Free to Reject LGBT, Other Unsuitable Western Influences - Dr Mahathir," New Straits Times, June 18, 2019, https://www.nst.com.my/news/nation/2019/06/497206/we-are-free-reject-lgbt-other-unsuitable-western-influences-dr-mahathir; "Malaysia Cannot Accept Same-Sex Marriage, Says Mahathir," The Straits Times, September 21, 2018, https://www.straitstimes.com/asia/se-asia/ malaysia-cannot-accept-same-sex-marriage-says-mahathir.

time an event or forum is organized, there is always the threat of infiltration or a raid."177 For example, Malaysian police banned the Sexuality Independence (Seksualiti Merdeka) festival in 2011, which featured informational sexual diversity and LGBTIQ rights activities such as workshops, talks, and performances.¹⁷⁸ In March 2019, LGBTIQ groups' participation in an International Women's Day event was even condemned by then-minister of religious affairs Mujahid Yusof Rawa as "a misuse of democratic space."¹⁷⁹ With regard to LGBTIQ representation in popular culture, the national media leadership has eased restrictions on LGBTIO portravals in film, but the Malavsian Film Censorship Board (LPF) only allows for "homosexual content" in films if the gay characters "reform" (i.e., become heterosexual) by the end of the film.¹⁸⁰

Amidst the public health crisis caused by the COVID-19 pandemic, LGBTIQ individuals in Malaysia, as everywhere, face heightened vulnerabilies due to pre-existing stigma and discrimination. As a result, LGBTIQ individuals are less likely to seek medical help, tests, and treatments.¹⁸¹ LGBTIQ patients in medical facilities have reported experiences ranging from "doctors who won't touch them" to "being openly shamed by doctors," and to "receiving hasty, inadequate diagnosis and treatment."¹⁸² Transgender individuals are particularly reticent to seek healthcare, out of fear of government detainment or persecution for not having legal documents that match their gender identity.¹⁸³ This fear is due to Malaysia's status as one of a few countries in the world that criminalizes transgender people.¹⁸⁴ Discrimination, in addition to fears that their personal information "could be used against them," lead to low health-seeking behavior within the LGBTIQ community in Malaysia.¹⁸⁵

According to Malaysian LGBTIQ rights group, Queer Lapis, the hesitation of LGBTIQ individuals to seek medical attention is likely exacerbated during the COVID-19 pandemic, especially because these individuals are often blamed (e.g., at home or on social media) for causing the pandemic.¹⁸⁶ Queer Lapis has also received reports of domestic abuse experienced by LGBTIQ individuals who are forced to return to their family homes due to the pandemic.¹⁸⁷ One person who spoke with Queer Lapis shared how his mental health has deteriorated given his father's frequent outbursts, blaming him and the "deviancy of LGBT people" for the pandemic.¹⁸⁸

¹⁷⁷ Thilaga, interview.

¹⁷⁸ Celine Fernandez, "Malaysians Debate Ban of Gay Rights Festival," *Wall Street Journal*, November 5, 2011, sec. Southeast Asia Real Time, https://www.wsj.com/articles/BL-SEAB-208.

¹⁷⁹ Rozanna Latiff, "In Muslim Malaysia, Uproar over LGBT Groups at Women's Day March," *Reuters*, March 10, 2019, https://www.reuters.com/article/us-malaysia-lgbt/inmuslim-malaysia-uproar-over-lgbt-groups-at-womens-daymarch-idUSKBN1QR06K.

¹⁸⁰ Mendos, State-Sponsored Homophobia, 62.

¹⁸¹ Ibid.

¹⁸² Nadia Gideon, Thilaga, and Pang Khee Teik, "Curing Discrimination: Making Healthcare Inclusive for LGBT People" (Queer Lapis, October 18, 2018), https://www.queerlapis. com/curing-discrimination/.

^{183 &}quot;Malaysia: Court Ruling Sets Back Transgender Rights," Human Rights Watch, October 8, 2015, https://www.hrw. org/news/2015/10/08/malaysia-court-ruling-sets-backtransgender-rights; Jonathon Egerton-Peters et al., Injustice Exposed: The Criminalisation of Transgender People and Its Impacts (London: Human Dignity Trust, May 17, 2019): 25, https://www.humandignitytrust.org/wp-content/ uploads/resources/Injustice-Exposed-the-criminsalisation-of-trans-people.pdf.

¹⁸⁴ Neela Ghoshal, "I'm Scared to Be a Woman" (Human Rights Watch, September 25, 2014): 1, http://features.hrw. org/features/HRW_reports_2014/Im_Scared_to_Be_a_ Woman/index.html.

¹⁸⁵ Nadia Gideon, Thilaga, and Pang Khee Teik, "Curing Discrimination."

¹⁸⁶ Vinodh Pillai, "Blaming LGBT People for Covid-19 Is Spreading Fast," Queer Lapis, April 5, 2020, https://www. queerlapis.com/blaming-lgbt-people-for-covid19/.

¹⁸⁷ Leyla, "Under MCO, Malaysian Queer People Face Family Violence at Home," Queer Lapis, April 4, 2020, https://www.queerlapis.com/violence-under-mco/.

¹⁸⁸ Ibid.

Public Opinion and Legal Situation for LGBTIQ People in Malaysia

Muslims make up approximately 60 percent of the Malaysian population.¹⁸⁹ The conservative turn of Islam in the country since the 1980s has contributed to the lack of promotion and protection of LGBTIQ rights.¹⁹⁰ Malaysia's Islamic religious leadership, for example, has publicly condemned LGBTIQ-related activities. The National Fatwa Council issued a fatwa (religious edict) in 2008 decreeing that "tomboyish behavior" and same-sex relations between women are forbidden acts in Islam.¹⁹¹ In late 2018, it was reported that the Malaysian government was promoting different forms of so-called "conversion therapy" to guide Muslim LGBTIQ people, especially transgender women, to the "right path."192 The Malaysian Islamic Development Department (JAKIM), a federal government agency, runs a conversion program known as "Mukhayyam," which aims to "rehabilitate" LGBTIQ persons.¹⁹³

The existing ban on sex "against the order of nature" in Section 377A of Malaysia's penal code was put to the test in May 2020, when a Malay Muslim man criminally accused of same-sex relations was granted leave to challenge Selangor State's Sharia laws.¹⁹⁴ In February 2021, he won this landmark case. Malaysia's highest court ruled that the Islamic provision used by Selangor state authorities was unconstitutional, because same-sex relations between men in Malaysia are already criminalized under civil laws.¹⁹⁵

Image 2:

Dr. Mohd Salleh Tun Said Keruak, Minister, Ministry of Communications and Multimedia, Malaysia. Photo ©ITU/R.Farrell



The Communications and Multimedia Act (CMA) of 1998 gives the Ministry of Communications and Multimedia the authority to license the ownership and operation of network facilities. The Ministry also oversees the Malaysian Communications and Multimedia Commission (MCMC), the regulatory body that oversees service providers, including the Internet.¹⁹⁶ Sections 211 and 233 of the CMA are particularly relevant to the blocking of websites. Rights activists have expressed concerns over the overly broad wording of Section 233 on content that is "obscene, indecent, false, menacing or offensive in character with intent to annoy, abuse, threaten or harass another person,"

^{189 &}quot;Study: By 2050, Seven out of 10 Malaysians Will Be Muslims | Malay Mail," *Malay Mail*, April 3, 2015, https://www. malaymail.com/news/malaysia/2015/04/03/study-by-2050-seven-out-of-10-malaysians-will-be-muslims/871679.

¹⁹⁰ Mohamed Nawab Mohamed Osman, "The Islamic Conservative Turn in Malaysia: Impact and Future Trajectories," Contemporary Islam 11, no. 1 (April 1, 2017): 1–20, https:// doi.org/10.1007/s11562-016-0373-3; Shanon Shah, "Populist Politics in the New Malaysia," New Diversities, Populism Beyond the West: Dissonant Diversities and Fragmented Politics, 21, no. 2 (2019): 53–68.

¹⁹¹ Jalil Hamid, "Malaysia Muslim Body Issues Fatwa against Tomboys," *Reuters*, October 24, 2008, https://www. reuters.com/article/us-malaysia-tomboys-idUSTRE-49N2AM20081024.

¹⁹² Jia Vern Tham, "Here's How Malaysia 'Cures' LGBTs With Conversion Therapy," SAYS, December 20, 2018, https://says. com/my/news/here-s-how-malaysia-cures-lgbts-withconversion-therapy.

¹⁹³ FMT Reporters, "AIDS Council Slams Jakim's 'Conversion Therapy' for LGBTs," Free Malaysia Today, December 24, 2018, sec. Highlight, https://www.freemalaysiatoday.com/category/nation/2018/12/24/aids-council-slams-jakims-conversion-therapy-for-lgbts/.

¹⁹⁴ Beh Leh Yi, "Malaysian Wins Landmark Right to Challenge Muslim Gay Sex Ban," *Reuters*, May 27, 2020, https:// www.reuters.com/article/us-malaysia-lgbt-rights-trfnidUSKBN23322F.

¹⁹⁵ Beh Leh Yi, "Malaysian Man Wins Landmark Challenge against Muslim Gay Sex Ban," *Reuters*, February 25, 2021, https://www.reuters.com/article/us-malaysia-lgbt-rightstrfn-idUSKBN2AP0YD.

¹⁹⁶ Freedom House, "Malaysia," in Freedom on the Net 2020.

which has been used as justification to block pornographic websites, as well as political blogs and news media websites.¹⁹⁷ The Printing Presses and Publications Act of 1984, combined with a mainstream media that has traditionally been either directly or indirectly controlled by the government or political parties, also makes public discussions of LGBTIQ-related issues challenging.¹⁹⁸



Image 3: Tweets with #TetapBangga and #CampurLGBT

Our interviews with in-country activists have confirmed that private Instagram, WhatsApp, and Telegram groups are widely used by LGBTIQ people in Malaysia who are looking to connect with others.¹⁹⁹ These communities often are segmented by language, meaning that Malay-speaking or Chinese-speaking LGBTIQ people can more easily find their peers.²⁰⁰ Online forums, Twitter accounts, and Facebook groups have also enabled the organization of underground meetings by LGBTIQ community members in Malaysia, while English-language accounts help mobilize transnational activism. Similarly specialized groups have emerged amidst the COVID-19 pandemic, as LGBTIQ people look online to connect with other individuals while remaining physically distanced.²⁰¹

The proliferation of online LGBTIQ content and activism is made possible by the Internet and social media platforms. In an interview, Thilaga noted that the challenges faced by LGBTIQ communities in Malaysia have not stopped "LGBTIQ [people] from pushing back and building movements using online spaces, such as hashtag organizing."202 For example, #TetapBangga ("StillProud") and #CampurLGBT ("MixLGBT") hashtags became viral and remain widely used to promote inclusion in the country.²⁰³ The organization Justice for Sisters also inspired multiple uses of the hashtag #MyTransAlly to discuss LGBTIQ activism online, as part of a campaign to promote tolerance and acceptance toward transgender people in Malaysia.²⁰⁴ A 2016 study by the Malaysian advocacy group EMPOWER noted

the interviewer, July 22, 2020.

202 Thilaga, interview.

203 Twitter. "#tetapbangga - Twitter Search / Twitter." Accessed March 25, 2021. https://twitter.com/search?q=%23tetapbangga&prefetchtimestamp=1616706964533, https://twitter.com/ search?q=%23tetapbangga; "#CampurLGBT - Twitter Search / Twitter," Twitter, accessed March 25, 2021, https://twitter. com/hashtag/campurlgbt, https://twitter.com/hashtag/ campurlgbt.

204 Leigh Cuen, "LGBT Malaysian Activists Go Online To Fight For Human Rights," *Vocativ*, June 30, 2015, sec. Culture News - Vocativ, https://www.vocativ.com/206782/queer-online/; "#MyTransAlly - Twitter Search / Twitter," Twitter, accessed March 25, 2021, https://twitter.com/hashtag/mytransally, https://twitter.com/hashtag/mytransally.

¹⁹⁷ Sinar Project, "Laws Cited for Internet Censorship in Malaysia," News Item, *Sinar Project*, accessed October 30, 2020, under "Offensive and Indecent Content," https:// sinarproject.org/digital-rights/updates/laws-cited-for-internet-censorship-in-malaysia.

¹⁹⁸ Lay Kim Wang, "Media and Democracy in Malaysia," Javnost - Journal of the European Institute for Communication and Culture 8, no. 2 (2001): 74, https://doi.org/10.1080/13183 222.2001.11008772.

¹⁹⁹ D (campaigner at Pelangi Campaign), in discussion with

²⁰⁰ Ibid.

²⁰¹ Ibid.

the Internet's role in the transgender community, allowing individuals to express themselves "with multimedia and interactive tools that can rapidly distribute content regardless of geographical location."²⁰⁵

A campaigner for a locally-based LGBTIQ advocacy organization whom we interviewed, known as "D," also acknowledged that there has been some progress in advancing LGBTIQ rights in Malaysia. "D" stated that LGBTIQ activism among youth has grown over the past ten years, especially through student groups, theatre groups, and community-building groups. These groups have emerged in regions beyond the capital city of Kuala Lumpur, such as in the states of Penang and Sabah.²⁰⁶

Access Restrictions to LGBTIQ Content Online in Malaysia

Over 80 percent of Malaysians have access to the Internet and nearly 70 percent are active on social media, making the Malaysian Internet ecosystem one of the most vibrant in Southeast Asia.²⁰⁷ To encourage economic development and foreign investment, former PM Mahathir had promised that Malaysia would never censor the Internet, but this promise was reversed in 2015, when then-PM Najib Razak censored websites that reported on his corruption scandal.²⁰⁸ When an opposition alliance led by Mahathir won a majority in parliament in 2018, political and news websites that were critical of Najib's regime were finally unblocked.²⁰⁹

In an interview, "D" revealed how blocking is implemented in Malaysia.²¹⁰ As the Internet regulator, the MCMC is the entity that would order ISPs to block certain websites based on the country's laws (e.g., the Communications and Multimedia Act of 1998). However, "D" noted that ISPs are known to have varying internal processes and levels of compliance (i.e., some are able to fulfill the blocking request faster than others).²¹¹

The Open Observatory of Network Interference (OONI) collaborated with the Malaysian advocacy group Sinar Project on a joint research report published in 2016, which found that there were no blocked LGBTIQ websites in Malaysia at the time.²¹² Sinar Project did, however, detect the blocking of news media websites and sites containing political criticism (particularly in relation to Najib's corruption scandal), file-sharing websites, as well as dating websites, among others.²¹³ In a follow-up study in 2018, Sinar Project confirmed the blocking of three LGBTIQ websites ('www.gaystarnews.com', `www.planetromeo.com`, and `www.utopia-asia. com[`]) through OONI Probe testing.²¹⁴ Even though the website for PlanetRomeo (also known as Romeo) ('www.planetromeo.com') is blocked in Malaysia, the app for Romeo is not blocked and is still used by local LGBTIQ communities.

²⁰⁵ Tan Jun, Freedom of Assembly and Association Online in Malaysia: Overview and Case Studies, APC-IMPACT Project (EMPOWER Malaysia, September 2016): 49, https://www.apc.org/sites/default/files/APC_IMPACT_ FOAA_Malaysia.pdf.

²⁰⁶ D, interview.

²⁰⁷ International Telecommunications Union, "Percentage of Individuals Using the Internet, 2000–2018."

²⁰⁸ Freedom House, Silencing the Messenger: Communication Apps under Pressure, Freedom on the Net 2016 (Freedom House, November 2016): 11, https://freedomhouse.org/ sites/default/files/2020-02/FOTN_2016_BOOKLET_FI-NAL.pdf; Joseph N. Goh, Ghislaine L. Lewis, and Pauline P. Y. Leong, "Sexy Media Dissidents: State Regulation, Dissidence, Pornography and Gay Men in Malaysia," Sexuality & Culture 23, no. 1 (March 1, 2019): 195,

https://doi.org/10.1007/s12119-018-9550-2; Columbia University, "The Case of Sarawak Report and Malaysia Insider," Global Freedom of Expression, July 20, 2015, https://globalfreedomofexpression.columbia.edu/cases/ case-sarawak-report-malaysia-insider/.

²⁰⁹ Freedom House, "Malaysia," in Freedom on the Net 2019 (Freedom House, 2019), https://freedomhouse.org/country/malaysia/freedom-net/2019.

²¹⁰ D, interview.

²¹¹ Ibid.

²¹² Xynou et al., The State of Internet Censorship in Malay-

sia, under "Key Findings."

²¹³ Ibid.

²¹⁴ Sinar Project, "Online LGBT Censorship Malaysia."

Although our analysis uncovered the blocking of several internationally-relevant LGBTIQ sites in Malaysia-`ilga.org`, `www.gay.com`, 'bisexual.org', 'transsexual.org', 'www.queernet.org`, `www.gayhealth.com`, and `www.ifge. org`-these URLs presented signs of blocking less than 1 percent of the times tested, limiting our confidence regarding their blocking. Thilaga mentioned in an interview that ILGA's website works in Malaysia without the use of a VPN, which suggests that previous evidence of blocking may have to do with the use of an Indonesian DNS resolver by OONI Probe users who tested `ilga.org` in Malaysia.215 Thilaga also confirmed that social media sites and dating apps like Grindr and Tinder are not blocked, even though they are heavily used by LGBTIQ communities in Malaysia.²¹⁶

LGBTIQ websites targeting domestic audiences, such as 'www.queerlapis.com' and 'justiceforsisters.wordpress.com', remain accessible in Malaysia. "D" suggested that, because only a few Malaysian LGBTIQ sites exist, they may be considered as non-threatening and therefore have remained accessible.²¹⁷ "D" argued that the Malaysian government is more inclined to take action on LGBTIQ-related content that has gone viral or become 'visible' to the public. For example, when photos of LGBTIQ people were shown in a public space at a festival, the Ministry of Islamic Affairs instructed the festival organizers to take them down.²¹⁸ "D" further added that, because of the lack of local sites or content, most LGBTIQ people in Malaysia do not rely on websites. Instead, they use chat apps like Telegram and WhatsApp to self-organize and share local language-specific content, as well as use dating apps, such as Grindr and Her, none of which are blocked in Malaysia.

According to Thilaga, LGBTIQ people are vulnerable to other forms of attacks and censorship on social media platforms, as there have been many cases where other users (e.g., religious conservatives) have tagged the authorities on LGBTIO-related posts, calling on them to take action.²¹⁹ A trans woman cosmetics entrepreneur, for example, faced backlash online on multiple occasions due to her gender identity and gender expression, including over her bikini photos and for wearing women's prayer clothes during a pilgrimage to Mecca, Saudi Arabia.220 The then-minister of religious affairs Mujahid Yusof Rawa also threatened to ban her on social media.221

Attacks against LGBTIQ individuals make it difficult for them to express their opinions freely online.²²² The tendency for users to 'police' the expression of other users, combined with overly-broad regulation (e.g., Section 233 of the CMA), results in self-censorship, particularly among those speaking on LGBTIQ issues.²²³ Meanwhile, the offline organizing of LGBTIQ events in Malaysia is impacted by threats of raids and surveillance by the police. Yet, these challenges have not stopped Malaysia's LGBTIQ movement, which continues to fight for fundamental human rights in online and offline spaces.

²¹⁵ Thilaga, interview.

²¹⁶ Ibid.

²¹⁷ D, interview.

²¹⁸ Ibid.

²¹⁹ Thilaga, interview.

²²⁰ CoconutsKL, "Malaysian Twitter Loses Its Mind over Controversial Cosmetics Entrepreneur's Pilgrimage," Coconuts Kuala Lumpur, February 3, 2020, https://coconuts.co/ kl/news/malaysian-twitter-loses-its-mind-over-controversial-cosmetics-entrepreneurs-pilgrimage/.

²²¹ Nadirah H. Rodzi, "Minister Wants to Ban Malaysian from Social Media after Ruckus in Mecca over Gender Issue," *The Straits Times*, February 4, 2020, https://www.straitstimes.com/asia/se-asia/minister-wants-to-ban-malaysianfrom-social-media-after-ruckus-in-mecca-over-gender.

²²² Thilaga, interview.

²²³ Ibid.

Technical Analysis of LGBTIQ Website Blocking in Malaysia

Summary of Technical Findings

Our findings are based on the analysis of OONI measurements collected from Malaysia between June 1, 2016 to July 31, 2020.²²⁴ Below we share a summary of our findings.

- At least two websites that are relevant to LGBTIQ communities were consistently blocked. The websites `www. gaystarnews.com` and `www.planetromeo.com` (and their related URLs) were found consistently blocked in more than 50 percent of times tested.
- The LGBTIQ websites found blocked in Malaysia are foreign, English-language LGBTIQ sites, while all Malaysian LGBTIQ sites tested were accessible.
- LGBTIQ sites are blocked in Malaysia by means of DNS hijacking. Most filtering was served with a single block page, presenting the nat_my_violates annotation
- There is a potential of "censorship leakage" from Indonesia.

Although we detected the blocking of twenty-one unique URLs that are relevant to global LGBTIQ communities, their blocking resolved to an Indonesian IP address (and, in some cases, even served an Indonesian block page), suggesting that the OONI Probe users who ran those tests may have used an Indonesian DNS resolver.

224 Citizen Lab, "Analysis of OONI measurements collected from Malaysia," accessed October 26, 2020, https://github. com/citizenlab/lgbtiq-report-data/blob/main/my.csv; OONI Explorer (OONI Measurements Collected from Malaysia, accessed October 26, 2020), https://explorer.ooni.org/ search?until=2020-10-02&probe_cc=MY.

Analysis of LGBTIQ Website Blocking in Malaysia

The Malaysian Communications and Multimedia Commission (MCMC) is the communications regulator of Malaysia. The MCMC reportedly instructs local ISPs to block thousands of websites.²²⁵ In total, we found **twenty-one unique URLs in our LGBTIQ testing lists blocked** at least once in Malaysia. Out of the twenty-one URLs, we are more confident about the blocking of those URLs associated with two websites, Gay Star News and Planet Romeo, as they presented signs of blocking in more than 50 percent of the times tested.

The following are HTTP and HTTPS URLs for Gay Star News and Planet Romeo, as well as another LGBTIQ website, Utopia Asia, that were found blocked in more than 50 percent of times tested:

`http://www.gaystarnews.com/`
`https://www.gaystarnews.com/`
`http://gayromeo.com` (which redirects
to `https://www.planetromeo.com/`)
`https://www.planetromeo.com/`
`http://www.utopia-asia.com/`.

The remaining fifteen unique URLs presented signs of blocking in less than 1 percent of the times tested, thereby limiting our confidence regarding their blocking. All except four of these URLs were only blocked for OONI Probe users in Malaysia using an Indonesian DNS resolver.

We were able to confirm the blocking of these URLs because block pages are served by ISPs, through the use of DNS hijacking, informing Internet users in Malaysia that access to those

^{225 &}quot;MCMC Blocks Over 5,000 Websites For Various Offences – Jailani," Malaysian Communications And Multimedia Commission, accessed October 25, 2020, https://www. mcmc.gov.my/en/media/press-clippings/mcmc-blocksover-5-000-websites-for-various-offenc.

sites was restricted.²²⁶ Below is the main block page that we saw Malaysian ISPs serve.



Image 4: The main Malay language block page observed in Malaysia.

When attempting to access blocked LGBTIQ sites, Internet users in Malaysia would see the above image in their web browser, instead of the content hosted on the website that they tried to access. The use of block pages is considered to be a more transparent form of blocking because users are informed of a website's inaccessibility.

Examples of LGBTIQ Websites Blocked in Malaysia

The Malaysian advocacy group Sinar Project reported the blocking of three LGBTIQ websites in 2018 (`www.gaystarnews.com`, `www. planetromeo.com`, `www.utopia-asia.com`).²²⁷ This study sheds light on the blocking of additional LGBTIQ sites in Malaysia. The following URLs, however, presented blocking in less than 1 percent of the total number of times tested, limiting our confidence with regard to their blocking.

`https://www.gay.com/` `http://ilga.org/` `http://www.gay.com/` `http://ilga.org/ilga/en/organisations/ ILGA%20ASIA` `https://bisexual.org/` `http://www.tsroadmap.com` `http://www.queernet.org` `http://www.samesexmarriage.ca` `http://www.gayscape.com` `http://www.glil.org` `http://www.bglad.com` `http://www.gayegypt.com` `http://www.ifge.org` `http://www.gayhealth.com` `http://transsexual.org`

Furthermore, the OONI measurements that showed the blocking of these sites were collected by OONI Probe users in Malaysia who seem to have used an Indonesian DNS resolver when these tests were performed. It is highly probable, therefore, that most Malaysian Internet users do not experience their blocking.

Number and Categories of LGBTIQ Websites Blocked in Malaysia

The following chart (**Figure 1**) illustrates the number and categories of LGBTIQ sites that were found blocked in Malaysia as part of this study. (See explanation of categories in **Table 1** below.)

Figure 1 demonstrates that the majority of the blocked LGBTIQ websites in Malaysia are in the "Culture" category (seven URLs in total), while there are three URLs each in "Dating" and "Human Rights" categories that were found to be blocked as well. These findings are likely influenced by the significant number of LGBTIQ websites in the "Culture" category that were tested, in comparison to other categories. (For more details regarding the composition of the testing lists, please see the Appendix: Methodology.)

^{226 &}quot;Block Page."; "DNS Query."

²²⁷ Sinar Project, "Online LGBT Censorship Malaysia."



Figure 1: Blocking of different types of LGBTIQ websites in Malaysia, based on analysis of OONI measurements collected between June 1 2016 to July 31 2020.

We found that many of the LGBTIQ domains blocked in Malaysia were also blocked in Indonesia. However, there were fewer categories of LGBTIQ websites blocked in Malaysia compared to Indonesia. For example, unlike in Indonesia, we did not detect in Malaysia the blocking of LGBTIQ URLs categorized as "Economics" or "Groups." In both Malaysia and Indonesia, we see that internationally-relevant LGBTIQ websites, such as `ilga.org`, appear to be blocked. These sites presented a low blocking consistency (blocked less than 1 percent of times tested), we are nonetheless able to confirm their blocking on a few networks within our analysis period because they returned a block page. Other relevant sites, such as `grindr.com`, however, are accessible in Malaysia. The reason for the blocking of some LGBTIQ sites in Malaysia, as opposed to others, remains unclear.

Categories of LGBTIQ Websites Blocked in Malaysia

For the twenty-one unique URLs found to be blocked, we have created a table below (**Table 2**) that (a) explains our categorization of LGBTIQ websites, (b) shows the number of blocked URLs in each category, and (c) provides examples of relevant blocked domains. Each URL is included under only one category.

Category	# (Out of 21 URLs)	Description	Sample Domains Blocked
Culture and Community	7	Websites that aim primarily to create a community (includes sports, religion, Pride websites, personal blogs), as well as websites about art and culture	gay.com, utopia-asia.com, transsexual.org
Dating	3	Websites that focus on meeting romantic or sexual partners.	gayromeo.com, planetromeo.com
Human Rights	3	Websites that mention human rights as a primary focus of their mission or work on a topic that can be seen as a human rights issue.	ilga.org

Category	# (Out of 21 URLs)	Description	Sample Domains Blocked
News Media	2	Websites that focus on providing news (mainstream or otherwise)	gaystarnews.com (both HTTP and HTTPS)
Pornography	2	Websites relating to hardcore or softcore pornography.	gayscape.com, bglad.com
Non-Operational or 404	2	Sites that were non-operational during secondary categorization.	gayegypt.com, samesexmarriage.ca
Political Reform	1	Websites relating to politics or critical political viewpoints.	glil.org
Sexual Health	1	Websites that focus on health issues, sexual or otherwise. Includes so-called "conversion therapy" and "ex-gay" websites.	gayhealth.com

Table 2: A breakdown of categories of all URLs seen blocked in Malaysia from June 1, 2016 to July 31, 2020 at least once.

Testing and Blocking Frequency of LGBTIQ Websites in Malaysia

Out of the twenty-one unique LGBTIQ-related URLs that presented signs of blocking in Malaysia, the following presented blocking in more than 50 percent of the times tested: `gayromeo.com`, `gaystarnews.com`, and `planetromeo.com`.

The following table (**Table 3**) shares the LGBTIQ sites that presented a relatively high frequency of blocking, in comparison to the total number of times tested in Malaysia during our analysis period. The more times a URL presented blocking ("Times Blocked"), in comparison to the total amount of times it was tested during our analysis period ("Times Tested"), the more confident we are with regards to its blocking.

URL	Category	Annotation percentage	Times Tested	Times Blocked
http://gayromeo.com	Dating	90.86 percent	525	477
http://www.gaystarnews.com/	News Media	90.69 percent	204	185
https://www.gaystarnews.com/	News Media	88.85 percent	278	247
https://www.planetromeo.com/	Dating	72.33 percent	1677	1213
http://www.planetromeo.com/	Dating	67.64 percent	550	372
http://www.utopia-asia.com/	Culture and Community	16.21 percent	2060	334

 Table 3: All URLs seen blocked in Malaysia more than 1 percent of the time.

There are LGBTIQ URLs that presented signs of blocking less than 1 percent of the times that they were tested, limiting our confidence regarding their blocking. These URLs are shared in the following table (**Table 4**).

URL	Category	Annotation percentage	Times Tested	Times Blocked
https://www.gay.com/	Culture and Community	0.59 percent	340	2
http://ilga.org/	Human Rights	0.53 percent	1713	9
http://www.gay.com/	Culture and Community	0.47 percent	1900	9
http://ilga.org/ilga/en/organisations/ ILGA%20ASIA	Human Rights	0.06 percent	1701	1
https://bisexual.org/	Culture and Community	0.06 percent	1748	1
http://www.tsroadmap.com	Culture and Community	0.05 percent	1880	1
http://www.queernet.org	Culture and Community	0.05 percent	1881	1
http://www.samesexmarriage.ca	Non-Operational or 404	0.05 percent	1887	1
http://www.gayscape.com	Pornography	0.05 percent	1893	1
http://www.glil.org	Political Reform	0.05 percent	1904	1
http://www.bglad.com	Pornography	0.05 percent	1905	1
http://www.gayegypt.com	Non-Operational or 404	0.05 percent	1906	1
http://www.ifge.org	Human Rights	0.05 percent	1907	1
http://www.gayhealth.com	Sexual Health	0.05 percent	1916	1
http://transsexual.org	Culture and Community	0.05 percent	1941	1

 Table 4: Low percentage blocked URLs in Malaysia (< 1 percent seen blocked)</th>

The variation of blocking versus testing frequency may be a reflection of the limitations to our methodologies (as discussed in more detail in the Network Measurement Methodology section), rather than a reflection of their actual blocking.

A URL may have a low percentage in its annotation (i.e., the number of times blocked is low, in comparison to the times tested) depending on:

- When OONI Probe users in Malaysia started testing the specific URL (in comparison to when it got blocked);
- Which network OONI Probe users in Malaysia tested the specific URL, and whether that URL was actually blocked on that network when it was tested;
- How frequently the specific URL was tested by OONI Probe users in Malaysia on a network where it is blocked.

As OONI data is opportunistic (that is, it depends on when OONI Probe users in a country choose to run tests and which URLs they choose or happen to test), this inevitably presents a limitation to our findings. Nonetheless, it is worth highlighting that the URLs shared through the above table presented signs of blocking, and therefore deserve further testing over time.


Image 5: Copy of MCMC's May 9, 2018 confidential request to Internet Service Providers (ISPs) cited by Malay Mail.

Previous OONI Research on Malaysia

In 2016, OONI collaborated with Sinar Project on a joint research report, which found that thirty-nine different websites were blocked in Malaysia, but it did *not* find any blocked LGBTIQ sites.²²⁸ In 2018, however, the blocking of LGBTIQ websites in Malaysia was reported by Sinar Project, and confirmed through OONI Probe testing.²²⁹ The LGBTIQ websites that were found blocked include `www. gaystarnews.com`, `www.planetromeo.com`, and `www.utopia-asia.com`.²³⁰ Local Malaysian LGBTIQ websites (e.g., `www.queerlapis.com`), however, remained accessible.²³¹

A comparison of the 2016 and 2018 studies reveals not only that Malaysia has an Internet filtering regime in place, but also that the blocking of LGBTIQ sites in the country is relatively recent. Malaysia might have updated

229 Sinar Project, "Online LGBT Censorship Malaysia."230 "OONI Probe."

231 Sinar Project, "Online LGBT Censorship Malaysia."

its block list in 2018 to include a few LGBTIQ websites, but the censorship techniques used by ISPs (e.g., DNS hijacking) remained the same as observed in the 2016 study and in this study.²³²

Blocking on AS Networks in Malaysia

Autonomous System (AS) networks are logical divisions given to computer networks on the Internet. They are officially registered and given to commercial entities such as telecom companies, Internet Service Providers, educational institutions, or large businesses among others. In this analysis, AS networks are used to organize where filtering is observed. The AS networks where annotations appear regularly indicate which service providers have filtering policies in place. This division is not always clearly divided, however, as an ISP may have more than one AS network such as when mergers or rebranding occurs, as well as when size dictates splitting up a network. It is important to note when interpreting this data that AS networks vary widely in size. A single AS network may be allotted for an office that represents 256 addresses or can be for ISPs that represent hundreds of thousands of addresses.

In total, we observed the blocking of LGBTIQ websites on eight different AS networks in Malaysia, each of which returned at least one blocking annotation. The top five networks where we found the most blocking of LGBTIQ sites in Malaysia are shared through **Table 5** on the following page. We detected most of the blocked LGBTIQ URLs on Telekom Malaysia (TM Net (AS4788)), which is Malaysia's largest ISP. This finding, however, is influenced by the number of times that the URLs in our testing lists were measured on this network throughout our analysis period.

²²⁸ Xynou et al., The State of Internet Censorship in Malaysia, under "Introduction."

^{232 &}quot;Block list."; Xynou et al., The State of Internet Censorship in Malaysia, under "Key Findings."

Rank	AS Number	AS Name	ISP	# of URLs Blocked
1	AS4788	TM Net, Internet Service Provider	TM Net ²³³	17
2	AS9534	Binariang Berhad	Maxis ²³⁴	7
3	AS17971	TM-VADS DC Hosting	Vads (A TM Net Subsidiary) ²³⁵	5
4 (tie)	AS10030	Celcom Axiata Berhad	Celcom ²³⁶	4
4 (tie)	AS4818	DiGi Telecommunications Sdn. Bhd.	DiGi ²³⁷	4
5	AS38322	WEBE DIGITAL SDN. BHD.	Unifi (formerly Webe)238	3

Table 5: Top five AS networks that have blocked at least one URL during testing in Malaysia.

Variety of Filtering Behaviors in Malaysia

We present the filtering behaviors seen in Malaysia, which describe in detail the technical means by which the blocks are served. In total, four different annotations were present in the measurements of all blocked LGBTIQ URLs. In most cases, we detected two blocking annotations on different networks for each blocked site, but we also detected three different blocking annotations for `www.gay.com`. Most annotations showed that block pages were served by means of DNS hijacking. The following table (**Table 6**) shares all blocking annotations detected (with relevant OONI measurements), along with the number of LGBTIQ URLs that presented each of these annotations. We also describe the behavior of each blocking annotation.

Annotation (with Sample OONI Measurement)	# of URLs	Behavior
dns_isp_id_sehat_jlm_negatif ²³⁹	11	DNS resolution to IP 150.107.140.200 (AS55685 PT Jala Lintas Media, Indonesia)
isp_id_jlm_negatifkonten_ blockpage ²⁴⁰	10	DNS resolution to IP 150.107.140.200 (AS55685 PT Jala Lintas Media, Indonesia) and returning a TrustPositif branded block page.
dns_nat_my_violates ²⁴¹	10	DNS resolution to IP 175.139.142.25 (AS4788 TM Net)
nat_my_violates ²⁴²	3	DNS resolution to IP 175.139.142.25 (AS4788 TM Net) and returning a Malay language block page.

Table 6: All annotations seen in Malaysia and the blocking behavior associated with it.

237 DiGi (website), DiGi, accessed October 25, 2020, https://www.digi.com.my/.

240 OONI Explorer (Sample OONI measurement collected from Malaysia, displaying the `isp_id_jlm_negatifkonten_block-page` annotation, accessed October 26, 2020), https://explorer.ooni.org/measurement/20170426T073510Z_AS4788_Zpu7a-TRyakulleWw9pSNT7k5XUy6H6Rq3wzTVjBBIDWMadqjgd?input=http://www.ifge.org.

241 OONI Explorer (Sample OONI measurement collected from Malaysia, displaying the `dns_nat_my_violates` annotation, accessed October 26, 2020), https://explorer.ooni.org/measurement/20200214T070603Z_AS4788_w9zBXkbTUiQCY9FEtGS-3Su6s0R4OeC8bHcUL2p9xBD8KsaeTOn?input=https://www.planetromeo.com/.

242 OONI Explorer (Sample OONI measurement collected from Malaysia, displaying the `nat_my_violates` annotation, accessed October 26, 2020), https://explorer.ooni.org/measurement/20200211T093948Z_AS4788_bPeCdAAczJ51HQOBnmWtfHZLp8D-VyjHkljIvQ14YC74ilD1a4Z?input=http://www.planetromeo.com/.

²³³ TM Net (website), TM Net, accessed October 25, 2020, https://www.tm.com.my/Pages/Home.aspx.

²³⁴ Maxis (website), Maxis, accessed October 25, 2020, https://www.maxis.com.my/whats-new/.

²³⁵ Vads (website), Vads, accessed October 25, 2020, http://www.vads.com/.

²³⁶ Celcom (website), Celcom Axiata Berhad, accessed October 25, 2020, https://www.celcom.com.my/personal.

²³⁸ Unifi (website), Unifi, accessed October 25, 2020, https://mobile.unifi.com.my/home/whats-new.

²³⁹ OONI Explorer (Sample OONI measurement collected from Malaysia, displaying the `dns_isp_id_sehat_jlm_negatif` annotation, accessed October 26, 2020), https://explorer.ooni.org/measurement/20170426T073510Z_AS4788_Zpu7aTRyakulleWw9pSNT7k5XUy6H6Rq3wzTVjBBIDWMadqjgd?input=https://bisexual.org/.

'Censorship Leakage' from Indonesia

The annotation in the previous table (**Table 6**) illustrates that most blocked URLs (eleven of them in total) resolved to an IP address in Indonesia (hosted on AS55685 PT Jala Lintas Media), instead of in Malaysia. Similarly, we observed that the blocking of ten URLs not only resolves to the same Indonesian IP address ('150.107.140.200'), but also returns Indonesia's Trust Positif-branded block page. Our analysis therefore suggests the presence of "censorship leakage" from Indonesia, where Internet users in Malaysia experience Internet censorship from Indonesia, even though they are connected to the Internet through a Malaysian ISP.

Some possibilities that could explain this censorship leakage include:

- If OONI Probe users had an Indonesian DNS resolver, and they travelled from Indonesia to Malaysia, but did not change their resolver before running OONI Probe tests in Malaysia;
- If an OONI Probe user intentionally set an Indonesian DNS resolver and ran tests in Malaysia;
- Filtering leakage (for example, due to peering issues) from Indonesian to Malaysian networks (though this is less likely);
- Indonesian filtering on a Malaysian network (unlikely scenario);
- If Malaysian ISPs used Indonesian DNS servers to serve the blocks (unlikely scenario).

Censorship leakage may also explain why we observe the blocking of many of the same LGBTIQ sites in both Malaysia and Indonesia. It is possible that the blocked URLs that resolve to Indonesian IPs are only blocked in Indonesia, and that some Malaysian Internet users experience this censorship on Malaysian networks as a result of some form of "censorship leakage."

We observe the DNS resolution to an Indonesian IP on Telekom Malaysia (TM Net) (AS4788), which is Malaysia's largest ISP.243 If this is caused by a filtering leakage by filtering implemented by Indonesia or because Telekom Malaysia used Indonesian DNS servers, it would potentially impact a large number of Malaysian Internet users that use Telekom Malaysia. This seems unlikely, however, since we do not observe DNS resolution to Indonesian IPs in most blocked measurements collected from Malaysia. Instead, it is more probable that OONI Probe users who contributed to these specific measurements may have used an Indonesian DNS resolver. If this is the case, then most Malaysian Internet users would not experience the blocking of many of the URLs in our study, beyond websites like 'www.gaystarnews.com', 'www.planetromeo. com', and 'www.utopia-asia.com', which were added to the MCMC block list in 2018.244

²⁴³ OONI Explorer (OONI measurement collected from Malaysia on the testing of `www.bglad.com`, accessed October 26, 2020), https://explorer.ooni.org/measurement/20170426T073510Z_AS4788_Zpu7aTRyakulleWw9pSNT7k5XUy6H6Rq3wzTVjBBIDWMadqjgd?input=http:// www.bglad.com.

²⁴⁴ Sinar Project, "Online LGBT Censorship Malaysia."

Conclusion

The public health crisis caused by the COVID-19 pandemic has led to heightened vulnerabilies of LGBTIQ individuals in Malaysia, particularly due to pre-existing stigma and discrimination. Malaysia is also one of a few countries in the world that criminalizes transgender people. In consequence, LGBTIQ individuals are less likely to obtain medical help, tests, and treatments when they are unwell. Meanwhile, overly-broad regulation, threats of raids and surveillance, and online attacks have negatively impacted LGBTIQ rights advocacy in Malaysia. Yet, these challenges have not stopped Malaysia's LGBTIQ movements to continue to fight for equality and justice.

Our analysis sheds light on the blocking of twenty-one unique URLs that are relevant to LGBTIQ communities. However, we suspect that most of them are the result of some form of "censorship leakage" from Indonesia, given that the blocking of those URLs resolves to an IP address in Indonesia. Since these websites are blocked in Indonesia as well, and they presented blocking less than 1 percent of the times that they were tested in Malaysia, these results likely occurred if OONI Probe users who ran those tests used an Indonesian DNS resolver. This finding highlights the need for further testing to confirm censorship events with more confidence and to potentially shed light on other cases of LGBTIQ site blocking.

Some ISPs in Malaysia can be considered to be more transparent about their censorship, as they serve block pages that clearly inform Internet users that access to certain LGBTIQ websites is restricted. These block pages are served by means of DNS hijacking, which can potentially be relatively easy to circumvent, in comparison to other forms of censorship. LGBTIQ sites appear to have been blocked in Malaysia starting from 2018. At the time, three foreign, English-language LGBTIQ sites were added to Malaysia's official block list–`www. gaystarnews.com`, `www.planetromeo.com`, and `www.utopia-asia.com`–and these sites have continued to be blocked. Many other internationally relevant and popular LGBTIQ sites remain accessible, as do LGBTIQ sites in the Malaysian language despite their popular use among Malaysian LGBTIQ communities.

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Highlights

- Censorship targeting LGBTIQ content has largely been driven by "anti-gay propaganda" legislation and the criminalization of pornography. Since virtual private networks (VPNs) are banned in Russia, options for Internet users seeking to circumvent censorship are limited.
- In response to escalating persecution, many LGBTIQ organizations have been forced to shut down, limit their online presence, or practice self-censorship. Anxiety over personal safety has resulted in LGBTIQ people remaining quiet in the face of widespread attacks.
- Thirty-two unique LGBTIQ-related URLs were found blocked in Russia, with news websites that cover LGBTIQ-related topics being most commonly blocked. Although news media, cultural, and human rights sites were found blocked, most websites presented blocking in less than 2 percent of times tested. Only `bluesystem.ru` and `deti-404.com` presented blocking in more than 70 percent of times tested.

• ISPs in Russia implement standardized censorship methods.

Most Internet Service Providers (ISPs) in Russia blocked LGBTIQ-related URLs predominantly through the use of HTTP transparent proxies.

Population (2020)	145,934,462 ²⁴⁵
Internet Penetration (December 2019)	79.7 percent ²⁴⁶
Growth of Internet Population (2010-2018)	38 percent ²⁴⁷
Active social media users	Facebook: 5.7 percent penetration rate (February 2020) ²⁴⁸ VKontakte: 23.49 percent penetration rate (July 2020) ²⁴⁹
Mobile subscriptions (per 100 inhabitants [2018]	157.43 ²⁵⁰
ICCPR Ratification	Yes
ECSR Ratification	Yes
Freedom on the Net ranking (2015)	38/100; Not free ²⁵¹
Freedom on the Net ranking (2020)	30/100; Not free ²⁵²
Consensual same-sex relations	Legal ²⁵³

Table 1: Selected Russian LGBTIQ, demographic and internet penetration indicators.

245 "Europe Internet Stats - Population Statistics: Russia," Internet World Stats, accessed July 21, 2020, https://www.internet-worldstats.com/europa2.htm#ru.

246 Ibid.

247 International Telecommunications Union, "Percentage of Individuals Using the Internet, 2000-2018."

248 "Europe Internet Stats - Population Statistics: Russia."

249 "Social Media Stats Russian Federation," StatCounter Global Stats, July 2020, https://gs.statcounter.com/social-media-stats/all/russian-federation.

250 International Telecommunications Union, "Mobile-Cellular Telephone Subscriptions, 2000-2018."

252 Freedom House, "Russia," in Freedom on the Net 2020 (Freedom House, 2020), https://freedomhouse.org/country/russia/freedom-net/2020.

253 Mendos, State-Sponsored Homophobia, 534.

²⁵¹ Freedom on the Net 2015, Freedom on the Net (Freedom House, 2015), https://freedomhouse.org/sites/default/files/FH_FOTN_2015Report.pdf; Please note that Freedom House flipped their Freedom on the Net (FOTN) Internet Freedom Score since their 2015 report, switching a score of 100 from signifying "least free" to "most free". 2015 FOTN scores thus have been flipped to map to the current scoring system.

Background

Russia has enacted numerous draconian laws in recent years, resulting in the deterioration of the human rights situation in the country. Perhaps the most infamous is the law "For the Purpose of Protecting Children from Information Promoting the Denial of Traditional Family Values," also known as the "anti-gay propaganda" law, which has further harmed members of the LGBTIQ community.²⁵⁴ The adoption of this law at the federal level occurred not long after similar laws were enacted elsewhere. The city of St. Petersburg, for example, passed a law against "homosexual propaganda" in March 2012, which criminalizes "public action aimed at propagandising sodomy, lesbianism, bisexualism, and transgenderism among minors."255 The European Court of Human Rights declared in 2017 that "anti-gay propaganda" laws are discriminatory and that "by adopting such laws, the authorities reinforce stigma and prejudice and encourage homophobia."256

Russia's shrinking civic space has resulted in a rise in pro-democracy protests. These protests have involved LGBTIQ people and organizations, contributing to their increased visibility in Russian society, but this visibility also puts individuals at greater risk.²⁵⁷ Homophobic groups have used the adoption of "anti-gay propaganda laws" at regional and federal levels as justification for perpetrating acts of violence.²⁵⁸ In particular, the homophobic group Occupy Pedophilia, which by 2014 had approximately forty branches across Russia, is known for finding LGBTIQ Russians on the Internet and luring them to meet under the pretense of a date, then recording the humiliation and beating of these individuals for later posting online.²⁵⁹ Activists working to promote human rights and democracy are doing so in a context of declining political opportunities and increasing peril, as evidenced by the September 2020 poisoning of Alexei Navalny, a pro-democracy activist.²⁶⁰

In some of Russia's quasi-autonomous republics, the assault against LGBTIQ communities has become even more violent. An anti-LGBTIQ state-sanctioned "purge" in the mainly-Muslim region of Chechnya began in March 2017 with the aim of eradicating LGBTIQ individuals.²⁶¹ In 2019, activists reported a renewed crackdown in Chechnya, including the use of surveillance and entrapment tactics through dating apps to arrest and torture suspected LGBTIQ Chechens.²⁶² Sean Howell, the co-founder of Hornet, a gay dating application known to be used in Chechnya, stated that "[Hornet has] 14,000 users in Chechnya and it was the most brutal crackdown we saw." In response to the crackdown, Hornet sent out warnings to its users in the region and, during severe circumstances, advised them not to use the app.²⁶³ Howell further added that "individuals, family members, and maybe even the police went online looking for gay and bisexual men [to entrap them]."264

²⁵⁴ Alexey Pichugin and Anastasia Shevchenko, The Kremlin's Political Prisoners: Advancing a Political Agenda by Crushing Dissent (Perseus Strategies, 2019): 87, https://www. perseus-strategies.com/wp-content/uploads/2019/04/ The-Kremlins-Political-Prisoners-May-2019.pdf.

²⁵⁵ Miriam Elder, "St Petersburg Bans 'Homosexual Propaganda," *The Guardian*, March 12, 2012, https:// www.theguardian.com/world/2012/mar/12/st-petersburg-bans-homosexual-propaganda.

²⁵⁶ Bayev and Others v. Russia, No. 67667/09, 44092/12 and 56717/12 (European Court of Human Rights June 20, 2017), https://hudoc.echr.coe.int/eng#{%22item id%22:[%22001-174422%22]}.

²⁵⁷ Current Time, Russian LGBT Activists Detained At St. Petersburg Protest (RadioFreeEurope RadioLiberty, 2019), https://www.rferl.org/a/russia-lgbt-rights-pro-test/29889686.html.

²⁵⁸ Radzhana Buyantueva, "LGBT Rights Activism and Homophobia in Russia," *Journal of Homosexuality* 65, no. 4 (March 21, 2018): 474, https://doi.org/10.1080/00918369.2017.1320167.

²⁵⁹ Ibid.

²⁶⁰ Ibid.

^{261 &}quot;Chechnya," Rainbow Railroad, 2019, https://www.rainbowrailroad.org/what-we-do/chechnya.

^{262 &}quot;Chechnya LGBT: Dozens 'Detained in New Gay Purge."

²⁶³ Howell, interview.

²⁶⁴ Ibid.

Ongoing threats to the lives of LGBTIQ rights activists have undermined their ability to organize and engage in collective action. Those living outside of urban areas like St. Petersburg or Moscow face even greater threats, because in these smaller cities and towns, governments are more able to focus their efforts on tracking, harassing, and punishing LGBTIQ individuals. These attacks have left many with no choice but to self-censor and to have pessimistic attitudes toward the future of LGBTIQ rights in Russia. In effect, LGBTIQ communities are forced to remain quiet in the face of widespread violence and persecution.²⁶⁵

Another considerable stressor is the ongoing COVID-19 pandemic, which has isolated LGBTIQ individuals from the in-person social groups that serve as emotional support and often take the place of family and friends who may have rejected their gender and sexual identity.266 Challenges also remain even after advocacy and support services moved online. For example, the organizers of the LGBTIQ-friendly festival "Znakravenstvafest" (which translates to "sign of equality") hosted their event over Zoom due to the pandemic, but experienced fears of prosecution under the federal anti-gay propaganda law should they admit an attendee under the age of eighteen.²⁶⁷ Nevertheless, activists have continued to put pressure on the Russian government to stop the targeted violence against LGBTIQ people, and to provide legal, financial, and advocacy support to LGBTIQ communities, including by signing petitions and launching campaigns with international human rights organizations.

Public Opinion and Legal Situation for LGBTIQ People in Russia

Findings from the 2020 Pew Research Center's Global Attitudes Survey have indicated a drop in the level of societal acceptance of homosexuality in Russia. Only 14 percent of Russian respondents in 2019 believe that homosexuality should be accepted, in contrast to a previously higher proportion (22 percent) in 2002.²⁶⁸ At the same time, findings from our interviews indicated some evidence of improved societal acceptance, especially among young people. According to LGBTIQ activist SZ, a public opinion poll among youth in 2019 showed that at least half of respondents supported marriage equality. SZ notes:

"It turned out that all those people whom the authorities are trying to 'protect' don't believe in 'propaganda' at all...So, I think society is changing and changing quite fast, but at the same time, there is the government, the authorities, who are still very openly homophobic, and they promote these homophobic policies."²⁶⁹

Anti-gay propaganda laws are concerning not only because they fuel widespread societal homophobia and transphobia, but also because they create a chilling effect among LGBTIQ individuals.²⁷⁰ These laws have been used to prohibit the dissemination of any LGBTIQ-related information (not only in relation to minors), effectively silencing public discussions and positive messages about the LGBTIQ community.²⁷¹ Additional restrictions are also imposed on LGBTIQ youth's ability to

²⁶⁵ Buyantueva, "LGBT Rights Activism and Homophobia in Russia," 476.

²⁶⁶ Amie Bishop, Vulnerability Amplified: The Impact of the COVID-19 Pandemic on LGBTIQ People (Outright International, May 7, 2020): 45, https://outrightinternational.org/sites/default/files/COVIDsReportDesign_FINAL_LR_0.pdf.

²⁶⁷ Isobell Cockerell, "Under Lockdown, LGBTQ Russians Were More Isolated than Ever. Then, the Zoom Parties Started," Coda Story, June 4, 2020, https://www.codastory.com/ disinformation/russia-lgbtq-zoom/.

²⁶⁸ Poushter and Nicholas O. Kent, "The Global Divide on Homosexuality Persists,": 18.

²⁶⁹ Interview #2 with SZ, November 4, 2020.

²⁷⁰ Tanya Cooper, License to Harm: Violence and Harassment against LGBT People and Activists in Russia (Human Rights Watch, December 15, 2014), https://www.hrw.org/ report/2014/12/15/license-harm/violence-and-harassment-against-lgbt-people-and-activists-russia.

²⁷¹ Ibid.

access educational resources and support services, which can negatively affect their health and wellbeing.²⁷² Anti-gay propaganda laws have impacted social media use as well, as the posting of LGBTIQ-related information has been criminalized.²⁷³ For example, a woman in the Russian city of Samara was charged and fined for violating the federal "anti-gay propaganda" law after re-posting pro-LGBTIQ links on her Facebook page.²⁷⁴

Mikhail Tumasov, chair of the Russian LGBT Network, argued that the main impact of these propaganda laws is "a huge level of fear." He said, "I remember when the [federal] anti-gay propaganda law went into force. The life of many LGBTIQ people became harder and then they started to hide again."275 The legislation has meant that "every LGBT organization [in Russia] must decide if they want to be involved in communication with minors," and risk prosecution, even though outreach efforts to queer youth (e.g., to provide support and safe havens) is known to save lives.²⁷⁶ While some organizations have decided to continue their work with youth-for example, by labeling their website as appropriate only for those aged twelve and older-many now work with young people "in a hidden way."277 Alternatively, organizations

276 The Trevor Project, National Survey on LGBTQ Youth Mental Health 2019 (New York: The Trevor Project, 2019), https:// www.thetrevorproject.org/survey-2019/; Tumasov, interview.

277 Interview #2 with SZ; Tatiana Bonch-Osmolovskaya et al., "Russia's Strident Stifling of Free Speech: 2012-2018" (London: Pen International, May 16, 2017), https://pen-international.org/app/uploads/PEN-Russia-final.pdf. Warning ratings with categories according to age groups (0+, 6+, 12+, 16+ and 18+) are required under the 2010 Federal Law "On the Protection of Children from Information Harmful to Their Health." would indicate that their websites are aimed at an audience which is "eighteen and older" to signal that it is in compliance with the laws.²⁷⁸ Regardless, organizations advocating for LGBTIQ rights run the risk of being fined for violating anti-propaganda laws. These fines are significant and generally beyond what any organization can afford to pay.²⁷⁹

At the time of writing, the Russian LGBT Network is facing two charges of violating the federal anti-propaganda law, which appears to be part of an accelerating wave of investigations against them.²⁸⁰ The organization is appealing the charges. During this appeal process, their website and page on the Russian social networking site VKontakte have remained accessible, but these charges are clearly a warning against their activities. SZ said that the charges against the Russian LGBT Network create a lot of uncertainty because:

"We don't know how many resources we should invest into our social networks and websites...Our group on the social network VKontakte has 80,000 subscribers. It is quite a big audience, and of course, it would be a great loss not to be able to be in touch with all these people.... Communication is at the very heart of our work–it is how we work with communities, it is how we try to work with society, and it's how we talk about the violations that take place in Russia."²⁸¹

SZ explained that the negative impact of attacks and censorship on LGBTIQ movement-building in Russia has been "huge."²⁸² She noted, "I believe that from the very beginning when this [federal] propaganda law was adopted, the main goal was exactly to silence any public discussion about the LGBT community, or LGBT rights, or

²⁷² Emily Hylton et al., "Sexual Identity, Stigma, and Depression: The Role of the 'Anti-Gay Propaganda Law' in Mental Health among Men Who Have Sex with Men in Moscow, Russia," Journal of Urban Health 94, no. 3 (June 1, 2017): 319–29, https://doi.org/10.1007/s11524-017-0133-6.

²⁷³ Tumasov, interview.

²⁷⁴ SaferVPN, "Interview with an Activist: Evdokia Romanova Faces Charges in Russia for Pro-LGBTQ Posts," Medium, September 16, 2017, https://medium.com/@SaferVPN/interview-with-an-activist-evdokia-romanova-faces-chargesin-russia-for-pro-lgbtq-posts-on-social-e4fb1cb8bca4.

²⁷⁵ Tumasov, interview.

²⁷⁸ Interview #1 with SZ, April 25, 2019.

²⁷⁹ Tumasov, interview.

²⁸⁰ Ibid.

²⁸¹ Ibid.

²⁸² Interview #1 with SZ, April 25, 2019.

violations of LGBT rights, and basically all this censorship has created an atmosphere of fear, and it concerns all social areas."²⁸³ SZ further added that "many psychologists and social workers refuse to work with LGBT minors just because they are afraid. They are afraid that for any kind of work, they can be taken to the court and found guilty."²⁸⁴

As a result of anti-gay propaganda laws, numerous projects aiming to support LGBTIQ communities in Russia have been targeted. A court in St. Petersburg ordered that the Russian LGBT Network and the Russian LGBT Community be disbanded in late 2019, and cited their pro-LGBTIQ social media posts as the cause.²⁸⁵ The regional court of the city of Barnaul also cited the federal "anti-gay propaganda" law in 2016 to block Children-404 (or "Deti-404"), "an online forum for Russianspeaking LGBT teens to write openly and anonymously about their daily lives and hardships."²⁸⁶

Several other laws have contributed to the closing of civic spaces. The foreign agent law (officially called the law "On Amendments to Legislative Acts of the Russian Federation regarding the Regulation of the Activities of Non-profit Organisations Performing the Functions of a Foreign Agent" of 2012) requires non-governmental organizations (NGOs) to register as "foreign agents" if they receive international funding and engage in advocacy, therefore subjecting them to further government scrutiny and oversight.²⁸⁷ This law also invites

287 Lucy Pakhnyuk, "Foreign Agents and Gay Propaganda: Russian LGBT Rights Activism Under Pressure," *Demokratizatsiya*: The Journal of Post-Soviet Democratization 27, no. 4 public criticism against NGOs more generally, as the term "foreign agent" carries a negative connotation due to its use in Soviet-era propaganda against dissidents.²⁸⁸ Amendments to the foreign agent law in 2019 added independent journalists and bloggers as those who must register as "foreign agents" and have this label included on their publications.²⁸⁹

Russia's "sovereign Internet" law (colloquially referred to as the "RuNet law") was passed in 2019. The law allows the Federal Service for Supervision of Communications, Information Technology, and Mass Media (Roskomnadzor), the state Internet regulator, to block access to content that it deems to be a "threat," and mandates ISPs to install special equipment that can track, filter, and reroute Internet traffic.²⁹⁰ Roskomnadzor maintains a list of URLs that ISPs must block, from LGBTIQ sites to sites that allegedly contain "terrorist propaganda"preventing terrorism has been one of the main justifications of Russia's oppressive measures.²⁹¹ The "sovereign Internet" law lays the groundwork for the implementation of "RuNet," a closed Internet system that requires Russian ISPs to have the technical means to "disconnect from the rest of the world and reroute Internet traffic through exchange points managed by Roskomnadzor."292 The government justified RuNet as a means to increase national security and counter potential threats to Russia's network.²⁹³ For the LGBTIQ community,

²⁸³ Interview #2 with SZ.

²⁸⁴ Ibid.

²⁸⁵ Mendos, State-Sponsored Homophobia, 79.

²⁸⁶ Buyantueva, "LGBT Rights Activism and Homophobia in Russia,"; Also known as "Deti-404," "Children-404". See: Trevor Allen, "Children-404': A Refuge for Russia's At-Risk LGBT Youth Is Under Attack," *Human Rights First* (blog), February 19, 2014, https://www.humanrightsfirst.org/ blog/%E2%80%9Cchildren-404%E2%80%9D-refuge-russia%E2%80%99s-risk-lgbt-youth-under-attack.

⁽September 22, 2019): 479-96.

²⁸⁸ Ibid.

^{289 &}quot;Russia to Label Individuals as 'foreign Agents' under New Law," BBC News, December 3, 2019, sec. Europe, https://www.bbc.com/news/world-europe-50643705.

^{290 &}quot;Russia Tightens Control on National Internet," BBC News, November 1, 2019, https://www.bbc.com/news/world-europe-50259597.

²⁹¹ David Meyer, "Russia: We Want Volunteers to Help Us Censor the Internet," ZDNet, July 12, 2018, https://www. zdnet.com/article/russia-we-want-volunteers-to-help-uscensor-the-internet/.

²⁹² Louise Matsakis, "What Happens If Russia Cuts Itself Off From the Internet," *Wired*, February 12, 2019, https://www. wired.com/story/russia-internet-disconnect-what-happens/.

²⁹³ Zak Doffman, "Putin Signs 'Russian Internet Law' To

however, RuNet means potentially worsening digital censorship and surveillance by Roskomnadzor, making engaging with human rights groups outside of Russia even more challenging.²⁹⁴ There are hopes that RuNet will not succeed, because as SZ argued, "[Russian] authorities are not that technically efficient."²⁹⁵

In April 2018, the encrypted messaging application Telegram, which had thirteen million Russian users, was shut down for refusing to provide its encryption key to the Federal Security Service (FSB). When Telegram circumvented the initial blocking, Roskomnadzor targeted millions of IP addresses related to Telegram, disabling a whole host of online services and other messaging platforms as a result.²⁹⁶ Despite these efforts, Telegram remains the most popular and important messenger app in Russia.²⁹⁷ In March 2020, Reporters Without Borders included Roskomnadzor as one of press freedom's 20 worst "digital predators" in 2020, due to its blocking of news agencies, investigative sites, and political magazines.²⁹⁸ The Kremlin's "Troll Army" is also included on the list.²⁹⁹

In July 2020, the Russian parliament submitted a draft legislation that would ban samesex marriage and outlaw same sex couples adopting children.³⁰⁰ This submission occurred after voters backed an array of constitutional amendments that included defining marriage as a union between a man and a woman only, as well as extending Vladimir Putin's eligibility to remain as president until 2036.³⁰¹ On April 5, 2021, Putin signed these constitutional amendments into law, formally outlawing same-sex marriage in Russia.³⁰²

The likely impact of these developments is increasing homophobia and transphobia in the country, in addition to self-censorship, especially when LGBTIQ individuals are victims of discrimination and violence, but are not yet 'out' to their family, friends, or employers.³⁰³ Mikhail Tumasov stated in an interview that the samesex marriage ban may lead to accusations against LGBTIQ people that their wish for marriage equality is illegal because it violates the Russian Constitution. These constitutional amendments, therefore, provide "a kind of support to the people who are fighting against LGBTIQ people and their communities in Russia." Tumasov added, "I think the challenge for the LGBTIQ community in Russia now is just to survive."304

Disconnect Russia From The World Wide Web," Forbes, May 1, 2019, https://www.forbes.com/sites/zakdoffman/2019/05/01/putin-signs-russian-internet-law-to-disconnect-the-country-from-the-world-wide-web/.

²⁹⁴ Russia: Growing Internet Isolation, Control, Censorship, Human Rights Watch, June 18, 2020, https://www.hrw.org/ news/2020/06/18/russia-growing-internet-isolation-control-censorship.

²⁹⁵ Interview #2 with SZ.

²⁹⁶ Freedom House, "Russia," in Freedom on the Net 2018 (Freedom House, 2018), https://freedomhouse.org/report/freedom-net/2018/russia.

²⁹⁷ Interview #2 with SZ.

²⁹⁸ Reporters Without Borders, "RSF Unveils 20/2020 List of Press Freedom's Digital Predators," (Reporters Without Borders, March 10, 2020), https://rsf.org/en/news/rsf-unveils-202020-list-press-freedoms-digital-predators.

²⁹⁹ Ibid.

^{300 &}quot;Russian Parliament Begins Legalising Ban on Same-Sex Marriage," *Reuters*, July 15, 2020, https://www.reuters.com/ article/us-russia-politics-gaymarriage-idUSKCN24G1CJ.
301 Ibid.

³⁰² Vladimir Isachenkov, "Putin Signs Law Allowing Him 2 More Terms as Russia's Leader," AP NEWS, April 5, 2021, sec. World News, https://apnews.com/article/russia-putin-signs-law-allows-2-more-terms-d9acdada71b75c-3daeafb389782fed4b.

³⁰³ Interview #2 with SZ.

³⁰⁴ Tumasov, interview.

Access Restrictions to LGBTIQ Content Online in Russia

Russia has a long history of media control and censorship, as evidenced by the dominance of state-owned media outlets. There have also been attacks and even murders of journalists who are critical of the state.³⁰⁵ Roskomnadzor, as Russia's Internet regulator, is in charge of "performing state control and supervision over the compliance with the legislation of the Russian Federation related to mass media and mass communications," as well as "to ensure compliance with the laws aimed at protecting children from information harmful to their health and development."306 Information controlled by Roskomnadzor includes items related to drug use, suicide, violent acts against people and animals, and content considered to portray and promote sexual acts.307

Russian ISPs are required to operate SORM (System of Operative Search Measures), a deep packet inspection system that is largely used for surveillance purposes,³⁰⁸ but is also used by ISPs for traffic filtering "to block websites that have been blacklisted by Roskomnadzor."³⁰⁹ The version of SORM that is in use today descends from the surveillance system developed in the Soviet Union during the mid-1980s at a KGB research institute.³¹⁰ A 2013 investigation by Privacy International found that the Soviet legacy of SORM remains in other post-Soviet states as well, including Ukraine, Belarus, and Uzbekistan.³¹¹

According to the research group Censored Planet at the University of Michigan, SORM and other censorship and surveillance technology have "made it cheaper and easier for ISPs to comply with government demands."312 In addition, the use of technology and laws constricting freedom of expression create a very challenging environment for online rights advocacy. Russia established the Internet restriction law (or the "Amendments to the Federal Law on Protecting Children from Information harmful to Their Health" of 2012), which allows the government to block any website it considers "inappropriate for children's health."313 Since virtual private networks (VPNs) are technically banned (though still available) in Russia, options for Internet users seeking to circumvent censorship to access information are limited.

Despite VPNs being technically banned, they are widely used by those residing in major cities. Nonetheless, there remains LGBTIQ organizations and individuals that either do not have access to VPNs or do not know how to use VPNs or other circumvention technology. This lack of knowledge is especially true for those residing in rural areas, yet these individuals may face heightened risks due to their remote

³⁰⁵ Ronald Deibert et al., eds., "Russia," in Access Contested: Security, Identity, and Resistance in Asian Cyberspace (MIT Press, IDRC, 2011), https://opennet.net/research/profiles/russia.

^{306 &}quot;Roskomnadzor - Statute of Roskomnadzor," 228 § (2009), http://eng.rkn.gov.ru/about/.

^{307 &}quot;Russia Slows down Twitter over 'banned Content'" BBC News, March 10, 2020, https://www.bbc.com/news/ world-europe-56344304.

³⁰⁸ Reethika Ramesh et al., "Decentralized Control: A Case Study of Russia," in Proceedings 2020 Network and Distributed System Security Symposium (Network and Distributed System Security Symposium, San Diego, CA: Internet Society, 2020): 5, https://doi.org/10.14722/ndss.2020.23098.

³⁰⁹ Ksenia Ermoshina, Benjamin Loveluck, and Francesca Musiani, "A Market of Black Boxes: The Political Economy of Internet Surveillance and Censorship in Russia," *Journal of Information Technology & Politics*, April 1, 2021, https://doi.or g/10.1080/19331681.2021.1905972.

³¹⁰ Andrei Soldatov and Irina Borogan, "In Ex-Soviet States, Russian Spy Tech Still Watches You," Wired, December 21, 2012, https://www.wired.com/2012/12/ russias-hand/.

^{311 &}quot;Lawful Interception: The Russian Approach," Privacy International, March 4, 2013, http://www.privacyinternational.org/blog/1296/lawful-interception-russian-approach.

³¹² Ramesh et al., "Decentralized Control: A Case Study of Russia," 13.

³¹³ Oksana Olshevskaya, "Factors That Influence Freedom of Speech and Self-Censorship in Mass Media in Contemporary Russia," Science Journal (*Communication and Information*) 6 (2013): 115, https://pdfs.semanticscholar.org/0d4a/2fe262fa5611a20b6df7cec7d6b6aae8ce5e.pdf.

location.³¹⁴ VPN restrictions and high levels of Internet surveillance have certainly made safe communication between advocates challenging.³¹⁵

State-sponsored censorship targeting or affecting LGBTIQ content has largely been driven by "anti-gay propaganda" laws and a desire to protect the so-called "traditional family." The criminalization of pornography also often includes any media containing tolerance and visibility of LGBTIQ individuals and issues in Russia.³¹⁸ Deti-404 also faced legal challenges, as authorities filed a "gay propaganda" case against one activist for administering its website in 2014, although the case was later dismissed by the court.³¹⁹

LGBTIQ rights advocates we spoke to explained that digital literacy is one of the most urgent skills needed to stay connected in Russia today.³²⁰ Skills such as the ability to safely

Skills such as the ability to safely search for and join an online LGBTIQ community, preserve one's own anonymity, remove messages and search history, and use encrypted messaging applications are needed to help communities to grow and develop. This need for advanced digital skills is most apparent in remote areas where attacks against LGBTIQ individuals have intensified.

LGBTIQ content.³¹⁶ As a consequence, websites serving LGBTIQ communities have either shut down or been censored or both. The website for the Deti-404 project (`www. deti-404.com`) is blocked on many networks in Russia, even though the site itself is no longer operational.³¹⁷ The number "404" in the project's title refers to the HTTP status code 404 (for "Page Not Found," seen when a web page no longer exists) to highlight the limited search for and join an online LGBTIQ community, preserve one's own anonymity, remove messages and search history, and use encrypted messaging applications are needed to help communities to grow and develop. This need for advanced digital skills is most apparent in remote areas where attacks against LGBTIQ individuals have intensified. Additionally, ensuring visibility of censorship targeting LGBTIQ content and organizations has been identified as critical. The Russian LGBT Network, for example, "tries to be as public

as possible" when their website is blocked.³²¹ Mass media has been an important partner to them in covering when and why they are attacked, because as SZ explained, this publicity is their "biggest tool" to raise awareness of the threats facing LGBTIQ communities in Russia.³²²

³¹⁴ Ibid.

³¹⁵ Ibid.

³¹⁶ Rights Trends in Russia, World Report 2020 (Human Rights Watch, December 10, 2019), https://www.hrw.org/world-report/2020/country-chapters/russia.

^{317 &}quot;OONI Measurements Collected from the Testing of `www.Deti-404.Com` in Russia," Open Observatory of Network Interference, accessed October 25, 2020, https://explorer. ooni.org/search?until=2020-10-15&domain=www.deti-404. com&probe_cc=RU.

^{318 &}quot;HTTP Status Codes," in OONI Glossary (Open Observatory of Network Interference), accessed October 23, 2020, https://ooni.org/support/glossary/#http-status-codes.

^{319 &}quot;Russia: Anti-LGBT Law a Tool for Discrimination," Human Rights Watch, June 29, 2014, https://www.hrw.org/ news/2014/06/29/russia-anti-lgbt-law-tool-discrimination.

³²⁰ Tumasov, Interview; Interview #2 with SZ.

³²¹ Interview #2 with SZ.

³²² Ibid.

Technical Analysis of LGBTIQ Website Blocking in Russia

Summary of Technical Findings

Our findings are based on the analysis of OONI measurements collected from Russia between June 1, 2016 to July 31, 2020.³²³ Below we summarize our findings.

- Thirty-two unique LGBTIQ-related URLs were found blocked in Russia. These URLs include news media, cultural, and human rights sites. However, most websites presented blocking in less than 2 percent of times tested, while only 'bluesystem.ru' and 'deti-404.com' presented blocking in more than 70 percent of times tested.
- ISPs in Russia implement standardized censorship methods. Most Internet Service Providers (ISPs) in Russia blocked LGBTIQ-related URLs through the use of HTTP transparent proxies, which intercept requests to those sites and redirect visitors to ISP-branded or non-branded block pages. We found seven ISPs in total that serve block pages though DNS hijacking.
- Ads were served in some block pages. Some block pages contain affiliate ads, suggesting the presence of financial incentives.

Analysis of LGBTIQ Website Blocking in Russia

To measure the extent of website censorship in Russia, we first compiled LGBTIQ URLs into our testing lists and categorized them based on content. These URLs were tested in Russia by volunteers using the OONI Probe software, which automatically published the measurements. We then looked through these measurement results and developed "annotations" (or text patterns) to match block pages and other behaviors indicative of filtering. (See the Methodology section for a more detailed explanation of this process.)

In total, we found **thirty-two unique LGBTIQ URLs blocked at least once on Russian networks**. A majority of them (twenty-six URLs), however, was seen blocked in less than 2 percent of times tested, and therefore this blocking is much less consistent. The remaining six URLs have a much higher block rate (between 18 and 75 percent), and are thus blocked more consistently. We further qualify how the blocks are presented to users as those being branded with ISPs' logos and those without.

We were able to confirm the blocking of LGBTIQ URLs because Russian ISPs serve block pages that inform Internet users that access to those sites was restricted.³²⁴ These block pages were primarily served through the use of HTTP transparent proxies, which intercept the user's requests to visit blocked websites and redirect them to domains that hosted block pages. Seven ISPs, however, opted to serve block pages by means of DNS hijacking. Regardless of the delivery mechanism, ISPs serve block pages in lieu of the restricted content. When a block page is served, visitors to a blocked web page would see an image like Image 1 in their web browser, rather than the content of the censored site. Some of these block pages even contain ads, suggesting that operators earn revenue from displaying these block pages.³²⁵

³²³ Citizen Lab, "Analysis of OONI measurements collected from Russia," accessed October 26, 2020, https://github. com/citizenlab/lgbtiq-report-data/blob/main/ru.csv; OONI Explorer (OONI Measurements Collected from Russia, accessed October 26, 2020), https://explorer.ooni.org/ search?until=2020-10-02&probe_cc=RU.

^{324 &}quot;Block Page."

^{325 &}quot;HTTP Transparent Proxy," in OONI Glossary (Open

Image 1: An example of a block page served in Russia.

Уважаемые пользователи!

Мы приносим свои извинения, но доступ к запрашиваемому ресурсу ограничен.

Возможные причины ограничения доступа:

 Доступ ограничен по решению суда или по иным основаниям, установленным законодательством Российской Федерации.

2.Сетевой адрес, позволяющий идентифицировать сайт в сети «Интернет», включен в Единый Реестр доменных имен, указателей страниц сайтов сети «Интернет» и сетевых адресов, позволяющих идентифицировать сайты в сети «Интернет», содержащие информацию, распространение которой в Российской Федерации запрещено.

Проверить наличие сетевого адреса в Едином реестре можно в разделе «Просмотр реестра» на сайте www.zapret-info.gov.ru.

3.Сетевой адрес, позволяющий идентифицировать сайт в сети «Интернет», включен в Реестр доменных имен, указателей страниц сайтов в сети «Интернет» и сетевых адресов, позволяющих идентифицировать сайты в сети «Интернет», содержащие информацию, распространяемую с нарушением исключительных прав.

Проверить наличие сетевого адреса в Реестре можно в разделе «Просмотр реестра» на сайте <u>пар.rkn.gov.ru</u>.



We observed the blocking of many internationally-relevant LGBTIQ sites in Russia at least once including the following URLs:

- The website of LGBTIQ dating app Grindr (`www.grindr.com`);
- The Human Rights Campaign's website (`www.hrc.org`);
- The International Lesbian, Gay, Bisexual, Trans, and Intersex Association's (ILGA) website (`ilga.org`);
- The Trevor Project's website (`www. thetrevorproject.org`), which provides crisis intervention and suicide prevention services for young LGBTIQ people under the age of twenty-five.

Number and Categories of LGBTIQ Websites Blocked in Russia

интернет-провайдер KASPNET

The following chart (**Figure 1**) illustrates the number and categories of LGBTIQ sites found blocked in Russia as part of this study. (See **Table 1** for explanation of categories.)

Figure 1 illustrates that news websites ("News Media") covering LGBTIQ-related topics were most commonly found blocked in Russia (eight URLs), followed by websites on "Culture" (seven URLs) and "Human Rights" (five URLs). We also observed the blocking of "Sexual Health" websites (two URLs), as well as "Dating" and "Political Reform" websites (one URL each). These findings are influenced by the selection of LGBTIQ URLs that was tested in Russia, as well as by the OONI Probe testing coverage that each of these URLs received during our analysis period. This is a common limitation of OONI-based testing, and we outline this further in the "Limitations" section in our "Methodology" chapter.

Observatory of Network Interference), accessed October 25, 2020, https://ooni.org/support/glossary/#http-transparent-proxy.



Figure 1: Blocking of different types of LGBTIQ websites in Russia, based on analysis of OONI measurements collected between June 1, 2016 to July 31, 2020.

Categories of LGBTIQ Websites Blocked in Russia

Only six URLs presented blocking more than 2 percent of times tested in Russia during our analysis period. The following table (**Table 2**) contains the categories to which the six LGBTIQ URLs belong, along with examples of relevant blocked domains. Each URL is included under only one category.

Category	Number of URLs (out of 6 URLs)	Description	Sample Domains Blocked
Culture and Community	3	Websites that primarily aim to create a sense of community (includes sports, religion, Pride websites, personal blogs), as well as websites about art and culture	bluesystem.ru, bluesystem.info
News Media	2	Websites that focus on providing news (mainstream or otherwise)	lesbi.ru, xs.gay.ru
Non-Operational	1	Websites that 404, do not load, or are otherwise non-operational	deti-404.com

Table 2: A breakdown of categories of all URLs seen blocked in Russia more than 2 percent of the time.

Testing and Blocking Frequency of LGBTIQ Websites in Russia

The more times a URL presented blocking, in comparison to the total amount of times tested during our analysis period, the more confident we are about its blocking. Yet, out of thirty-two URLs found blocked, most URLs presented blocking in less than 2 percent of the total number of times tested in Russia. Of six URLs that presented blocking *more* than 2 percent of times tested, only two URLs, 'bluesystem.ru' and 'www.deti-404.com', were blocked in more than 70 percent of times tested, as shown in **Table 3**. Both sites also received relatively high testing coverage, in comparison to other blocked LGBTIQ sites in Russia, thereby increasing our confidence about their blocking.

Only two websites presented blocking in more than 50 percent of times tested, `www.lesbi.ru` and `bluesystem.info` (the latter redirects to `bluesystem.site` when accessed from a browser and hosts the same site as `bluesystem.ru`). It is possible that these alternative domains for `bluesystem` may have been set up as a result of its blocking. Overall, we observed that the Russian government has instructed local ISPs to block access to `.ru` domains, instead of issuing an order to Russian host-ing companies to remove the sites (i.e., takedown requests).

URL	Category	Annotation percentage	Times Tested	Times Blocked
http://bluesystem.ru/	Culture and Community	77.15 percent	40580	31308
http://www.deti-404.com/	Non-Operational	72.52 percent	40210	29162
http://www.lesbi.ru/	News Media	59.09 percent	88	52
http://bluesystem.info/	Culture and Community	57.28 percent	103	59
http://www.1gay.ru/	Culture and Community	28.42 percent	95	27
http://xs.gay.ru/	News Media	18.89 percent	90	17

Table 3: All URLs seen in Russia seen blocked more than 2 percent of the time.

Many other LGBTIQ-related URLs were found blocked in Russia, but in less than 2 percent of the times tested, indicating that the blocking of these websites was highly inconsistent. These URLs are shared in **Table 4**. While all of the URLs in this table were tested more than one thousand times in Russia during our analysis period, most were found blocked less than six times (excluding `www.thegailygrind.com`, which was found blocked thirty-two times). This suggests that many of these sites are accessible on most networks in Russia, but it may also be a reflection of the limitations of our study in terms of testing coverage across local networks over time.

URL	Category	Annotation percentage	Times Tested	Times Blocked
http://www.gayvideo.ru/	Non-Operational	1.09 percent	92	1
http://www.thegailygrind.com/	News Media	0.19 percent	17165	32
http://www.transparentgender.com/	Non-Operational	0.02 percent	17176	4
http://transsexual.org/	Culture and Community	0.01 percent	17430	2
http://amygoodloe.com/lesbian-dot-org/	Human Rights	0.01 percent	57883	6
http://lgbt.foundation/	Culture and Community	0.01 percent	57116	5
http://www.advocate.com	News Media	0.01 percent	39309	3
http://www.gayegypt.com/	Non-Operational	0.01 percent	56271	4
https://www.shoe.org/	Groups	0.01 percent	17166	1
https://www.thetrevorproject.org/	Human Rights	0.01 percent	17169	1
http://instinctmagazine.com/	News Media	0.01 percent	17195	1
http://www.samesexmarriage.ca/	Non-Operational	0.01 percent	17204	1
http://www.tsroadmap.com/	Culture and Community	0.01 percent	17209	1
http://gaytoday.com/	News Media	0.01 percent	17546	1
http://www.glaad.org	Human Rights	0.01 percent	39027	2
http://www.afterellen.com	News Media	0.01 percent	39338	2
http://www.well.com/user/queerjhd/	Religion	< 0.01 percent	55818	2
http://www.glil.org/	Political Criticism	< 0.01 percent	56300	2
http://ilga.org/	Human Rights	< 0.01 percent	57193	2
http://www.towleroad.com	News Media	< 0.01 percent	38516	1
http://www.gmhc.org	Sexual Health	< 0.01 percent	38969	1
http://www.hrc.org	Human Rights	< 0.01 percent	38969	1
http://www.gayhealth.com	Sexual Health	< 0.01 percent	39063	1
http://www.gay.com/	Culture and Community	< 0.01 percent	53805	1
http://www.lgbt-ep.eu/tag/russia/	Non-Operational	< 0.01 percent	54300	1
http://www.grindr.com/	Dating	< 0.01 percent	56447	1

 Table 4: Low percentage blocked URLs in Russia (less than 2 percent seen blocked)

Blocking on AS Networks in Russia

Autonomous System (AS) networks are logical divisions given to computer networks on the Internet. They are officially registered and given to commercial entities such as telecom companies, Internet Service Providers, educational institutions, or large businesses among others. In this analysis, AS networks are used to organize where filtering is observed. The AS networks where annotations appear regularly indicates which service providers have filtering policies in place. This division is not always clearly divided, however, as an ISP may have more than one AS network, such as when mergers or when rebranding occurs as well as when size dictates splitting up a network. It is important to note when interpreting this data, that AS networks vary widely in size. A single AS network may be alloted for an office that represents 256 addresses or can be for ISPs that represent hundreds of thousands of addresses.

Overall, we observed the blocking of LGBTIQ websites on 172 different AS networks in Russia, each of which returned at least one blocking annotation. Most LGBTIQ site blocking occurs on MGTS (AS25513), where we found seventeen LGBTIQ-related URLs blocked, followed by Rostelecom (AS42610), where we found ten URLs blocked. Tele2 (AS12958), ER Telecom (AS34533), and MTS (AS8359) are in fifth place, having blocked six LGBTIQ-related URLs each. These findings are influenced by the OONI Probe testing coverage that specific URLs received on those networks during the analysis period of this study.

Rank	AS Number	AS Name	ISP	# Of URLs Blocked
1	AS25513	PJSC Moscow city telephone network	MGTS ³²⁶	17
2	AS42610	PJSC Rostelecom	Rostelecom ³²⁷	10
3	AS25159	PJSC MegaFon	Megafon ³²⁸	8
4	AS31213	PJSC MegaFon	Megafon	7
5 (tie)	AS12958	T2 Mobile LLC	Tele2 ³²⁹	6
5 (tie)	AS34533	JSC ER-Telecom Holding	ER Telecom ³³⁰	6
5 (tie)	AS8359	MTS PJSC	MTS ³³¹	6

The following table (**Table 5**) shares the top five AS networks where we observed the most blocking in Russia, along with the number of LGBTIQ URLs found blocked on each network.

Table 5: Top five AS networks that have blocked at least one URL during testing.

³²⁶ MGTS (website), Moscow City Telephone Network, accessed October 23 2020, https://mgts.ru/.

³²⁷ Rostelecom (website), Rostelecom, accessed October 23, 2020, https://www.company.rt.ru/.

³²⁸ Megafon (website), Megafon, accessed October 23, 2020, https://moscow.megafon.ru/.

³²⁹ Tele2 (website), Tele2 Russia, accessed October 23, 2020, https://msk.tele2.ru/.

³³⁰ ER Telecom, ER-Telecom Holding JSC, (website) accessed October 23, 2020, https://ertelecom.ru/.

³³¹ MTS (website), Mobile TeleSystems, accessed October 23, 2020, https://moskva.mts.ru/personal.

Variety of Filtering Behaviors in Russia

Filtering behaviors describe in detail the technical means by which blocking is implemented. This information is provided both as a means of documenting frequently seen behavior, as well as being helpful to those who are doing circumvention work.

In total, we detected 148 different blocking annotations across networks in Russia. The following table (**Table 6**) shares the top three annotations by URL block count (with several annotations tied for third place by blocking 6 URLs each), as well as a description of their behavior.

Annotation (with Sample OONI Measurement)	# of URLs	Behavior
isp_ru_mgts_rkn_forward_4 ³³²	13	Intercept request through a squid proxy named sch-1352-3- proxy, return an HTTP 302 redirect to domain block.kf.mgts.ru (AS25513: PJSC Moscow city telephone network) and return an MGTS branded block page.
isp_ru_rostelcom_block_forward ³³³	7	Intercept request through a squid proxy named sch-1347-1-proxy, return an HTTP 302 redirect to domain block.rt.ru (AS42610: Rostelecom) and return a Rostelecom branded block page.
dns_prod_skydns_1 ³³⁴	7	DNS resolution to IP 193.58.251.1 (AS51289: SkyDNS Ltd) and return a SkyDNS branded block page. As this is a DNS based filtering product it is unclear whether this is ISP scoped blocking.
isp_ru_ertelecom_rkn_blockpage ³³⁵	6	Intercept request and return an HTTP 301 redirect to domain lawfilter.ertelecom.ru (AS31483: JSC ER-Telecom Holding) and return a block page with no branding.
isp_ru_tele2_block336	6	Return an unbranded block page.
isp_ru_yota_block_2 ³³⁷	6	Return an HTTP 307 redirect to URL http://forbidden.yota.ru/, a 301 redirect to URL https://forbidden.yota.ru/, and return a block page with Yota branding.

³³² OONI Explorer (Sample OONI measurement collected from Russia, displaying the `isp_ru_mgts_rkn_forward_4` annotation, accessed October 26, 2020), https://explorer.ooni.org/measurement/20180227T105325Z_AS25513_9B9ZVbDAx2w3RPEvUk0s3dULxNQ8lIls6a22tQoqJg0ayvtsMa?input=http://www.glaad.org.

³³³ OONI Explorer (Sample OONI measurement collected from Russia, displaying the `isp_ru_rostelcom_block_forward` annotation, accessed October 26, 2020), https://explorer.ooni.org/measurement/20190228T081241Z_AS42610_MF4eK3OhJp-buDJunqVkrC8J2TeEGQpsAjZmSBnutRvzwr4b4gz?input=http://ilga.org/.

³³⁴ OONI Explorer (Sample OONI measurement collected from Russia, displaying the `dns_prod_skydns_1` annotation, accessed October 26, 2020), https://explorer.ooni.org/measurement/20171003T161217Z_AS15599_eoh3aUHQ7NV5LwWDA3B-r8Hf3FGcgxG3s8mjxFd40cSWcV5BL23?input=http://lgbt.foundation/.

³³⁵ OONI Explorer (Sample OONI measurement collected from Russia, displaying the `isp_ru_ertelecom_rkn_blockpage` annotation, accessed October 26, 2020), https://explorer.ooni.org/measurement/20200215T043307Z_AS51604_DYHYMhFG-jCV1Uh3migBy75wUpWauTs8iwK3PIJqVDyQFaqvqNa?input=http://www.deti-404.com/.

³³⁶ OONI Explorer (Sample OONI measurement collected from Russia, displaying the `isp_ru_tele2_block` annotation, accessed October 26, 2020), https://explorer.ooni.org/measurement/20200215T212058Z_AS15378_SZb6ei1PIXvlvJSHeL3MEgh80gMUF-SIEKwsj87z4VAaCbPLEoq?input=http://xs.gay.ru/.

³³⁷ OONI Explorer (Sample OONI measurement collected from Russia, displaying the `isp_ru_yota_block_2` annotation, accessed October 26, 2020), https://explorer.ooni.org/measurement/20200708T185441Z_AS31213_enJCLruf9ejtq1C2HMvrkPNof-N7Q7yAuEPcu76rLF3AjcTGySv?input=http://www.lesbi.ru/.

Annotation (with Sample OONI Measurement)	# of URLs	Behavior
isp_ru_megafon_block_tag ³³⁸	6	Return an HTTP 302 to URL http://m.megafonpro.ru:81/rkn, followed by an HTTP 302 to URL http://m.megafonpro.ru/rkn- landing/besmarty and return an unbranded block page with ads.
isp_ru_mts_block ³³⁹	6	Return an HTTP 302 redirect to domain blocked.mts.ru (AS8359: MTS PJSC) and return a block page with no branding.
isp_ru_yota_forward ³⁴⁰	6	Return an HTTP 307 redirect to URL http://forbidden.yota.ru/, a 301 redirect to URL https://forbidden.yota.ru/, and return a block page with Yota branding.
isp_ru_ertelecom_rkn_forward ³⁴¹	6	Intercept request and return an HTTP 301 redirect to domain lawfilter.ertelecom.ru (AS31483: JSC ER-Telecom Holding) and return a block page with no branding.
isp_ru_megafon_forward ³⁴²	6	Return an HTTP 302 to URL http://m.megafonpro.ru:81/rkn, followed by an HTTP 302 to URL http://m.megafonpro.ru/rkn- landing/antivirus and return an unbranded block page with ads.

Table 6: Top three annotations by number of unique URLs seen blocked in Russia.

Thirteen URLs presented the `isp_ru_mgts_rkn_forward_4` annotation, where we see the request intercepted by a squid proxy (named `sch-1352-3-proxy`) which returned an HTTP 302 redirect to `block.kf.mgts.ru` and an MGTS branded block page, as illustrated below.

Seven URLs presented the `isp_ru_rostelcom_block_forward` annotation, where the request was intercepted by a squid proxy (named `sch-1347-1-proxy`) which redirected to `block.rt.ru` and returned a Rostelecom branded block page, such as **Image 2** on the following page.

Six URLs presented the `isp_ru_yota_block_2` annotation, which returned an HTTP 307 redirect to `http://forbidden.yota.ru/`, and a subsequent redirect to `https://forbidden.yota.ru/`, which served the following Yota branded block page. (See **Image 3** on the following page.)

³³⁸ OONI Explorer (Sample OONI measurement collected from Russia, displaying the `isp_ru_megafon_block_tag` annotation, accessed October 26, 2020), https://explorer.ooni.org/measurement/20200215T053350Z_AS31208_ilgbksUk8hWR5svFbpJ0ox-OkeDWdQqaW2xsDiL13G2VeN7KnVT?input=http://www.lesbi.ru/.

³³⁹ OONI Explorer (Sample OONI measurement collected from Russia, displaying the `isp_ru_mts_block` annotation, accessed October 26, 2020), https://explorer.ooni.org/measurement/20191229T070318Z_AS39811_LImIFLqwhl9s0tmSM56e9J8jKRake6J-c6yOeERMwJ6YECAQFC3?input=http://bluesystem.ru/.

³⁴⁰ OONI Explorer (Sample OONI measurement collected from Russia, displaying the `isp_ru_yota_forward` annotation, accessed October 26, 2020), https://explorer.ooni.org/measurement/20200207T052037Z_AS25159_3WBQJDo77TEPKUaHyYO-H8IANF4ou8Yy6vKJliUDRhpzE3R9FZt?input=http://www.1gay.ru/.

³⁴¹ OONI Explorer (Sample OONI measurement collected from Russia, displaying the `isp_ru_ertelecom_rkn_forward` annotation, accessed October 26, 2020), https://explorer.ooni.org/measurement/20200215T044305Z_AS41661_nQ6zJW9tCD8KKIG-35ZiX8hJrmOnfMG2AXCcWv24U4zjcB0Tsal?input=http://www.deti-404.com/.

³⁴² OONI Explorer (Sample OONI measurement collected from Russia, displaying the `isp_ru_megafon_forward` annotation, accessed October 26, 2020), https://explorer.ooni.org/measurement/20191229T120433Z_AS31213_oNz4KjfBCXSZtDwheMVsgq-1uEUqYZigigLX016O63Mrm6G1rpX?input=http://www.deti-404.com/.



Доступ ограничен

Доступ к сайту заблокирован системой Контент-фильтрации.



Image 2: MGTS branded block page served in Russia.



Доступ ограничен

Доступ к сайту заблокирован системой Контент-фильтрации.



Image 3: Rostelecom branded block page served in Russia.



Image 4: Yota branded block page served in Russia.

Some blocking annotations (such as `isp_ru_tele2_block`) did not return a branded block page, however. When URLs presented the `isp_ru_ertelecom_rkn_ block page` annotation, the request was intercepted, returning an HTTP 301 redirect to `lawfilter.ertelecom.ru` which served the following non-branded block page (**Image 4**).

We see that seven URLs which presented the `dns_prod_ skydns_1` annotation resolved to the `193.58.251.1` IP and returned a SkyDNS branded block page. But as this is a DNS-based filtering product that is available to the public (unlike the proxybased forms of censorship that we have observed on networks across Russia), it is unclear whether this blocking is implemented by an ISP (**Image 5**).

Ads Served in Some **Block Pages**

In some cases, the block pages even contained ads. When URLs presented the `isp_ru_ megafon_block_tag`annotation, the intercepted requests returned a redirect to `http://m.megafonpro.ru:81/ rkn`, followed by another redirect to *`http://m.mega*fonpro.ru/rkn-landing/ besmarty`, which returned the following non-branded block page containing ads (Image 6).

Similarly, when URLs presented the `isp_ru_megafon_forward` annotation, intercepted requests redirected to ` http://m.megafonpro.ru:81/ rkn`, followed by a redirect to *http://m.megafonpro.* ru/rkn-landing/antivirus`, which returned the following non-branded block page containing ads (Image 7).

The presence of ads suggests that ISPs in Russia may have financial incentives while implementing government-mandated Internet censorship. This is not the first time that we have observed ads being served as part of censorship implementation. In 2018, both OONI and the Citizen Lab reported on the injection of ads



Доступ к информационному ресурсу ограничен на основании ФЗ от 27.07.2006 г. №149-ФЗ "Об информации, информационных технологиях и о защите информации"



Узнать причину



Доступ к информационному ресурсу ограничен на основании Федерального закона от 27 июля 2006 г. № 149-ФЗ «Об информации, информационных технологиях и о защите информации».





к информационному ресурсу ограничен на основании Федерального закона от 27 июля 2006 г. № 149-ФЗ «Об информации, информационных технологиях и о защите информации».

Image 7: Block page containing ads served in Russia.

by ISPs in Egypt that implemented censorship.³⁴³

³⁴³ Leonid Evdokimov et al., The State of Internet Censorship in Egypt (Association for Freedom of Thought and Expressionand Open Observatory of Network Interference, July 2, 2018), https://ooni.org/post/egypt-internet-censorship/; Bill Marczak et al., Bad Traffic: Sandvine's PacketLogic Devices Used to Deploy Government Spyware in Turkey and Redirect Egyptian Users to Affiliate Ads? (The Citizen Lab, March 9, 2018), under "Key Findings," https://citizenlab.ca/2018/03/bad-traffic-sandvines-packetlogic-devices-deploy-government-spyware-turkey-syria/.

Conclusion

Draconian legislation like the "anti-gay propaganda" laws and the actions carried out by the state Internet regulator, Roskomnadzor, have created a very challenging online environment for LGBTIQ communities in Russia. Yet as the country's civic space continues to shrink, there has also been a rise in public pro-democracy protests that involve LGBTIQ people. There are fears, however, that increasing visibility also puts LGBTIQ individuals at greater risk of attacks. Those who espouse pro-LGBTIQ views may experience harassment, prosecution, or worse (e.g., face vicious

"The challenge for the LGBTIQ community in Russia now is just to survive."

assaults or even death). This difficult circumstance has led one of our interviewees to remark that "the challenge for the LGBTIQ community in Russia now is just to survive."³⁴⁴

Our research found thirty-two unique URLs that are relevant to LGBTIQ communities blocked in Russia, however, most of these URLs only presented

blocking in less than 2 percent of times tested. The URLs consistently found blocked the most (i.e., in more than 70 percent of times tested) were `bluesystem.ru` and `deti-404.com`, although the latter is no longer operational. Further OONI Probe testing across networks in Russia is needed to have a more holistic view of LGBTIQ website censorship in the country.

Most ISPs in Russia appear to primarily block LGBTIQ-related URLs through the use of HTTP transparent proxies, which intercept requests to those sites and redirect Internet users to domains that serve block pages. Only seven ISPs used DNS hijacking to serve block pages. These findings suggest that the overall censorship techniques adopted by Russian ISPs are relatively standardized. Since VPNs are technically banned (though they are still available) in Russia, the ability of Russian Internet users to circumvent censorship to access information is severely limited.

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Highlights

- Pervasive censorship has harmed the ability of LGBTIQ people to organize and advocate for human rights, as well as access critical information about health and well-being. Iran's move towards creating a national Internet, called the National Information Network, is projected to further restrict online freedom.
- LGBTIQ individuals are targeted online with surveillance and harassment. This is especially the case since the passing of Law No. 71063 on Computer Crimes of 2009, which significantly expands state surveillance and censorship powers.³⁴⁵ Entrapment through dating apps is also a persistent concern.
- Seventy-five unique LGBTIQ-related URLs were found blocked in Iran. Blocked URLs in Iran include many human rights, cultural, and news sites covering LGBTIQ-related topics. Many blogging platforms are also blocked; therefore, blogs discussing LGBTIQ topics hosted on these platforms are inaccessible as well.
- Iranian Internet Service Providers (ISPs) alternate between blocking and unblocking access to LGBTIQ URLs over time.
- VPNs are commonly used to access banned Internet content. However, some Iranian-hosted VPNs are suspected to be monitored or managed by the government to collect the Internet usage information of its citizens.³⁴⁶

Population (2020)	83,992,949 ³⁴⁷
Internet Penetration	80.5 percent ³⁴⁸
Growth of Internet Population (2010-2018)	54.1 percent ³⁴⁹
Active social media users	Facebook: 47.6 percent penetration rate (December 2019) ³⁵⁰
Mobile subscriptions (per 100 inhabitants [2018]	108.46351
ICCPR Ratification	Yes
ECSR Ratification	Yes
Freedom on the Net ranking (2015)	13/100; Not free ³⁵²
Freedom on the Net ranking (2020)	15/100; Not free ³⁵³
Consensual same-sex relations	Not legal ³⁵⁴

Table 1: Selected Iranian LGBTIQ, demographic and internet penetration indicators.

345 James Marchant et al., Breaking the Silence: Digital Media and the Struggle for LGBTQ Rights in Iran (Small Media, 2018): 92, https://smallmedia.org.uk/media/projects/files/BreakingTheSilence_2018.pdf.

346 Email correspondence between OutRight and Kevin Schumacher, December 5, 2020.

347 "Middle East Internet Stats and Telecommunications Reports: Iran," Internet World Stats, accessed July 22, 2020, https://www.internetworldstats.com/middle.htm#ir.

348 Ibid.

349 International Telecommunications Union, "Percentage of Individuals Using the Internet, 2000-2018."

350 "Middle East Internet Stats and Telecommunications Reports: Iran."

351 International Telecommunications Union, "Mobile-Cellular Telephone Subscriptions, 2000-2018."

352 *Freedom on the Net* 2015; Please note that Freedom House flipped their Freedom on the Net (FOTN) Internet Freedom Score since their 2015 report, switching a score of 100 from signifying "least free" to "most free." 2015 FOTN scores thus have been flipped to map to the current scoring system.

353 Freedom House. "Iran," in Freedom on the Net 2020 (Freedom House, 2020), https://freedomhouse.org/country/iran/free-dom-net/2020

354 Mendos, State-Sponsored Homophobia, 531.

Background

Following the 1979 Islamic Revolution, Iranian authorities pursued "a deeper regulatory penetration of [its] society" by subjecting social spaces and private morality to state control,³⁵⁵ including by imposing strict restrictions on women and criminalizing same-sex relations.³⁵⁶ To do so, the authorities drew on a discourse of "othering" the West and the Pahlavi dynasty, thereby condemning practices considered to be associated with them (e.g., homosexuality). This discourse resonated with Iranians who blamed the Shah for allowing the 'infiltration' of Western influences, such as same-sex practices, despite the fact that these practices had existed in pre-modern Iran.³⁵⁷

As any extramarital sex is illegal in Iran, it is difficult for individuals to explore their sexuality outside the bounds of different-sex marriage. Furthermore, sex between women is criminalized, while sex between men can be punished with the death penalty under certain circumstances.³⁵⁸ Amnesty International estimated in 2017 that five thousand gay, bisexual, and lesbian individuals have been executed there since the 1979 revolution.³⁵⁹ Although confirming the frequency of executions for same-sex conduct is challenging, some Western observers maintained that the number of executions appeared to be decreasing.³⁶⁰ Nevertheless, a 2019 "UN Report of the Secretary General on the situation of human rights in the Islamic Republic of Iran" expressed concerns over continued discrimination and punishment against LGBTIQ individuals, and urged the government to eliminate all forms of discrimination and adopt legislation that protects LGBTIQ communities.³⁶¹

A strict government-enforced system of social, religious, and legal norms that is defined by Shi'a jurisprudence has contributed to human rights violations against LGBTIQ individuals. Religious leaders in Iran have long demonized members of LGBTIQ communities. Then-president Mahmoud Ahmadinejad made an infamous statement in 2007 in New York that, "In Iran, we don't have homosexuals like you do in your country." Since then, Iran has acknowledged the existence of LGBTIQ individuals, albeit portraying them as people who are suffering from "illness and malady."362 Accordingly, the authorities have recommended various 'treatments' for LGBTIQ individuals, including psychotherapy, so-called "conversion therapy," and gender affirmation surgery.³⁶³

363 Catherine Bevilacqua, Elizabeth Harper, and Catherine

³⁵⁵ Katarzyna Korycki and Abouzar Nasirzadeh, "Desire Recast: The Production of Gay Identity in Iran," *Journal of Gender Studies* 25, no. 1 (January 2, 2016): 50–65, https://doi. org/10.1080/09589236.2014.889599.

³⁵⁶ Afsaneh Najmabadi, Women with Mustaches and Men without Beards, 1st ed. (Berkeley: UC Press, 2005), 57.

³⁵⁷ Wayne Martino and Jón Ingvar Kjaran, "The Politics of Recognizability: Giving an Account of Iranian Gay Men's Lives under Repressive Conditions of Sexuality Governance," *International Journal of Middle East Studies* 51, no. 1 (February 2019): 27, https://doi.org/10.1017/S002074381800048X.

³⁵⁸ Simon Forbes, "The Reconstruction of Homosexuality and Its Consequences in Contemporary Iran," The SOAS Journal of Postgraduate Research 10 (2017), https://core.ac.uk/ reader/132197268.

³⁵⁹ Rachel Banning-Lover, "Where Are the Most Difficult Places in the World to Be Gay or Transgender?," *The Guardian*, March 1, 2017, sec. Working in development, https:// www.theguardian.com/global-development-professionals-network/2017/mar/01/where-are-the-most-difficultplaces-in-the-world-to-be-gay-or-transgender-lgbt.

³⁶⁰ Mohammadrasool Yadegarfard, "How Are Iranian Gay Men Coping with Systematic Suppression Under Islamic Law? A Qualitative Study," *Sexuality & Culture* 23, no. 4 (December 1, 2019): 1250–73, https://doi.org/10.1007/s12119-019-09613-7; *Country Policy and Information Note - Iran: Sexual Orientation and Gender Identity or Expression* (London: United Kingdom's Home Office, June 2019): 7, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/810845/ CPIN_-_Iran_-SOGI_-_v3.0__June_2019__EXT.PDF.

³⁶¹ UN General Assembly, Situation of Human Rights in the Islamic Republic of Iran: Report of the Secretary General, A/74/273 (August 2, 2019), https://documents-dds-ny. un.org/doc/UNDOC/GEN/N19/243/59/pdf/N1924359.pdf.

³⁶² International Railroad for Queer Refugees, *Iranian Queer Watch Report* (Planet Romeo Foundation, September 2018): 4, https://irqr.net/wp-content/uploads/2018/09/IQW-Report. pdf; Saeed Kamali Dehghan, "Iranian Human Rights Official Describes Homosexuality as an Illness," *The Guardian*, March 14, 2013, sec. World news, https://www.theguardian.com/world/ iran-blog/2013/mar/14/iran-official-homosexuality-illness.

The absence of education...in Iran results in a gap in people's knowledge regarding sexual orientation, and gender identity and expression. According to one interviewee, the lack of credible sources for researching LGBTIQ issues and the circulation of misinformation have led some people to think that they are transgender when they are likely to be gay.

The absence of education about gender and sexuality in Iran results in a gap in people's knowledge regarding sexual orientation, and gender identity and expression. According to one interviewee, the lack of credible sources for researching LGBTIQ issues and the circulation of misinformation have led some people to think that they are transgender when they are likely to be gay.³⁶⁴ Additionally, families often do not have sufficient information or resources to support their LGBTIQ loved ones, which can lead to bullying and violence, while healthcare professionals may also be misinformed or misleading on how to appropriately care for LGBTIQ people.³⁶⁵

In 1967, the exiled Ayatollah Ruhollah Khomeini issued a fatwa that clarified that there is no religious restriction on gender affirmation surgery. The current regime subsidizes gender affirmation surgery, paying up to half of the high expenses of both surgery and treatment.³⁶⁶ For legal and medical authorities in Iran, therefore, gender affirmation is explicitly framed as "the cure for a diseased abnormality" and a "religio-legally sanctioned option for heteronormalizing people with same-sex desires and practices."³⁶⁷ As a result, gay and lesbian individuals are often forced by their families and the authorities into having gender affirmation surgery or undergoing so-called conversion therapy. Many LGBTIQ individuals have fled the country to avoid suffering from these treatments.³⁶⁸

Given the repressive climate against LGBTIQ communities in Iran, Iranian LGBTIQ rights advocates can typically be found in the diaspora.³⁶⁹ Some of these advocates are members of the more secular parts of Iranian society, while others belong to religious groups who are seeking interpretations of the holy texts that are more inclusive and tolerant. Thus far, however, the number of scholarly works documenting Iranian LGBTIQ rights movements has remained relatively small, which indicates that more needs to be done to study LGBTIQ social movements at home and abroad.³⁷⁰

Kent, Sexual Orientation and Gender Identity: Iran's International Human Rights Obligations, Legal Research Series (University of Essex, Human Rights in Iran Unit, June 2014): 5, https://www1. essex.ac.uk/hri/documents/briefing-sexual-orientation.pdf.

³⁶⁴ Amin, interview.

³⁶⁵ Ibid.

³⁶⁶ Farrah Jafari, "Transsexuality under Surveillance in Iran: Clerical Control of Khomeini's Fatwas," *Journal of Middle East Women's Studies* 10, no. 2 (2014): 31–51, https:// doi.org/10.2979/jmiddeastwomstud.10.2.31; Mehrnaz Samimi, "Fatwa Allows Sex Changes in Iran, but Stigma Remains," *Al-Monitor*, October 7, 2013, https://www. al-monitor.com/pulse/ru/originals/2013/10/iran-subsidizes-sex-change-surgery.html.

³⁶⁷ Afsaneh Najmabadi, "Verdicts of Science, Rulings of Faith: Transgender/Sexuality in Contemporary Iran," Social Research 78, no. 2 (2011): 533–56.

³⁶⁸ Ali Hamedani, "The Gay People Pushed to Change Their Gender," BBC News, November 5, 2014, sec. Magazine, https://www.bbc.com/news/magazine-29832690.

³⁶⁹ Bashir Tofangsazi, "From the Islamic Republic to the Green Movement: Social Movements in Contemporary Iran," Sociology *Compass* 14, no. 1 (January 2020): 10, https://doi. org/10.1111/soc4.12746.

³⁷⁰ Ibid.

Public Opinion and Legal Situation for LGBTIQ People in Iran

The rights to free expression, association, and assembly continue to be severely restricted, while the exercise of these rights carry significant social and legal risks in Iran.³⁷¹ The 2021 "Report of the special rapporteur on the situation of human rights in the Islamic Republic of Iran, Javaid Rehman" noted that "individuals who identify as lesbian, gay, bisexual and transgender experience human rights violations and widespread discrimination."372 Rehman added that Iranian authorities have also used "hateful terms" to describe the LGBTIQ community, "including by labelling individuals as "subhuman" and "diseased.""373 The use of discriminatory language by the authorities, combined with the criminalization of same-sex consensual acts, has the effect of legitimizing violence by state actors and private individuals "including the use of torture, beatings and rape."374

LGBTIQ individuals have been targeted online in the form of surveillance and harassment. Iran's new Islamic Penal Code of 2013, particularly Article 639, further empowers authorities to target members of LGBTIQ social media groups and organized community chatrooms for facilitating a "place of immorality."³⁷⁵ The passing of the Computer Crimes Law has significantly expanded state surveillance and censorship powers, because

many Internet-related laws are written vaguely, allowing for their broad application. Article 14 of the Computer Crimes Law, for example, criminalizes "producing, sending, publishing, distributing, saving or financially engaging in obscene contact by using computer or telecommunications systems or portable data storage devices."376 This article has been used to enforce state-defined morality against LGBTIQ communities and to prohibit the dissemination of materials, such as sexual health information.³⁷⁷ Article 15 criminalizes the use of devices for inciting or aiding and abetting crimes. Additional language notes that fines and prison sentences are mandated for anyone who encourages "the public access to immoral content or facilitates access to this content," or who "provokes or invites the public to participate in crimes against chastity . . . or acts of sexual perversion."378 Similarly, Article 18 "criminalizes the use of a computer or telecommunications to disseminate lies with the intention of damaging the public, disturbing the public state of mind or disturbing the official authorities' state of mind."379

LGBTIQ individuals in Iran fear being surveilled or entrapped by the authorities. According to a study by the research group Small Media, surveillance perpetrated by the state and "malicious individuals" is perceived as the biggest risk to security and safety. More than one-third of the study's respondents were also concerned about online entrapment.³⁸⁰ Evidence exists that members of law enforcement would pose as gay or trans people interested in "meeting up" to

³⁷¹ Reza Afshari, "LGBTs in the Islamic Republic of Iran," Human Rights Quarterly 38, no. 3 (August 3, 2016): 818, https://doi.org/10.1353/hrq.2016.0046.

³⁷² United Nations Human Rights Council, Report of the Special Rapporteur on the situation of human rights in the Islamic Republic of Iran, Javaid Rehman, A/HRC/46/50, ¶4, https://undocs.org/A/HRC/46/50.

³⁷³ Ibid.

³⁷⁴ Ibid.

³⁷⁵ Being Lesbian in Iran (New York, NY: OutRight Action International, 2016): 36, https://outrightinternational.org/ sites/default/files/OutRightLesbianReport.pdf.

³⁷⁶ Marchant et al., Breaking the Silence, 92; Matthew Carrieri et al., After the Green Movement: Internet Controls in Iran, 2009-2012 (OpenNet Initiative, February 2013), https://opennet.net/blog/2013/02/after-green-movement-internet-controls-iran-2009-2012.

³⁷⁷ Rubin, "Evolution of Iranian Surveillance Strategies Toward the Internet and Social Media."

³⁷⁸ Marchant et al., Breaking the Silence, 92.

³⁷⁹ Ibid.

³⁸⁰ Ibid.

entrap LGBTIQ people, while those who were entrapped by police on dating apps (or caught offering sex for money) are then used to entrap others.³⁸¹ Research by the advocacy group ARTICLE19 also indicates that LGBTIQ dating apps and Telegram chat groups have been monitored by Iranian officials.³⁸² Furthermore, Shadi Amin, an Iranian writer and activist who is the director of 6rang, an Iranian Lesbian and Transgender network, noted in an interview that the Islamic Republic's "Cyber Army" trolls LGBTIQ-supportive accounts and spreads messages that homosexuals are sinful.³⁸³ While some LGBTIQ people online in Iran already practice some form of digital security, Amin notes that they must continue to increase their vigilance and knowledge of digital security measures, especially when using dating apps.384

rights violations can appeal.³⁸⁵ Until this situation changes, LGBTIQ communities in Iran will continue to struggle for their rights and appeal for support from the Iranian diaspora and the international community.

Access Restrictions to LGBTIQ Content Online in Iran

The Supreme Council of Cyberspace (SCC) develops most of Iran's Internet-related policies. Its power is centralized, yet separate from the various branches of government, bringing Internet policy directly under Khamenei's control.³⁸⁶ The SCC was established in 2012 and is made up of seventeen representatives of government institutions and ten additional members appointed by Ayatollah Khamenei. By implementing policies such as online cen-

...OONI confirmed the blocking of...forty-six LGBTIQ-related domains, as well as foreign and local news websites, political opposition and pro-democracy sites, blogs of Iranian political activists, and human rights websites, among others. sorship and throttling Internet connection speeds during politically volatile times, the SCC plays a major role in suppressing dissent and limiting freedom of expression in Iran. In March 2020, the advocacy group Reporters Without Borders

For the moment, there is little recourse for LGBTIQ Iranians. There is no national law or institution protecting human rights and digital freedom in the country, nor is there a regional mechanism for the Middle East and North Africa to which those suffering from human

included the SCC as one of press freedom's

opinion and expression."387

twenty worst "digital predators," as its actions "represent a clear danger for freedom of

³⁸¹ Houshyar, LGBT Rights in Iran; Shadi Amin (Director of 6rang, an Iranian Lesbian and Transgender network), as discussed with the interviewer, August 27, 2020..

³⁸² LGBTQ Online Summary Report: Apps, Arrests and Abuse in Egypt, Lebanon and Iran (Article 19, February 2018): 10, https://www.article19.org/wp-content/ uploads/2018/02/LGBTQ-Apps-Arrest-and-Abuse-report_22.2.18.pdf.

³⁸³ Ibid.

³⁸⁴ Ibid.

³⁸⁶ Freedom House. "Iran," in Freedom on the Net 2019 (Freedom House, 2020), https://freedomhouse.org/country/ iran/freedom-net/2019.

³⁸⁷ Reporters Without Borders, "RSF Unveils 20/2020 List of Press Freedom's Digital Predators."

Iran has been a regional leader in expanding Internet usage and penetration, but it also has a long history of state-sponsored censorship and surveillance.³⁸⁸ According to one interviewee, the SCC has designated certain keywords as content that must be banned and has blocked entire websites.³⁸⁹ A 2017 study by OONI confirmed the blocking of 886 domains, which included forty-six LGBTIQ-related domains, as well as foreign and local news websites, political opposition and pro-democracy sites, blogs of Iranian political activists, and human rights websites, among others.³⁹⁰ Shadi Amin explained that LGBTIQ-related censorship is often justified on the grounds of safeguarding morality.³⁹¹ This pervasive censorship of local and international websites has particularly damaged the ability of LGBTIQ people in Iran to organize domestic and transnational advocacy initiatives.392

Internet filtering in Iran has been implemented using products made by Western companies. A 2013 report by the Citizen Lab documented the use of California-based Blue Coat Systems' Internet filtering and monitoring products in Iran.³⁹³ Internet censorship in the country is not without challenges, however. According to one interviewee, some companies that have provided filtering tools to the government in the past have been prohibited from working within Iran due to economic sanctions. As a result, some of the tools the authorities used for filtering have either become unavailable or unable to receive updates to function properly.³⁹⁴

Motivated by perceived threats that unregulated Internet connectivity could pose to the regime, the Iranian government is establishing a national Internet, known as the "National Information Network" (NIN) or "Shoma" in Farsi.³⁹⁵ The first phase of Shoma was launched in 2016, eleven years after it was initially planned.³⁹⁶ The government claimed that the national Internet is to "offer high quality, high speed connections at low costs," but critics suspect that its true aim is to tighten control over Internet use, including facilitating network shutdowns.³⁹⁷ In the wake of protests in November 2019, the government shut down the Internet for over eighty million people, by ordering Internet Service Providers (ISPs) to sever their connection to international Internet traffic and semi-state-owned mobile operators to disconnect their cellular data connectivity for their users.³⁹⁸ As the Internet is a source of information, as well as an avenue to exercise freedoms of expression, assembly, and association, escalations in state control over the Internet harm the fundamental human rights of Iranians.³⁹⁹

³⁸⁸ Carrieri et al., After the Green Movement: Internet Controls in Iran, 2009-2012, 3..

³⁸⁹ Interview with a digital protection expert in the region, October 27, 2020.

³⁹⁰ Xynou et al., Internet Censorship in Iran.

³⁹¹ Amin, interview.

³⁹² Ibid.

³⁹³ Morgan Marquis-Boire et al., "Some Devices Wander by Mistake: Planet Blue Coat Redux" (The Citizen Lab, July 9, 2013): 13, https://citizenlab.ca/2013/07/planet-blue-coat-redux/.

³⁹⁴ Interview with a digital protection expert in the region, October 27, 2020.

³⁹⁵ Rubin, "Evolution of Iranian Surveillance Strategies Toward the Internet and Social Media."

^{396 &}quot;Iran Launches National Information Network," *Mehr* News Agency, August 28, 2016, https://en.mehrnews.com/ news/119304/Iran-launches-National-Information-Network.

^{397 &}quot;Iran Rolls out Domestic Internet," BBC News, August 29, 2016, sec. Technology, https://www.bbc.com/news/technol-ogy-37212456.

³⁹⁸ Iran: Tightening the Net 2020: After Blood and Shutdowns (ARTICLE 19, September 2020): 18, https://www.article19. org/ttn-iran-november-shutdown/; A network shutdown is defined in Rydzak et al.'s 2018 paper as "a deliberate, significant disruption of entire channels of electronic communication within a given geographical area and/or affecting a predetermined group of citizens." See: Jan Rydzak, Moses Karanja, and Nicholas Opiyo, "Internet Shutdowns in Africa Dissent Does Not Die in Darkness: Network Shutdowns and Collective Action in African Countries," International Journal of Communication 14, no. 0 (August 13, 2020): 4625, https:// ijoc.org/index.php/ijoc/article/view/12770/3185.

³⁹⁹ Mani Mostofi, "Lesbian, Gay, Bisexual and Transgender Rights in Iran: Analysis from Religious, Social, Legal and Cultural Perspectives – Iranian's Queer Internet: Human Rights Successes and Setback" (International Gay and Lesbian Human Rights Commission, 2015): 97, https://outrightinternational.org/sites/default/files/LGBTRightsInIran_0.pdf.

Members of Iranian LGBTIQ communities use virtual private networks (VPNs) to access platforms such as Facebook and Instagram, which are intermittently blocked.⁴⁰⁰ If the government is to permanently ban Instagram in the name of blocking 'immoral' or 'obscene' content, it could result in the loss of one of the few remaining platforms for online expression for Iranians. This ban would hit women and LGBTIQ people the hardest, as many of them rely on Instagram to advertise their businesses and to exchange information.⁴⁰¹ The Iranian government is reportedly seeking to replace international social media platforms with nationally developed alternatives (e.g., messaging platforms Soroush and Bale), although uptake has been slow. A 2020 report by Filter Watch and Taraaz, which ranked the protection of digital rights and accountability of messaging platforms in Iran, scored Bale highest on respecting its user's privacy and freedom of expression. Soroush closely followed Bale in the ranking.⁴⁰² However, both of these nationally developed alternatives were ranked significantly behind their international counterparts in WhatsApp and Telegram, which are by far the most widely used platforms by Iranians.⁴⁰³ Despite the banning of the Telegram messaging app by the Iranian judiciary in 2018, the app remains popular, potentially taking up to 60 percent of Iran's bandwidth as Iranians use VPNs to access the platform.⁴⁰⁴

The government's efforts to curtail VPN use, in addition to blocking services such as the Google Play store, may finally push Iranians to start using homegrown platforms.⁴⁰⁵

Censorship circumvention tools are routinely targeted for blocking, particularly during sensitive political events.⁴⁰⁶ The government blocked access to VPNs in 2009 after the presidential election, and again in 2011 and 2013; however, users have consistently been able to circumvent these blocks..407 VPNs that are "bought, sold and hosted within Iran" are heavily used by Iranians despite warnings by digital rights activists that "these VPNs could have connections to the Iranian authorities and security forces."408 One interviewee also suggested that some Iranian-hosted VPNs are monitored or managed by the government to collect information regarding the Internet usage of its citizens.⁴⁰⁹ Therefore, although many Iranians have access to software that allows them to evade the censors, their use may actually put them in danger. Prior Citizen Lab research has identified compromised versions of Simurgh, a popular tool to bypass censorship, which

⁴⁰⁰ Xynou et al., *Internet Censorship in Iran*, under "Key Findings"; Leonid Evdokimov, Iran Protests: DPI Blocking of Instagram (Part 2), Open Observatory of Network Interference, February 14, 2018, https://ooni.org/post/2018-iran-protests-pt2/.

⁴⁰¹ Megha Rajagopalan and Soudeh Rad, "Meet the Iranian Influencers Whose Livelihoods Will Be Strippped Away By a Ban on Instagram," *BuzzFeed News*, January 29, 2019, https:// www.buzzfeednews.com/article/meghara/iran-instagram-ban-women-influencers.

^{402 &}quot;Digital Rights & Technology Sector Accountability in Iran" (Filter Watch & Taraaz, 2020), https://static1.squarespace.com/static/5d159d288addab0001036c45/t/5fc-1b55a7acac6192a00d7f6/1606530425196/DRTSAIran2020_ English_compressed.pdf.

⁴⁰³ Ibid., 24.

⁴⁰⁴ Lily Hay Newman, "Iran's Telegram Ban Has Impacted All Corners of the Country," Wired, June 19, 2018, https:// www.wired.com/story/iran-telegram-ban/; Michael

Schwirtz, "Telegram, Pro-Democracy Tool, Struggles Over New Fans From Far Right," *The New York Times*, January 26, 2021, sec. World, https://www.nytimes.com/2021/01/26/ world/europe/telegram-app-far-right.html.

⁴⁰⁵ Khosro Kalbasi, "Iran Judiciary Moves to Ban Google Play," *Financial Tribune*, October 20, 2019, https://financialtribune.com/articles/sci-tech/100403/iran-judiciary-movesto-ban-google-play; Armen Shahbazian, "Analysis: The Growth of Domestic Messaging Apps in Iran," BBC Monitoring, July 23, 2018, https://monitoring.bbc.co.uk/product/c20041be.

⁴⁰⁶ Ronald Deibert, Joshua Oliver, and Adam Senft, "Censors Get Smart: Evidence from Psiphon in Iran," Review of Policy Research 36, no. 3 (February 13, 2019): 341–56, https:// doi.org/10.1111/ropr.12333.

⁴⁰⁷ Internet in Chains: The Front Line of State Repression in Iran (Center for Human Rights in Iran, November 19, 2014):
30, https://www.iranhumanrights.org/wp-content/uploads/Internet_report-En.pdf.

⁴⁰⁸ Kaveh Azarhoosh, Iran's 'Legal VPNs' and the Threat to Digital Rights (Filterwatch, August 14, 2020), https://filter. watch/en/2020/08/14/irans-legal-vpns-and-the-threat-to-digital-rights/.

⁴⁰⁹ Email correspondence between OutRight and Kevin Schumacher, December 5, 2020.

exfiltrated data and logged keystrokes of unsuspecting users.⁴¹⁰

The COVID-19 pandemic is exacerbating the need for reliable access to information. State authorities are well aware that, with lockdowns and social distancing requirements, more people are increasingly online. As a result, instances of blocking have increased and users have had to continuously upgrade their digital security skills (e.g., learning how to use VPNs) to stay safe online.⁴¹¹

Technical Analysis of LGBTIQ Website Blocking in Iran

Summary of Technical Findings

Our findings are based on the analysis of OONI measurements collected from Iran between June 1, 2016 to July 31, 2020.⁴¹² We summarize our findings below.

- Seventy-five unique LGBTIQ-related URLs were found blocked in Iran. Blocked URLs in Iran include many human rights, cultural, and news websites covering LGBTIQ-related topics. Many blogging platforms are also blocked; therefore, blogs discussing LGBTIQ topics hosted on these platforms are inaccessible as well.
- Iranian ISPs alternate between blocking and unblocking access to LGBTIQ URLs over time.

 Most ISPs not only block the same sites, but they also use the same set of censorship techniques, suggesting a more uniform censorship apparatus. Most Iranian ISPs serve block pages for the same LGBTIQ URLs by means of DNS injection, which is potentially harder to circumvent in comparison to simple DNS filtering.

Analysis of LGBTIQ Website Blocking in Iran

Internet filtering has been implemented in Iran since at least 2004.⁴¹³ The blocking of websites is conducted by injecting false DNS replies to requests to access restricted sites, irrespective of which DNS server is chosen. This is because DNS replies are spoofed uniformly and sent to those making the request– it is a method that was seen across a wide variety of Iranian ISPs and networks.⁴¹⁴

In total, we found **seventy-five unique URLs** in our LGBTIQ testing lists that were blocked at least once in Iran. We were able to confirm their blocking because block pages are served by ISPs, informing Iranian Internet users that access to those sites was restricted.415 When a block page is served by means of DNS injection, Iranian Internet users would see an image in their web browser like the one shared above (Image 1), rather than the content of the blocked site. Block pages will only be returned when insecure sites are accessed (i.e., "http://" URLs, instead of "https://") or when either the website does not support strict transport security or when the certificate is not pinned to the browser.

⁴¹⁰ Morgan Marquis-Boire, Iranian Anti-Censorship Software 'Simurgh' Circulated with Malicious Backdoor (Updated), The Citizen Lab, May 30, 2012, https://citizenlab. ca/2012/05/iranian-anti-censorship-software-simurgh-circulated-with-malicious-backdoor-2/.

⁴¹¹ Interview with a digital protection expert in the region, October 27, 2020.

⁴¹² Citizen Lab, "Analysis of OONI Measurements Collected from Iran," accessed October 26, 2020, https://github. com/citizenlab/lgbtiq-report-data/blob/main/ir.csv; OONI Explorer (OONI Measurements Collected from Iran, accessed October 26, 2020), https://explorer.ooni.org/search?until=2020-10-02&probe_cc=IR.

⁴¹³ Derek Bambauer et al., Internet Filtering in Iran in 2004-2005: A Country Study (OpenNet Initiative), accessed October 27, 2020, http://nrs.harvard.edu/urn-3:HUL.InstRepos:2794837.

⁴¹⁴ Matthäus Wander et al., "Measurement of Globally Visible DNS Injection," IEEE Access 2 (2014): 526–36, https://doi. org/10.1109/ACCESS.2014.2323299.

^{415 &}quot;Block Page."

دسترسبی به تارنمای فراخوانده شد	ه امکان بدیر نمی یات	د. جهت رسندکی به ک	زارشات و شکابات این	حا كليك كنيد.
کې موتور چستجو ۵۰ موبو ۵۰ ورسموه ۵۰ موبو ۱۰ ورسموه ۱۰ مارسۍ حو ۱۰ وریزیان ۲۰۰۰ موبو	کی پست الکترونیک • جی عرل دیا • ایمل دیات • ایمل میات • ایمل موات	، البعرل الراك • مريون مرل • وطن مزل • مريل الرائيسل • الإمرال الرائيسل	کی فرهنگی و مذهبی ۵۰ قرآن ۱۹ ماسدگاری به شیوات ۱۹ مدر دی وه. ۱۹ مدر دی وه.	ه شرکه برارغ • حوزه علمیه • موجود • راستوید • استاک • اطلعات
ایها خانواده و سرگرمی - خلواده سنبر - ازدواج - چی بیرم؟ - نحک تیوز - مشکله ورش - کودکان ایران - قبلم های سلامت - شبکه بلوتوت ایران - نظامه ای	الشتراک گذاری فایل • بیکو قایل • سراته مهر • عرکز نرم افار ایران • عربار افار • نرم افزار های من بار	۰ برشین کیگ ۰ فارس تن وی ۰ سالت گذر ۰ بید موبابار ۰ فیلم های آموزشنی اداهه۰۰	کی حامقه محازی - حوان بلاک - برشعی بلاکی - میزومی هجاری - شناب کبیر	• بارسی بلاک • بلاک اسکاف • درم افزار چت ایطاها • شبکه افسران • برنامه نویس
کی علمی و آموزشی • نشیریاب ایران • نعیگان جوان • بارنگر • بازگاه های سلامی • بارنگه دندان برشگان • مداری علمی ایران • اعت نامه • • فرهنگ اعت هوسیار	جو فېرې - دېرگرارۍ قرانۍ لیانې - ولید بلنیگاه حیرنگرایه - روزنمه کیهان	۰ خبرگراری فارس ۰ جبرگراری میو ۱۰ اسیا ۰ دانیاک ۰ رحانیور	کار و سرمایه ایرانی • فزارگاه خانم الانیبا • فروشگاه شمورد • سروس های سبنی • سازمان هایی ایران • ناریک	، • مصنوع بارس حنونی • گوشو، جو، آن ایکس • صلوری دیتو • صلوری دیتو • وب ترین

Image 1: Block page served in Iran.

Internet censorship in Iran can be considered as both advanced and erratic for two reasons. First, Internet censorship in Iran is considered as advanced because recent OONI studies found that Iranian ISPs use Deep Packet Inspection (DPI) technology to block access to Instagram during anti-government protests,⁴¹⁶ and generally implement SNI-based filtering.⁴¹⁷ In June 2020, OONI also discovered that Iranian ISPs started blocking "DNS over TLS" (or DoT), a network protocol that allows the use of DNS with encryption and authentication of the remote DNS server.418 Second, it can be considered erratic because OONI found that Iranian ISPs alternate between blocking and unblocking sites over time, which in some cases may make Internet censorship more subtle and harder to

detect. This is further suggested by the fact that the methods of blocking may vary as well, as some blocks were served in Iran by means of DNS, while others by means of TLS.⁴¹⁹

Examples of LGBTIQ Websites Blocked in Iran

Filtering in Iran is fairly uniform both in terms of the method through which content is blocked and what content is filtered. All observed filtering was performed by injecting an illegitimate DNS response (for example, the local IP 10.10.34.34) regardless of which DNS resolver is used.⁴²⁰ This type of filtering appears regardless of which ISP is used, which implies that the filtering mechanism exists on the network above the ISPs.

⁴¹⁶ Simone Basso, "Measuring SNI Based Blocking in Iran," Open Observatory of Network Interference, April 28, 2020, https://ooni.org/post/2020-iran-sni-blocking/; Evdokimov, Iran Protests.

⁴¹⁷ SNI (Server Name Indication) is an optional feature of TLS (transport layer security, which is the protocol by which websites are encrypted) that allows a client to specify the common name of the site they are trying to reach. This common name is sent unencrypted and is often used as a method of blocking encrypted websites.

⁴¹⁸ Simone Basso, DNS over TLS Blocked in Iran (Open Observatory of Network Interference, June 24, 2020), https:// ooni.org/post/2020-iran-dot/.

⁴¹⁹ Xynou et al., Internet Censorship in Iran, under "Blocked domains and tools."

^{420 &}quot;An example of an Iranian user seeing a DNS injection while using a Google DNS resolver", *Open Observatory of Network Interference*, accessed December 2nd, 2020, https:// explorer.ooni.org/measurement/20180104T065447Z_ AS44244_vHqWDTctJssEp5ZQ8i886furVSw3gEP8utlveAY74Tceeav11r?input=http://alone-persian-man.blogspot.com.

In this study, we observed the blocking of URLs such as `www.gay.com`, `www.bisexual.org`, `www.planetromeo.com`, `www.grindr.com`, and `www.ifge.org`, in addition to the blocking of several other Iranian and internationally relevant LGBTIQ URLs.

6rang

The website that was found to be blocked the most in our study is '6rang.org', which belongs to the Iranian Lesbian and Transgender Network. The website was found to be blocked 88 percent of the times tested in Iran throughout our analysis period. This site shares news and stories of violence and discrimination against lesbian and transgender people in Iran. In an interview with Shadi Amin, 6rang's director, she confirmed the blocking of `6rang.org`, but mentioned that people in Iran use VPNs to access their site. Amin added that most people in Iranian LGBTIQ communities have access to LGBTIQ-related information through social media platforms (e.g., Facebook and Twitter), although these platforms are intermittently blocked. OONI's previous studies on Iran confirmed this irregular blocking.421

Amnesty International

Amnesty USA's 2015 report titled "The state of LGBT human rights worldwide" (`www.amnestyusa.org/the-state-of-lgbt-rights-worldwide`) discusses discrimination and violence against LGBT communities in Iran, among other countries. This report was found to be blocked 13 percent of the times tested in Iran. OONI's measurements show that Iranian ISPs also occasionally block access to Amnesty International's main site (`www.amnesty.org`), suggesting that the blocking of Amnesty USA's 2015 report may be the result of censorship against Amnesty International overall, rather than about the specific report.⁴²²

Grindr

Grindr is a popular application among gay, bisexual, queer, and transgender men. Its website (`www.grindr.com`) was found to be blocked 77 percent of the times tested in Iran throughout our analysis period. The blocking of the Grindr website does not necessarily impact the functionality of the Grindr app.

Human Rights Campaign

The Human Rights Campaign (`www.hrc.org`) is a forty-year-old movement that defends LGBTIQ rights around the world. Its website was found to be blocked 81 percent of the times tested in Iran throughout our analysis period.

IRQO

We observed the blocking of the Iranian Queer Organization's website (IRQO) ('www.irqo. org`), in 80 percent of the times tested in Iran, even though the overall number of times that this website was tested was rather limited in comparison to other sites that presented a high ratio of blocking. The IRQO ceased its operations in February 2019 and its site has not been updated since July 2019. However, we observed that access to `www.irqo.org` remains blocked in Iran, possibly because they stated on their website that they plan to keep their website up for a few years.⁴²³

ILGA

The International Lesbian, Gay, Bisexual, Trans, and Intersex Association (ILGA) is a worldwide federation of more than 1,600 organizations from over 150 countries and territories that are campaigning for LGBTIQ human rights. ILGA's website (`ilga.org`) was found blocked 75 percent of the times tested in Iran throughout our analysis period. Beyond the

⁴²¹ Xynou et al., Internet Censorship in Iran, under "Key Findings"; Evdokimov, Iran Protests.

⁴²² OONI Explorer (OONI Measurements Collected from the Testing of `www.Amnesty.Org` in Iran, accessed

October 26, 2020), https://explorer.ooni.org/search?until=2020-10-15&domain=www.amnesty.org&probe_cc=IR.

^{423 &}quot;OONI Measurements from the Testing of `www.Irqo.Org` in Iran," *Open Observatory of Network Interference*, accessed October 26, 2020, https://explorer.ooni.org/search?until=2020-10-15&domain=www.irqo.org&probe_cc=IR.

blocking of ILGA's main site (`ilga.org`), we also observed the blocking of the European branch of their organization (`ilga-europe.org`) in 30 percent of times tested.

OutRight Action International

The website of one of this report's authors, OutRight Action International ('www.outrightinternational.org`), an international LGBTIQ organization that fights for the human rights of LGBTIQ people around the world, was found to be blocked 17 percent of times tested in Iran. This low percentage of blocking may be influenced by the relatively limited OONI Probe testing coverage that the site has received in Iran, as well as the erratic nature of the blocking implemented by local ISPs.⁴²⁴ However, we frequently observed that `www. outrightinternational.org` is accessible on several local networks in Iran.⁴²⁵

PlanetRomeo

Similar to Malaysia and Indonesia, the LGBTIQ dating site `gayromeo.com`, which redirects to `www.planetromeo.com`, was among the LGBTIQ URLs found blocked the most in Iran (86 percent of the times tested throughout our analysis period).

The Trevor Project

The Trevor Project provides crisis intervention and suicide prevention services for LGBTIQ people under the age of twenty-five. Their site ('www.thetrevorproject.org') was found to be blocked 31 percent of times tested in Iran.

News Websites

Several LGBTIQ news sites were seen blocked as well, such as `www.queerty.com`, `www.pinknews.co.uk`, and `www.mombian.com`, a news site for lesbian mothers. Established in 1967, The Advocate is the oldest and largest LGBTIQ news site in the United States, with an international LGBTIQ audience. Their website (`www.advocate.com`) was found blocked 81 percent of the times tested in Iran during our analysis period.

Personal Blogs

Many of the URLs found blocked are personal blogs that cover LGBTIQ-related topics. It is possible that this blocking is a result of the targeted blocking of blogging platforms (e.g., 'blogpost.com' and 'persianblog.com'), which was reported by OONI in 2017, rather than the specific targeting of LGBTIQ-related blogs.426 The LGBTIQ URLs that were found blocked most frequently include several sites hosted on 'blogfa.com`, which is an Iranian blogging platform. Because OONI measurements showed that Iranian ISPs blocked access to the domain blogfa. com', this suggests that the blocking may have targeted the entire platform, rather than specific URLs with LGBTIQ-related content hosted on the platform.⁴²⁷ Although the HTTP version of the site is blocked in Iran, it remains unclear if the HTTPS version is accessible, given that it has not been tested with OONI Probe.428

⁴²⁴ Xynou et al., Internet Censorship in Iran, under "Acknowledgement of limitations."

^{425 &}quot;OONI Measurements Collected from the Testing of `www.Outrightinternational.Org` in Iran," *Open Observatory* of Network Interference, accessed October 26, 2020, https:// explorer.ooni.org/search?until=2020-10-15&domain=www. outrightinternational.org&probe_cc=IR.

⁴²⁶ Xynou et al., Internet Censorship in Iran.

⁴²⁷ OONI Explorer (OONI Measurements from the Testing of 'blogfa.Com' in Iran, accessed October 26, 2020), https://ex-plorer.ooni.org/search?until=2020-10-15&probe_cc=IR&test_name=web_connectivity&only=anomalies&domain=blogfa.com.

⁴²⁸ It is up to people in Iran to determine whether they run OONI Probe, when they run it, which tests they run, and which websites they test. As a result, OONI Probe measurement coverage is uneven across countries and across networks within countries.
Number and Categories of LGBTIQ Websites Blocked in Iran

The following chart (**Figure 1**) illustrates the number and categories of LGBTIQ sites found blocked in Iran as part of this study. (See **Table 1** below for explanation of categories.)



Figure 1: Blocking of different types of LGBTIQ websites in Iran, based on analysis of OONI measurements collected between June 1 2016 to July 31 2020.

The majority of blocked LGBTIQ URLs discuss topics related to "Culture" (twenty-one URLs in total), followed by "Human Rights" (fifteen URLs) and "News Media" (fourteen URLs). This trend is similar to what we found in Indonesia and Malaysia. These findings are influenced by the presence of a significant number of LGBTIQ websites in the "Culture" category in our testing lists, in comparison to other content categories. We also observed the blocking of eight LGBTIQ "Dating" websites, as well as nine websites that are no longer operational ("404").

Categories of LGBTIQ Websites Blocked in Iran

LGBTIQ sites covering topics related to "Culture" are not only blocked the most, but also presented the highest frequency of blocking (i.e., they were found to be blocked in more than 50 percent of times tested). In addition, we observed that personal blogs (such as `keyvanlg.blogfa.com` and `shabbin.blogspot.com`) are among the LGBTIQ-related URLs found blocked the most in Iran.

Out of the seventy-five LGBTIQ-related URLs found blocked in Iran during our analysis period, fifty-one of them were blocked in more than 50 percent of the times tested. The table on the following page (**Table 2**) shares the respective content categories of these URLs, and provides examples of blocked domains. Each URL is included under only one category.

Category	Number (out of 51) URLs	Description	Sample Domains Blocked
Culture and Community	17	Websites that primarily aim to create a sense of community (includes sports, religion, Pride websites, personal blogs), as well as websites about art and culture	keyvanlg.blogfa.com, shabbin. blogspot.com
Non-Operational	9	Websites that 404 ("Not Found"), do not load, or are otherwise non-operational	pjhouse.blogspot.com, hamseresht.blogfa.com
Human Rights	8	Websites that mention human rights as a primary focus of their mission or work on a topic that can be seen as a human rights issue	hrc.org, humanrightsfirst.org
News Media	6	Websites that focus on providing news (mainstream or otherwise)	advocate.com, gaytoday.com
Dating	4	Websites that focus on meeting romantic or sexual partners	grindr.com, planetromeo.com
Health Education	2	Websites that focus on health issues, sexual or otherwise.	gmhc.org, gayhealth.com
Pornography	2	Websites relating to hardcore or softcore pornography	bglad.com, gayscape.com
Political Criticism	2	Websites relating to politics or critical political viewpoints	aqueeerdiaries.blogspot.com, alone-persian-man.blogspot. com
Not Relevant	1	Websites that are unrelated to LGBT issues	www.mani4lgbt.blogspot.com

 Table 2: Categorizations of URLs seen blocked more than 50 percent of the time in Iran.

Testing and Blocking Frequency of LGBTIQ Websites in Iran

The more times a URL presented blocking, in comparison to the total amount of times tested, the more confident we are about its blocking. This is particularly the case in Iran, where Internet censorship is known to be implemented on a national level. We therefore expect similar blocking behavior across networks.

Out of seventy-five LGBTIQ-related URLs found to be blocked, we are more confident regarding the websites that presented blocking in more than 50 percent of the times tested in Iran throughout our analysis period. These URLs are shared in the table on the following page (**Table 3**).

URL	Category	Annotation percentage	Times Tested	Times Blocked
http://6rang.org/	Human Rights	88.89 percent	18	16
http://gayromeo.com	Dating	86.36 percent	22	19
http://keyvanlg.blogfa.com/	Culture and Community	85.35 percent	1263	1078
http://aadaamaak.blogfa.com/	Culture and Community	85.13 percent	1264	1076
http://dokhtare-aftab.blogfa.com/	Culture and Community	84.66 percent	1271	1076
http://hamseresht.blogfa.com/	Non-Operational	84.06 percent	1267	1065
http://pjhouse.blogspot.com/	Non-Operational	82.07 percent	1244	1021
http://shabbin.blogspot.com/	Culture and Community	82.04 percent	1247	1023
http://queerquotes.blogspot.com/	Culture and Community	82.01 percent	1251	1026
http://pesareghabile.blogspot.com/	Non-Operational	81.88 percent	1258	1030
http://aqueeerdiaries.blogspot.com/	Political Criticism	81.85 percent	1278	1046
http://www.advocate.com/	News Media	81.84 percent	1459	1194
http://www.mani4lgbt.blogspot.com/	Not Relevant	81.78 percent	1235	1010
http://gaysong.blogspot.com/	Culture and Community	81.75 percent	1255	1026
http://www.pesaregay.blogspot.com/	Culture and Community	81.75 percent	1222	999
http://alone-persian-man.blogspot.com/	Political Criticism	81.64 percent	1269	1036
http://happygay.blogspot.com/	Culture and Community	81.50 percent	1265	1031
http://ablogformen2.blogspot.com/	Non-Operational	81.43 percent	1276	1039
http://www.hrc.org/	Human Rights	81.20 percent	1436	1166
http://www.pglo.net/	Non-Operational	81.14 percent	1230	998
http://www.wmmh.blogspot.com/	Culture and Community	81.13 percent	1224	993
http://www.irqo.org/persian/	Human Rights	80.95 percent	21	17
http://www.humanrightsfirst.org/	Human Rights	80.50 percent	1405	1131
http://harfeakhar.persianblog.com/	Non-Operational	79.94 percent	1276	1020
http://pesari2004.persianblog.com/	Culture and Community	79.76 percent	1250	997
http://www.bglad.com/	Pornography	78.76 percent	1591	1253
http://www.gayscape.com/	Pornography	78.04 percent	1553	1212
http://www.afterellen.com/	News Media	78.04 percent	1589	1240
http://www.gayhealth.com/	Health Education	77.91 percent	1580	1231
http://www.grindr.com/	Dating	77.70 percent	1583	1230
http://transsexual.org/	Culture and Community	77.54 percent	1616	1253
http://www.newnownext.com/franchise/ the-backlot/	News Media	77.48 percent	1550	1201
http://gaytoday.com/	News Media	77.46 percent	1637	1268
https://www.gay.com/	Culture and Community	77.22 percent	474	366

URL	Category	Annotation percentage	Times Tested	Times Blocked
http://www.ifge.org/	Human Rights	77.14 percent	1566	1208
http://www.glaad.org/	Human Rights	77.07 percent	1561	1203
http://amygoodloe.com/lesbian-dot-org/	Human Rights	76.95 percent	1688	1299
http://www.gmhc.org/	Health Education	76.86 percent	1569	1206
http://www.samesexmarriage.ca/	Non-Operational	76.75 percent	1553	1192
http://www.towleroad.com/	News Media	76.62 percent	1540	1180
http://www.queernet.org/	Culture and Community	76.56 percent	1557	1192
http://ilga.org/	Human Rights	75.59 percent	1610	1217
https://www.planetromeo.com/	Dating	74.70 percent	1569	1172
http://www.gayegypt.com/	Non-Operational	74.47 percent	1559	1161
https://www.queerty.com/	News Media	74.44 percent	1522	1133
http://www.lesbian.org/	Culture and Community	73.81 percent	817	603
http://www.bisexual.org/	Culture and Community	73.60 percent	822	605
http://www.gay.com/	Culture and Community	72.53 percent	1092	792
http://www.glbtq.com/	Culture and Community	72.53 percent	819	594
http://www.lgf.org.uk	Non-Operational	72.26 percent	703	508
https://www.pinkcupid.com/	Dating	59.52 percent	42	25

Table 3: URLs seen blocked in Iran more than 50 percent of the time.

Other LGBTIQ sites were seen as blocked in Iran as well, but in less than 50 percent of the total times tested during our analysis period, thereby limiting our confidence regarding their blocking. These URLs are shared in the following table (**Table 4**).

URL	Category	Annotation percentage	Times Tested	Times Blocked
http://lambdalegal.org/	Human Rights	48.17 percent	218	105
http://instinctmagazine.com/	News Media	45.89 percent	231	106
http://www.thegailygrind.com/	News Media	45.07 percent	213	96
http://www.newnownext.com/	News Media	41.33 percent	225	93
http://www.nclrights.org/	Human Rights	41.15 percent	226	93
http://www.out.com/	News Media	32.79 percent	61	20
http://www.thetrevorproject.org/	Human Rights	31.82 percent	66	21
http://www.ilga-europe.org/	Human Rights	30.16 percent	63	19
http://www.queerty.com/	News Media	26.61 percent	233	62
http://www.mombian.com/	News Media	24.24 percent	66	16
http://pflag.org/	Culture and Community	24.14 percent	58	14

URL	Category	Annotation percentage	Times Tested	Times Blocked
http://www.scruff.com/	Dating	23.96 percent	217	52
http://www.shoe.org/	Groups	23.44 percent	64	15
http://bisexual.org/	Culture and Community	21.92 percent	219	48
http://www.planetromeo.com/	Dating	20.96 percent	229	48
http://www.pinknews.co.uk/	News Media	18.00 percent	150	27
http://lgbt.foundation/	Culture and Community	17.72 percent	1614	286
http://www.outrightinternational.org/	Human Rights	17.62 percent	210	37
http://www.gaystarnews.com/	News Media	15.04 percent	113	17
http://www.amnestyusa.org/the-state- of-lgbt-rights-worldwide/	Human Rights	13.90 percent	223	31
https://hornet.com/	Dating	4.76 percent	231	11
https://bisexual.org/	Culture and Community	0.98 percent	1636	16
https://www.scruff.com/	Dating	0.52 percent	1549	8
https://www.outrightinternational.org/	Human Rights	0.32 percent	1539	5

Table 4: URLs seen blocked in Iran less than 50 percent of the time.

Previous OONI Research on Iran

In 2017, OONI published a study titled "Internet Censorship in Iran: Network Measurement Findings from 2014–2017," which analyzed all OONI measurements collected from sixty local networks in Iran between 2014 and 2017.⁴²⁹ At the time, OONI found that ISPs in Iran blocked both the HTTP and HTTPS versions of sites by serving block pages by means of DNS injection (similarly to the findings of this study). The 2017 report discovered four URLs relevant to LGBTIQ communities were blocked in Iran: Grindr's website, ILGA's website, as well as 'lesbian.org', and 'transsexual.org'.⁴³⁰ Our analysis of OONI measurements collected from Iran between 2016 and 2020 also confirmed the blocking of these previously tested LGBTIQ websites. These findings suggest that these URLs may have been blocked since at least 2014.

⁴²⁹ Xynou et al., Internet Censorship in Iran.

⁴³⁰ Ibid.

Blocking on AS Networks in Iran

Autonomous System (AS) networks are logical divisions given to computer networks on the Internet. They are officially registered and given to commercial entities such as telecom companies, Internet Service Providers, educational institutions, or large businesses, among others. In this analysis, AS networks are used to organize where filtering is observed. The AS networks where annotations appear regularly indicates which service providers have filtering policies in place. This division is not always clearly divided, however, as an ISP may have more than one AS network, such as when mergers or rebranding occurs, as well as when size dictates the splitting up of a network. It is important to note when interpreting this data that AS networks vary widely in size. A single AS network may be alloted for an office that represents 256 addresses or can be for ISPs that represent hundreds of thousands of addresses.

Overall, we observed the blocking of LGBTIQ websites on eighty-four different AS networks in Iran, each of which returned at least one blocking annotation. We observed the most LGBTIQ site blocking on Shatel (AS31549), where we found seventy-one out of seventy-five unique LGBTIQ URLs blocked. We also observed a high number of blocking on Hiweb (AS56402) (sixty-eight URLs) and MTN Irancell (AS44244) (sixty-four URLs). These findings are influenced by the OONI Probe testing coverage that specific URLs received on those networks during the study period.

Rank	AS Number	AS Name	ISP	# of URLs Blocked
1	AS31549	Aria Shatel Company Ltd	Shatel ⁴³¹	71
2	AS56402	Dadeh Gostar Asr Novin P.J.S. Co.	Hiweb ⁴³²	68
3	AS44244	Iran Cell Service and Communication Company	MTN Irancell ⁴³³	64
4	AS12880	Information Technology Company (ITC)	ITO ⁴³⁴	61
5 (tie)	AS50810	Mobin Net Communication Company (Private Joint Stock)	Mobin Net ⁴³⁵	59
5 (tie)	AS197207	Mobile Communication Company of Iran PLC	MCI ⁴³⁶	59

The following table (**Table 5**) shares the top five AS networks where we observed the most blocking in Iran, along with the number of LGBTIQ URLs found blocked on each network.

Table 5: Top five AS networks in Iran by the amount of unique URLs blocked.

⁴³¹ Shatel (website), Shatel, accessed October 26, 2020, https://www.shatel.ir/.

⁴³² Hiweb (website), Hiweb, accessed October 26, 2002, https://www.hiweb.ir/.

⁴³³ Irancell (website), MTN Irancell, accessed October 26, 2020, https://irancell.ir/en/home.

⁴³⁴ ITO (website), Information Technology Organization of Iran, accessed October 26, 2020, https://ito.gov.ir/.

⁴³⁵ Mobin Net (website), Mobin Net, accessed October 26, 2020, https://mobinnet.ir/home.

⁴³⁶ MCI (website), Mobile Telecommunication Company of Iran, accessed October 26, 2020, https://mci.ir/.

Variety of Filtering Behaviors in Iran

The filtering behaviors seen in Iran describe in detail the technical means by which the blocks are served. This information is provided both as a means of documenting frequently seen behavior, as well as being a helpful resource to those conducting circumvention work.

In total, we detected six different blocking annotations across networks in Iran. Sixty-eight of the blocked LGBTIQ URLs presented the `nat_ir_iframe_forward_ipv4` annotation, where we see that the DNS resolves to a local IPv4 address that renders a block page in Iran. In fifty-four blocked URLs, we detected the `dns_nat_ir_inject_2` annotation, where the DNS resolution returns a known Iranian national block page. The following table (**Table 6**) shares these annotations, the number of URLs that presented each of these annotations, and a description of their behavior.

Annotation (with Sample OONI Measurement)	# of URLs	Behavior
nat_ir_iframe_forward_ipv4437	68	DNS resolution returns the correct answer but response is an iframe to a local IPv4 address that renders a block page in Iran.
dns_nat_ir_inject_2438	54	DNS resolution returns known Iranian national block page.
nat_ir_block_peyvandha439	45	National Iranian block page returned directly in response body without an iframe.
nat_ir_iframe_forward_ipv6440	17	DNS resolution returns the correct answer but response is an iframe to a local IPv6 address that renders a block page in Iran.
dns_nat_ir_inject_1441	16	DNS resolution returns known Iranian national block page.
nat_ir_block_internetir ⁴⁴²	14	National Iranian block page returned directly in response body without an iframe.

Table 6: All annotations observed in Iran ranked by number of unique URLs blocked.

⁴³⁷ OONI Explorer (Sample OONI measurement collected from Iran, displaying the `nat_ir_iframe_forward_ipv4` annotation, accessed October 26, 2020), https://explorer.ooni.org/measurement/20200129T080401Z_AS12880_DZjQ1zlitlHPZgPedYmGt-7VU0AoLqrkERFUILBn5DGVgM7iBxu?input=http://www.humanrightsfirst.org/.

⁴³⁸ OONI Explorer (Sample OONI measurement collected from Iran, displaying the `dns_nat_ir_inject_2` annotation, accessed October 26, 2020), https://explorer.ooni.org/measurement/20190903T185826Z_AS31549_KWlhyF7C62ACbAihDUTK6itR-wSib6b0TaeYjcnmgC3AECXC9ik?input=http://lgbt.foundation/.

⁴³⁹ OONI Explorer (Sample OONI measurement collected from Iran, displaying the `nat_ir_block_peyvandha` annotation, accessed October 26, 2020), https://explorer.ooni.org/measurement/20180814T190754Z_AS12880_JT88sIlGTHGAwojURBkl2q1F-Ze0e19B7dpK9RVjqfZL8whyJDA?input=http://gaysong.blogspot.com.

⁴⁴⁰ OONI Explorer (Sample OONI measurement collected from Iran, displaying the `nat_ir_iframe_forward_ipv6` annotation, accessed October 26, 2020), https://explorer.ooni.org/measurement/20180527T230152Z_AS44244_211DXnUg4EgzfXAIZQT-VL0QITsgjGNsbi9sHjXnCgUHTpJTUHC?input=http://www.outrightinternational.org/.

⁴⁴¹ OONI Explorer (Sample OONI measurement collected from Iran, displaying the `dns_nat_ir_inject_1` annotation, accessed October 26, 2020), https://explorer.ooni.org/measurement/20180109T015518Z_AS44244_ZgznI79xaNFTvWcsscuUCOHsrkYjJh-H1liMmbS2qq3bKsm4udH?input=https://www.queerty.com/.

⁴⁴² OONI Explorer (Sample OONI measurement collected from Iran, displaying the `nat_ir_block_internetir` annotation, accessed October 26, 2020), https://explorer.ooni.org/measurement/20180820T021029Z_AS61173_vwdaCizJB4X4FivliozTRL01F-cm11nVJ0x9aSoOmJiq8ztzbye?input=http://www.gay.com/.

Conclusion

Fears over the Internet's potential threat to regime stability have led the Iranian government to establish a national Internet, known as the "National Information Network" (NIN) or "Shoma" in Farsi. The government claimed that Shoma would offer high speed connections at low costs, but critics argue that it would only tighten control over Internet users. Following a ban instituted against the messaging app Telegram in 2018, Iran has sought to increase the popularity of nationally-developed apps such as Soroush and Bale, but the rates of user growth for these apps have been slow.

Seventy-five unique LGBTIQ-related URLs were found to be blocked in Iran. Most ISPs in the country serve block pages by means of DNS injection, suggesting a more uniform censorship apparatus. However, we also observed the blocking and unblocking of LGBTIQ sites over time. LGBTIQ censorship in Iran appears to be extensive, including a wide range of human rights, cultural, and news websites. Similar to Indonesia, most of the blocked LGBTIQ URLs in Iran host internationally-relevant content (such as `www.outrightinternational.org` and `ilga.org`), but we also observed the blocking of a few Iranian LGBTIQ sites as well (such as `6rang.org` and `irqo.org`).

In addition to censorship, LGBTIQ individuals in Iran have been targeted with online surveillance and harassment. The Computer Crimes Law of 2009 significantly expanded state surveillance and censorship powers, while the Islamic Penal Code of 2013 has resulted in attacks against the few remaining online spaces for free expression, such as LGBTIQ social media groups and organized community chat rooms. Our interviewees indicated that there are significant risks of surveillance and entrapment (e.g., using online dating apps) by the authorities. As a result, LGBTIQ individuals must remain vigilant and continuously update their digital security knowledge.



Highlights

- Extensive censorship, the banning of VPN use, and the condemnation of diverse sexual orientations and gender identities in the UAE render LGBTIQ rights advocacy nearly impossible. Currently, there are no laws or regional mechanisms that can provide accountability or recourse for rights violations.
- Self-censorship is common due to the UAE's highly controlled online environment. Many within the LGBTIQ community also believe that they are being surveilled by the authorities.
- **Fifty-one unique LGBTIQ-related URLs were found blocked in the UAE.** Many of the blocked LGBTIQ websites are currently non-operational, suggesting that local Internet Service Providers (ISPs) may not have updated their block list in recent years.
- The use of both WireFilter and Netsweeper filtering technologies was detected in the blocking of websites in the UAE. WireFilter is a filtering product made for the ISP and commercial market, manufactured by Riyadh-based Sewar Technologies Ltd., while Netsweeper is a Canadian company that sells Internet filtering products to ISPs around the world.

Population (2018)	9,541,615 ⁴⁴³
Internet Penetration	98.4 percent ⁴⁴⁴
Growth of Internet Population (2010-2018)	30.45 percent ⁴⁴⁵
Active social media users	Facebook: 88.3 percent penetration rate (February 2020) ⁴⁴⁶
Mobile subscriptions (per 100 inhabitants [2018]	208.5 ⁴⁴⁷
ICCPR Ratification	No
ECSR Ratification	No
Freedom on the Net ranking (2015)	32; Not free ⁴⁴⁸
Freedom on the Net ranking (2020)	29; Not free ⁴⁴⁹
Consensual same-sex relations	Not legal ⁴⁵⁰

 Table 1: Selected Emirati LGBTIQ, demographic and internet penetration indicators.

^{443 &}quot;Middle East Internet Stats and Telecommunications Reports: UAE," Internet World Stats, accessed July 22, 2020, https://www.internetworldstats.com/me/ae.htm.

⁴⁴⁴ Ibid.

⁴⁴⁵ International Telecommunications Union, "Percentage of Individuals Using the Internet, 2000-2018."

^{446 &}quot;Middle East Internet Stats and Telecommunications Reports: UAE."

⁴⁴⁷ International Telecommunications Union, "Mobile-Cellular Telephone Subscriptions, 2000-2018."

⁴⁴⁸ Freedom on the Net 2015; Please note that Freedom House flipped their Freedom on the Net (FOTN) Internet Freedom Score since their 2015 report, switching a score of 100 from signifying "least free" to "most free". 2015 FOTN scores thus have been flipped to map to the current scoring system.

⁴⁴⁹ Freedom House, "United Arab Emirates," in Freedom on the Net 2020 (Freedom House, 2020), https://freedomhouse.org/country/united-arab-emirates/freedom-net/2020.

⁴⁵⁰ Mendos, State-Sponsored Homophobia: Global Legislation Overview Update, 532.

Background

The United Arab Emirates (UAE) is a federation of seven emirates-Abu Dhabi, Ajman, Dubai, Fujairah, Ras Al Khaimah, Sharjah, and Umm Al Ouwain-and Sharia law forms the basis of the country's legal regime.⁴⁵¹ However, as the UAE's Penal Code excludes rules relating to Hudud (boundaries, borders, or limits), Qisas (retaliation in kind) and Diyah (blood money or ransom), the judiciary is in charge of interpreting and elaborating legal rules from the original traditional texts.⁴⁵² The Penal Code also does not recommend a specific school of Sharia jurisprudence for an Islamic jurist's interpretation. Therefore, the Sharia rules that are applied are chosen depending on the religious affiliation of specific Emirates or of the individual judge.453

The UAE has been referred to as "one of the most liberal countries in the Gulf," although political parties are banned and both citizens and non-citizens (the latter of which comprise about 90 percent of the population) have limited civil liberties.⁴⁵⁴ A 2018 report by the UN Office of the High Commissioner for Human Rights (OHCHR) outlined the UAE's dire human rights situation. The report highlights restrictions on freedom of expression in the country, including imprisonment and trials for those who criticize government institutions, as well as the use of torture against prisoners, discrimination against women, and lack of protection for foreign workers.455 The OHCHR has repeatedly condemned the conditions of

detention and called for the immediate release of jailed human rights activist Ahmed Mansoor, in addition to the release of academic Nasser bin Ghaith.⁴⁵⁶

Despite declaring 2019 as the "Year of Tolerance," the UAE's rulers continued their crackdown on dissent, including by continuing to hold activists who had completed their sentences, without a clear legal basis.⁴⁵⁷ The Citizen Lab has also uncovered multiple targeted digital attack campaigns against Ahmed Mansoor, using NSO Group's government-exclusive Pegasus product in 2016, Hacking Team's Remote Control System in 2012, and FinFisher's FinSpy spyware in 2011.⁴⁵⁸ The high-cost nature of these tools serves as an indicator that the UAE government is the likely operator behind the targeting.

The UAE has a booming tourism industry, contributing more than 10 percent to the nation's economy.⁴⁵⁹ Over the years, the UAE has faced issues related to human trafficking and sex work, with news reports estimating that there are at least thirty-thousand sex workers in Dubai alone.⁴⁶⁰ The UAE has routinely

459 World Travel and Tourism Council. "Travel & Tourism Reaches 11% of UAE Economy, Says New WTTC Research," March 22, 2019. https://wttc.org/News-Article/Travel-Tourism-reaches-11-percent-of-UAE-economy-says-new-WTTC-research.

⁴⁵¹ Mendos, State-Sponsored Homophobia: Global Legislation Overview Update, 29

⁴⁵² Butti Sultan Butti Ali Al-Muhairi, "The Islamisation of Laws in the UAE: The Case of the Penal Code," Arab Law Quarterly 11, no. 4 (1996): 369, https://doi.org/10.2307/3381546.

⁴⁵³ Ibid.

^{454 &}quot;United Arab Emirates Country Profile," BBC News, August 31, 2020, sec. Middle East, https://www.bbc.com/news/ world-middle-east-14703998; Freedom House, "United Arab Emirates," in Freedom on the Net 2020.

⁴⁵⁵ UN Human Rights Council, "Report of the Working Group on the Universal Periodic Review: United Arab Emirates," HRC/38/14 (2018), https://documents-dds-ny.un.org/ doc/UNDOC/GEN/G18/107/40/PDF/G1810740.pdf.

^{456 &}quot;UN Raises Concern over Human Rights in UAE," Al Jazeera News, January 10, 2018, https://www.aljazeera. com/news/2018/01/raises-concern-human-rightsuae-180110045834391.html.

⁴⁵⁷ UAE: Dangerous Disregard for Rule of Law (Human Rights Watch, January 14, 2020), https://www.hrw.org/ news/2020/01/14/uae-dangerous-disregard-rule-law.
458 Bill Marczak and John Scott-Railton, The Million Dollar Dissident: NSO Group's IPhone Zero-Days Used against a UAE Human Rights Defender (The Citizen Lab, August 24, 2016) under "Executive Summary," https://citizenlab. ca/2016/08/million-dollar-dissident-iphone-zero-daynso-group-uae/; Morgan Marquis-Boire, Backdoors Are Forever: Hacking Team and the Targeting of Dissent (The Citizen Lab, October 10, 2012) under "Introduction," https:// citizenlab.ca/2012/10/backdoors-are-forever-hackingteam-and-the-targeting-of-dissent/.

⁴⁶⁰ Thessa Lageman, "Dubai in United Arab Emirates a Centre of Human Trafficking and Prostitution," *The Sydney Morning Herald*, January 20, 2016, https://www.smh.com.au/ world/dubai-in-united-arab-emirates-an-epicentre-of-human-trafficking-and-prostitution-20160115-gm6mdl.html.

portrayed itself to wealthy Westerners as ultra-modern and advanced, while oppressing their own population and low-income foreign workers with strict policing of public spaces and harsh punishments against those who challenge the status quo.⁴⁶¹ As the UAE's economy is dependent on foreign workers, the authorities operate on what has been described as a "don't ask, don't tell" policy, which enables LGBTIQ expatriates to continue to live in the country.⁴⁶² Our interviewees expect for this policy to continue in the coming years. typically aware of everything that takes place, they choose to ignore most of them, at least for the time being.

Public Opinion and Legal Situation for LGBTIQ People

Human rights activists have reported extreme difficulty in conducting LGBTIQ advocacy from within the country. Social attitudes toward LGBTIQ people remain hostile, as the government fuels beliefs that being LGBTIQ is immoral and antithetical to Islam.⁴⁶⁵ A digital protection

"There will be no room for homosexual and queer acts in the UAE. Our society does not accept queer behavior, either in word or in action."

Interviews with local LGBTIQ individuals have revealed that, while the state officially condemns same-sex relations, LGBTIQ events and parties do exist and are publicly, though not widely, announced on Facebook, especially those taking place in Dubai. Foreign LGBTIQ entertainers, such as Mashrou L'eila and Sam Smith, are also permitted to perform. According to members of an active LGBTIQ community engagement and support group: "People know that LGBT [people] exist [in the UAE], but it is not being talked about publicly."463 According to interviewees LI & CS, who are active members of LGBTIQ communities in the UAE, the country's relatively small population (approximately 10 million as of 2020) has led people to assume that the government knows about most events taking place in the country.⁴⁶⁴ Yet, there is also the public perception that, although the authorities are

461 Email correspondence between OutRight and Kevin Schumacher, June 17, 2020.

expert we interviewed maintained that even rights defenders working on other (non-LGBTIQ-related) issues in the region are not sympathetic to the oppression of LGBTIQ

people.⁴⁶⁶ As a result, people in the UAE may even demand that certain LGBTIQ content be blocked by the government, whether it is a website, a film, or other media.⁴⁶⁷

The UAE's rulers have continually made it clear that LGBTIQ activities are not acceptable in the country. In 2005, Mohammed bin Nukhaira Al Dhahiri, then-minister of justice, Islamic affairs, and *auqaf* (endowments), reportedly stated: "There will be no room for homosexual and queer acts in the UAE. Our society does not accept queer behavior, either in word or in action."⁴⁶⁸ Apart from federal law, Article 80 of

⁴⁶² Ibid.

⁴⁶³ LI and CS, interview.

⁴⁶⁴ Worldometer. "United Arab Emirates Population (2021) - Worldometer," 2021. https://www.worldometers.info/ world-population/united-arab-emirates-population/.

⁴⁶⁵ Dan Littauer, "Activists Slam Emirates Depiction of LGBT Rights as 'Evil' and 'Diseases," *Gay Star News*, November 29, 2012, sec. News, https://www.gaystarnews.com/ article/activists-slam-emirates-depiction-lgbt-rights-%e2%80%98evil%e2%80%99-and-%e2%80%98diseases%e2%80%99291112/.

⁴⁶⁶ Ibid.

⁴⁶⁷ Interview with a digital protection expert in the region, October 27, 2020.

⁴⁶⁸ Adel Arafah, "Officials Lambast Capital's Gay Party Youth," *Khaleej Times*, November 25, 2005, https://www. khaleejtimes.com/nation/general/officials-lambast-capital-s-gay-party-youth.

the Dubai Penal Code punishes "unnatural sex with another person" with a penalty of up to fourteen years imprisonment, while Article 177 of the Abu Dhabi Penal Code punishes samesex relations with a penalty of up to ten years imprisonment.⁴⁶⁹ Under Article 6 of Federal Law No. 6 of 1973, individuals can face deportation if security authorities deem it necessary for the public interest, public security, or public discipline.⁴⁷⁰ Individuals engaging in illegal sexual conduct can face deportation under this law.

The UAE also places strict restrictions on gender expression. Article 359 of the Federal Penal Code criminalizes gender nonconformity. Men who are considered to be "disguising" themselves as women have been deported from the country–for example, two Singaporeans were deported in 2017 for "looking feminine," while those who engage in consensual samesex sexual relationships have been arrested.⁴⁷¹ In 2011, Dubai Police launched a campaign against transgender people and the practice of *boyat* or so-called cross-dressing, while in 2008, the authorities arrested and imprisoned a number of men for non-normative gender expressions and participating in an alleged gay wedding.⁴⁷² Whether same-sex relations are punishable by the death penalty in the UAE has been a subject of dispute. This is because the Arabic text of Article 354 of the Federal Penal Code is ambiguous and can be translated in different ways. For example, two variations of the translation include: "Any individual who forcibly compels a female to carnal copulation or a man to sodomy" would receive capital punishment, or "Whoever commits rape on a female or sodomy with a male shall be punished by death."473 Meanwhile, Article 356 of the Federal Penal Code criminalises zina (i.e., sexual relations outside different-sex marriage) and other "moral" offenses with a minimum sentence of one year in prison.474

Gender affirmation surgeries were legalized in 2016 through Article 7 of the Federal Decree No. 4, which allows a person to undergo such surgery if they suffer from gender dysphoria and if they are provided mental health care in order to psychologically prepare for the surgery.⁴⁷⁵ Nevertheless, the law is still unclear on whether a person's gender change is legally recognized. The Abu Dhabi Federal Court of First Instance rejected a request in 2018 for legal gender recognition by three transgender individuals who were seeking to change their names and update their gender markers on official documents.⁴⁷⁶ Their final appeal was rejected in December 2018 by the Abu Dhabi Court of Cassation.477

^{469 &}quot;Country Profile of the United Arab Emirates," Human Dignity Trust, accessed July 22, 2020, https://www.human-dignitytrust.org./country-profile/united-arab-emirates/.

⁴⁷⁰ United Arab Emirates Global Workplace Briefing, Stonewall Global Workplace Briefings 2018 (London: Stonewall, 2018), https://www.stonewall.org.uk/system/files/ uae_global_workplace_briefing_2018.pdf.

^{471 &}quot;UAE: Stop Policing Gender Expression," Human Rights Watch, September 7, 2017, https://www.hrw.org/ news/2017/09/07/uae-stop-policing-gender-expression; Alice Crocker, United Arab Emirates LGBTI Resources, Refugee Legal Aid, Rights in Exile Programme (Reading: AMERA International), accessed July 27, 2020, http://www.refugeelegalaidinformation.org/united-arab-emirates-lgbti-resources.

^{472 &}quot;UAE: Stop Policing Gender Expression"; Awad Mustafa and Rym Ghazal, "Cross-Dressing Women Targeted in Dubai Campaign," *The National*, June 1, 2011, https://www.thenational.ae/uae/cross-dressing-women-targeted-in-dubaicampaign-1.415782; Javaid Rehman and Eleni Polymenopoulou, "Is Green a Part of the Rainbow? Sharia, Homosexuality and LGBT Rights in the Muslim World," *Fordham International Law Journal* 37, no. 1 (January 1, 2013): 36, https://ir.lawnet. fordham.edu/ilj/vol37/iss1/7.

⁴⁷³ Arno Schmitt and Jehoeda Sofer, Sexuality and Eroticism Among Males in Moslem Societies (Psychology Press, 1992): 144.

⁴⁷⁴ United Arab Emirates: Country Summary (Human Rights Watch, January 2016): 14, https://www.justice.gov/sites/default/files/pages/attachments/2016/02/17/hrw_2016_united-arab-emirates.pdf.

⁴⁷⁵ Stonewall, United Arab Emirates Global Workplace Briefing.

⁴⁷⁶ Bureau of Democracy, Human Rights and Labor, United Arab Emirates, 2019 Country Reports on Human Rights Practices (U.S. Department of State, 2019): 33, https://www.state. gov/reports/2019-country-reports-on-human-rights-practices/united-arab-emirates/.

⁴⁷⁷ Shireena Al Nowais, "Transgender Emiratis Have Case Rejected by UAE High Court," *The National*, January 6, 2019, https://www.thenationalnews.com/uae/health/transgenderemiratis-have-case-rejected-by-uae-high-court-1.810021.

The 1980 Publications and Publishing Law exerts strict media regulation and prohibits government criticism, which often leads journalists to self-censor. Internet censorship is also common.⁴⁷⁸ The Federal Law 5 on Combating Cybercrimes of 2012 calls for substantial prison sentences for criticizing the government or its institutions. In addition, Terrorism Law No. 7 of 2014 makes producing material that opposes or insults Islam a punishable offense.⁴⁷⁹ paragraph 2, of Law No. 7 of 2014 by belonging to a "terrorist organization."⁴⁸¹

Major reforms to the UAE's Muslim personal laws were enacted in early November 2020.⁴⁸² According to the state-run WAM news agency, these reforms "consolidate the UAE's principles of tolerance," with changes including loosening alcohol restrictions, allowing unmarried couples to cohabitate, and removing

Websites blocked as a result of being categorized as "alternative lifestyles" included HIV/AIDS prevention and civil rights content, such as the websites of non-governmental organizations GLAAD and the Human Rights Campaign.

The application of these laws, however, has varied from case to case. Additionally, tweets have been used as evidence in terrorism cases. A submission to the UN Human Rights Council by the International Center for Justice and Human Rights (ICJHR) cites the imprisonment of three sisters who tweeted about Eissa al-Suwaidi, their dissident activist brother.⁴⁸⁰ Following the inquiry into the sisters' case by the ICJHR, Emirati authorities responded that they had violated article 22, laws that defended socalled "honor killings."⁴⁸³ These reforms also include amendments that allow foreigners to avoid Sharia courts on issues such as marriage, divorce, and inheritance. However, amendments do not include

exemptions for other behaviors that have brought jail time to foreigners in the past, such as homosexuality or "cross-dressing."⁴⁸⁴ A Scottish tourist was sentenced to three months in jail in 2017 after allegedly touching a man's hip in a Dubai bar, while a pre-operative Singaporean transgender woman and her friend were arrested, sentenced to a Dh10,000 fine, and then deported.⁴⁸⁵

⁴⁷⁸ Sarah Repucci, Freedom in the World 2020: A Leaderless Struggle for Democracy - United Arab Emirates (Freedom House, 2020), https://freedomhouse.org/report/freedom-world/2020/leaderless-struggle-democracy.

⁴⁷⁹ Ibid.

⁴⁸⁰ The UAE94 trial was a mass trial of ninety-four dissidents accused of violating article 180 of the Federal Penal Code, which prohibits the founding, organizing, or operation of a group that aims to overthrow the country's political system. The accused group consisted of human rights lawyers, judges, university professors, teachers, and student leaders. The trial's verdict convicted sixty-nine of the accused, acquitted twenty-five, and sentenced the eight tried in absentia to fifteen years in prison. See: David Hearst, "The UAE's Bizarre, Political Trial of 94 Activists," *The Guardian*, March 6, 2013, sec. Opinion, http://www.theguardian.com/commentisfree/2013/mar/06/uae-tri-al-94-activists; International Federation for Human Rights, Unit-ed Arab Emirates: Criminalising Dissent, Judicial Observation Report (International Federation for Human Rights, August 2013): 4, https://www.fidh.org/IMG/pdf/report_uae94_uk.pdf.

⁴⁸¹ ICJHR Submission to the Office of the UN High Commissioner for Human Rights on the Negative Effects of Terrorism on the Enjoyment of All Human Rights and Fundamental Freedoms in the United Arab Emirates. Geneva: International Center for Justice and Human Rights, September 23, 2016. https://www.ohchr.org/Documents/Issues/RuleOfLaw/ NegativeEffectsTerrorism/ICJHR.pdf.

⁴⁸² Isabel Debre, "UAE Announces Relaxing of Islamic Laws for Personal Freedoms," AP NEWS, November 7, 2020, sec. International News, https://apnews.com/article/dubai-united-arab-emirates-honor-killings-travel-islam-bce74c-423897dc77c7beb72e4f51a23a.

⁴⁸³ Ibid.

⁴⁸⁴ Ibid.

^{485 &}quot;Dubai Indecency Accused Jamie Harron Back in Scotland," BBC News, October 25, 2017, sec. Tayside and Central Scotland, https://www.bbc.com/news/uk-scotland-tayside-central-41744068; Kok Xing Hui, "Singaporeans Arrested in Abu Dhabi Back Home," The Straits Times, August 29, 2017, https://www.straitstimes.com/singapore/singaporeans-arrested-in-abu-dhabi-back-home.

Access Restrictions to LGBTIQ Content Online in the UAE

The UAE restricts freedom of expression online by blocking content considered prohibited by Sharia law, content perceived as blasphemous, offensive or contrary to the Islamic faith, as well as liberal, secular, and atheist content.⁴⁸⁶ Filtering occurs in two ways: first, through the use of word lists that identify banned terms, and second, through using machine learning to identify specific websites that are deemed unacceptable and need to be blocked.⁴⁸⁷ According to the website of the UAE's Telecommunications Regulatory Authority (TRA), the state Internet regulator, access to websites and webpages with prohibited content is blocked by UAE ISPs.⁴⁸⁸ The TRA lists nineteen prohibited content categories, including Internet content that helps users bypass blocked content.489

LGBTIQ-friendly websites and platforms regularly face threats.⁴⁹⁰ Sean Howell, co-founder of the Hornet LGBTIQ dating and social network app that is used in the UAE, mentioned that, to his knowledge, Hornet's website ('hornet.com') is only blocked in the UAE, although he said it is possible that it is blocked in Saudi Arabia as well.⁴⁹¹ We have been unable to confirm the latter though through OONI measurements, particularly given the very limited testing coverage that the website has received in the country. Currently, the Hornet app cannot be tested through the use of OONI Probe either.

LI and CS, who are advocates for creating safe spaces for LGBTIQ individuals in the Arab region, stated in an interview that very few local websites covering LGBTIQ topics exist in the UAE.⁴⁹² Therefore, local LGBTIQ communities depend on foreign LGBTIQ websites to access relevant information, but many of those are blocked. Research by the Citizen Lab in 2018 found that the UAE-based ISP "du" was using a pre-set filtering category in Netsweeper's Internet filtering technology called "Alternative Lifestyles," which included content related to "non-traditional sexual practices, interests and orientations."493 Websites blocked as a result of being categorized as "alternative lifestyles" included HIV/AIDS prevention and civil rights content, such as the websites of non-governmental organizations GLAAD and the Human Rights Campaign.⁴⁹⁴ Netsweeper, a Canadian company, announced in 2019 that it has disabled the "Alternative Lifestyles" category.495

LI and CS also noted that the use of virtual private networks (VPNs) is common in the UAE to circumvent blocks.⁴⁹⁶ While the UAE's Telecommunications Regulatory Authority has

⁴⁸⁶ Helmi Noman, In the Name of God: Faith-Based Internet Censorship in Majority Muslim Countries (OpenNet Initiative, August 1, 2011): 9, https://opennet.net/sites/opennet.net/ files/ONI_NameofGod_1_08_2011.pdf.

⁴⁸⁷ Interview with a digital protection expert in the region, October 27, 2020.

^{488 &}quot;Internet Guidelines - Information & EGovernment Sector," Telecommunications Regulatory Authority, accessed October 27, 2020, https://www.tra.gov.ae/en/about-tra/ information-and-egovernment-sector/internet-guidelines/ details.aspx#pages-67183.

⁴⁸⁹ Ibid.

⁴⁹⁰ Sahrzad VPN, "Dating Apps Blocked In Uae," *Medium*, December 27, 2019, https://medium.com/@SahrzadVPN/dating-apps-blocked-in-uae-2d296e815f3b.

⁴⁹¹ Ibid.

⁴⁹² Names anonymized for safety; LI and CS, interview.

⁴⁹³ Jakub Dalek et al., Planet Netsweeper: Country Case Studies (The Citizen Lab, April 25, 2018) under "Alternative Lifestyles," https://citizenlab.ca/2018/04/planet-netsweeper-section-2-country-case-studies/; Adam Senft, Miles Kenyon, and Ron Deibert, Identities in the Crosshairs–Censoring LGBTQ Internet Content around the World (OpenGlobal– Rights, November 27, 2018), https://www.openglobalrights. org/identities-in-the-crosshairs-censoring-LGBTQ-internet-content-around-the-world/.

⁴⁹⁴ Dalek et al., Planet Netsweeper; Senft, Kenyon, and Deibert, Identities in the Crosshairs–Censoring LGBTQ Internet Content around the World.

⁴⁹⁵ Pearson, "Netsweeper Says It's Stopped 'Alternative Lifestyles' Internet Censorship," https://www.vice.com/ en/article/3kgznn/netsweeper-says-its-stopped-alternative-lifestyles-censorship.

⁴⁹⁶ Ibid.

stated that VPNs are allowed to be used by banks, institutions, and companies for internal purposes, the Cyber Crimes Law of 2012 and Article 1 of Federal Law No. 12 of 2016 amending the Cyber Crimes Law criminalize the use of VPNs to commit crimes, for illegal activities, and to unblock apps or access restricted websites.⁴⁹⁷ These restrictions make the UAE

the most restrictive country in the region when it comes to regulating the use of circumvention software.⁴⁹⁸ Both LI and CS mentioned, however, that while access to Grindr's website ('www.grindr.com') is blocked in the UAE, which is confirmed through OONI data, Grindr's app and other Yet, CS notes that local LGBTIQ communities are keenly aware that they are likely being surveilled. An individual known to the interviewees described being afraid of doing an Internet search on "how to know I am a lesbian," as they feared that the authorities would somehow find out about them.⁵⁰¹ CS believed that the UAE will continue (or may possibly

...local LGBTIQ communities are keenly aware that they are likely being surveilled. An individual known to the interviewees described being afraid of doing an Internet search on "how to know I am a lesbian," as they feared that the authorities would somehow find out about them.

websites that have been "deemed illegal" can be accessed with a VPN.⁴⁹⁹ The UAE has also banned VoIP (Voice over Internet Protocol) applications (e.g., WhatsApp, Skype, and FaceTime) that provide free online voice and video calls. This ban negatively affects low-income migrant workers from connecting with their families, especially during the coronavirus pandemic.⁵⁰⁰

LGBTIQ communities in the UAE can still access LGBTIQ-related content through Netflix and Reddit (both of which are not blocked), as well as other streaming platforms that host LGBTIQ-themed content. expand) the use of monitoring technology to "maintain order" in the country, in addition to employing scare tactics to ensure compliance and "religious and traditional respect." CS predicts this to be the case especially because "[the] UAE is a rich and very modern society, so they have the capacity and resources to deploy monitoring technology everywhere."⁵⁰² Given these trends, individuals whom we interviewed maintained that self-censorship is commonly practiced by LGBTIQ people in the country.⁵⁰³

COVID-19 has escalated both censorship and circumvention efforts, as explained by a digital protection expert in the region:

"During COVID-19, blocking has increased, because people are at home and have more time to search-they spend more time online. So definitely more websites are being blocked, and more tools are being blocked. On the other hand, people have

⁴⁹⁷ Waheed Abbas, "3.8m UAE Residents Have Downloaded VPN, but Is It Legal to Use It?," *The Khaleej Times*, November 4, 2020, https://www.khaleejtimes.com/technology/38m-uae-residents-have-downloaded-vpn-but-is-it-legal-to-use-it.

⁴⁹⁸ Cleofe Maceda, "Individuals Can Access VPNs in the UAE, with Caution," *Gulf News*, January 3, 2018, https://gulfnews.com/technology/individuals-can-access-vpns-in-the-uae-with-caution-1.1872304; Interview with a digital protection expert in the region, October 27, 2020.

⁴⁹⁹ LI and CS, interview.

⁵⁰⁰ Burhan Wazir, "Foreign Workers in the Gulf Can't Call Home during Coronavirus Crisis - Coda Story," *Coda Media*, March 27, 2020, https://www.codastory.com/authoritarian-tech/gulf-coronavirus-internet/.

⁵⁰¹ LI and CS, interview.

⁵⁰² Ibid.

⁵⁰³ Interview with a digital protection expert in the region, October 27, 2020.

become more knowledgeable about what tools they can use to circumvent blocking of these websites and to protect themselves."

This individual went on to say, however, that he expects for the repressive situation in the UAE to persist, and that LGBTIQ movements will only continue to be negatively affected. "It is not easy [for LGBTIQ individuals] to communicate, to find each other, to work together, to coordinate. And all of this is because of censorship," he added.⁵⁰⁴

Technical Analysis of LGBTIQ Website Blocking in the UAE

Summary of Technical Findings

Our findings are based on the analysis of OONI measurements collected from the UAE between June 1, 2016 to July 31, 2020.⁵⁰⁵ We summarize our findings below.

- Fifty-one unique LGBTIQ-related URLs were found blocked in the UAE. Many of the blocked LGBTIQ websites were non-operational, suggesting that local Internet Service Providers (ISPs) may not have updated their block lists in recent years.
- Blocking was detected on three Autonomous System (AS) networks. These networks belong to du (AS15802) and Etisalat (AS5384), plus a network where OONI probe users opted out of sending AS information.

- ISPs censored LGBTIQ sites by redirecting Internet users to domains hosting block pages.
- We detected the use of both Saudi Arabia's WireFilter and Canada's Netsweeper in the blocking of websites in the UAE.

Analysis of LGBTIQ Website Blocking in the UAE

The UAE has been filtering websites since at least 2004,⁵⁰⁶ blocking a wide variety of content from adult content to Internet telephony and proxies (VPNs) to LGBTIQ content.⁵⁰⁷ In total, we found **fifty-one unique URLs in our LGBTIQ testing lists that were blocked** at least once in the UAE. We were able to confirm their blocking because block pages are served by ISPs, which inform Internet users in the UAE that access to those sites was restricted.⁵⁰⁸ In some cases, we detected the use of WireFilter and Netsweeper filtering technologies for serving block pages.⁵⁰⁹

"It is not easy [for LGBTIQ individuals] to communicate, to find each other, to work together, to coordinate. And all of this is because of censorship."

– Digital protection expert in the region

⁵⁰⁴ Ibid.

⁵⁰⁵ Citizen Lab, "Analysis of OONI Measurements Collected from the United Arab Emirates," accessed October 29, 2020, https://github.com/citizenlab/lgbtiq-report-data/ blob/main/ae.csv; OONI Explorer (OONI Measurements Collected from the United Arab Emirates, accessed October 26, 2020), https://explorer.ooni.org/search?until=2020-10-02&probe_cc=AE.

⁵⁰⁶ Internet Filtering in the United Arab Emirates in 2004-2005: A Country Study, (OpenNet Initiative, February 2005), https://opennet.net/studies/uae.

⁵⁰⁷ Dalek et al., Planet Netsweeper.

^{508 &}quot;Block Page."

⁵⁰⁹ WireFilter (website), Wirefilter, accessed October 23, 2020, https://wirefilter.com; Netsweeper (website), Netsweeper, accessed October 23, 2020, https://www.netsweeper.com/.

When a block page is served, Internet users in the UAE would see an image such as below (**Image 1**) in their web browser, rather than the content of the blocked site.



Image 1: Block page served in the United Arab Emirates.

Examples of LGBTIQ Websites Blocked in the UAE

We observed the blocking of a number of internationally-relevant LGBTIQ sites in the UAE, including:

`ilga.org` `gayscape.com` `gayhealth.com` `gayromeo.com` `advocate.com`

Additionally, the website belonging to the ASWAT magazine (`www.aswatmag.com`), which shares LGBTIQ-related news and covers issues related to asylum and migration, was found blocked every time that it was tested. However, this website has been tested in the UAE only five times over the last four years (between February 2020 and May 2020). Therefore, it is possible that its blocking frequency may have been lower if it had been tested more frequently and over a longer period of time.

A number of websites that are no longer operational, such as Helem (`www.helem.net`), which belonged to a Lebanese non-profit organization that advocates for LGBTIQ rights, and `www. glas.org`, were among the websites blocked the most. Among the URLs found blocked at least 50 percent of times tested is the website of Bint el Nas (`bintelnas.org`), which translates to "Daughter of the People." This website caters to LGBTIQ communities who identify ethnically and culturally with the Arab world. Bint el Nas' website was found to be blocked 55 percent of times tested between January 2019 to April 2020 in the UAE.

We also observed the blocking of a few Arab-region specific websites and blogs, which include `www.gaytelaviv.com` (which is no longer operational), `arabgaypride.blogspot.com`, and `arabiclgbt.blogspot.com`.

Number and Categories of LGBTIQ Websites Blocked in the UAE

IRAN: DISTINCT URL COUNT CULTURE DATING GROUPS HUMAN RIGHTS NEWS MEDIA PORNOGRAPHY POLITICAL REFORM 404 ERROR SEXUAL HEALTH NOT RELEVANT 0 5 10 15 20 25

The following chart (**Figure 1**) illustrates the number and types of LGBTIQ sites that were found blocked in the UAE as part of this study. (See **Table 1** for explanation of categories.)

Figure 1: Blocking of different types of LGBTIQ websites in the United Arab Emirates, based on analysis of OONI measurements collected between June 1, 2016 to July 31, 2020.

Out of fifty-one blocked LGBTIQ URLs, thirteen of them are currently non-operational ("404"), which suggests that ISPs in the UAE may not have updated their block lists in recent years.⁵¹⁰ We also observed the blocking of LGBTIQ-related websites in the following categories: "Culture" (ten URLs), "Human Rights" (seven URLs), "News Media" (four URLs), and "Sexual Health" (four URLs). There is an unequal number of URLs across different categories of LGBTIQ websites that we tested, which influenced these findings. (For more details regarding the composition of the testing lists, please see the Appendix: Methodology.)

^{510 &}quot;Block list."

Categories of LGBTIQ Websites Blocked in the UAE

Only twenty-five LGBTIQ-related URLs in our testing lists were found blocked more than 25 percent of the times tested in the UAE during our analysis period. **Table 2** shares the content categories of these twenty-five URLs, along with examples of relevant blocked domains. Each URL is included under only one category. **Table 3** contains the full list of twenty-five URLs that were found blocked.

Category	Number (out of 25 URLs)	Description	Sample Domains Blocked
Non-Operational (404)	10	Websites that were non-operational (404 Not Found) during secondary categorization.	gayalgerie.net, gaytravelnet.com
Human Rights	3	Websites that mention human rights as a primary focus of their mission or work on a topic that can be seen as a human rights issue.	ilga.org, amygoodloe.com
Culture and Community	3	Websites that primarily aim to create a sense of community (includes sports, religion, Pride websites, personal blogs), as well as websites about art and culture.	gay.com, gayguide.net
Pornography	2	Websites relating to hardcore or softcore pornography.	dubaihotties.org, gayscape.com
News Media	2	Websites that focus on providing news (mainstream or otherwise)	aswatmag.com, advocate. com
Dating	2	Websites that focus on meeting romantic or sexual partners.	gayromeo.com, lavaplace. com
Sexual Health	1	Websites that focus on health issues, sexual or otherwise. Includes so-called "conversion therapy" and "ex-gay" websites.	gayhealth.com
Not Relevant	1	Websites that are unrelated to LGBT issues	gayarab.org
Groups	1	Websites that focus on chat groups or social networking.	bintelnas.org

Table 2: Categorization of the URLs that were seen filtered more than 25 percent of the time in the United Arab Emirates.

Testing and Blocking Frequency of LGBTIQ Websites in the UAE

Out of the fifty-one URLs found blocked in the UAE, twenty-five of those that presented blocking more than 25 percent of times tested are listed in the following table (**Table 3**).

URL	Category	Annotation Percentage	Times Tested	Times Blocked
http://www.aswatmag.com/	News Media	100.00 percent	5	5
http://www.helem.net/	Non-Operational	80.00 percent	5	4
http://www.glas.org/lazeeza.html	Non-Operational	73.17 percent	82	60
http://www.glas.org/	Non-Operational	72.41 percent	87	63
http://www.dubaihotties.org/	Pornography	66.67 percent	3	2
http://www.glas.org/ahbab/	Non-Operational	66.67 percent	81	54
http://www.gayalgerie.net/	Non-Operational	56.25 percent	16	9
http://www.bintelnas.org/	Groups	55.00 percent	20	11
http://www.lavaplace.com/	Dating	50.00 percent	6	3
http://gaytoday.com/	News Media	41.26 percent	143	59
http://www.gay.com/	Culture and Community	40.54 percent	111	45
http://www.gayhealth.com/	Sexual Health	33.79 percent	145	49
http://ilga.org/	Human Rights	32.26 percent	93	30
http://www.samesexmarriage.ca/	Non-Operational	32.09 percent	134	43
http://www.gayegypt.com/	Non-Operational	31.58 percent	152	48
http://www.sodomylaws.org	Non-Operational	29.85 percent	67	20
http://gayromeo.com	Dating	28.57 percent	56	16
http://www.gayarab.org/	Not Relevant	28.40 percent	81	23
http://www.sodomylaws.org/world/uae/ united_arab_emirates.htm	Non-Operational	28.36 percent	67	19
http://gayguide.net/	Culture and Community	27.59 percent	87	24
http://gayinkuwait.blogspot.com	Non-Operational	27.14 percent	70	19
http://gayswithoutborders.wordpress.com	Human Rights	26.92 percent	78	21
http://amygoodloe.com/lesbian-dot-org/	Human Rights	26.47 percent	102	27
http://www.gayscape.com/	Pornography	26.09 percent	138	36
http://www.bisexual.org	Culture and Community	25.86 percent	58	15

Table 3: URLs seen blocked in the United Arab Emirates more than 25 percent of the time.

The LGBTIQ websites listed in the table below (**Table 4**) were also found blocked in the UAE, but in less than 25 percent of the total times tested during our analysis period, thereby limiting our confidence regarding their blocking.

URL	Category	Annotation Percentage	Times Tested	Times Blocked
http://www.globalgayz.com	Culture and Community	24.32 percent	74	18
http://www.bglad.com/	Pornography	24.16 percent	149	36
http://www.gaytravelnet.com	Non-Operational	24.00 percent	75	18
http://www.well.com/user/queerjhd/	Religion	23.94 percent	142	34
http://www.ifge.org	Human Rights	23.14 percent	121	28
http://www.hrc.org	Human Rights	20.74 percent	135	28
http://www.advocate.com/	News Media	20.00 percent	145	29
http://www.glaad.org/	Human Rights	19.74 percent	152	30
http://magazinegaymaroc.blogspot.com/	Non-Operational	18.18 percent	11	2
http://www.scruff.com/	Dating	17.65 percent	51	9
http://transsexual.org/	Culture and Community	17.50 percent	160	28
http://www.exgay.com	Sexual Health	16.67 percent	132	22
http://www.gaymaroc.net/	Not Relevant	15.38 percent	13	2
http://www.tsroadmap.com/	Culture and Community	15.00 percent	120	18
http://arabgaypride.blogspot.com/	Political Criticism	11.11 percent	18	2
http://arabiclgbt.blogspot.com/	Human Rights	10.53 percent	19	2
http://gay-uae.blogspot.com/	Sexual Health	10.53 percent	19	2
http://www.glil.org	Political Criticism	5.88 percent	136	8
http://www.lesbian.org	Culture and Community	5.77 percent	52	3
http://www.queerty.com	News Media	4.26 percent	47	2
http://www.grindr.com/	Dating	3.55 percent	141	5
http://lgbt.foundation/	Culture and Community	3.06 percent	98	3
http://www.gaytelaviv.com	Non-Operational	2.94 percent	68	2
http://www.queernet.org	Culture and Community	2.50 percent	120	3
http://www.gmhc.org	Sexual Health	2.31 percent	130	3
https://bisexual.org/	Culture and Community	0.98 percent	102	1

Table 4: URLs seen blocked in the United Arab Emirates less than 25 percent of the time.

Blocking on AS Networks in the UAE

Autonomous System (AS) networks are logical divisions given to computer networks on the Internet. They are officially registered and given to commercial entities such as telecom companies, Internet Service Providers, educational institutions, or large businesses, among others. In this analysis AS networks are used to organize where filtering is observed. The AS networks where annotations appear regularly indicate which service providers have filtering policies in place. This division is not always clearly divided, however, as an ISP may have more than one AS network, such as when mergers or when rebranding occurs, as well as when size dictates splitting up a network. It is important to note when interpreting this data that AS networks vary widely in size. A single AS network may be alloted for an office that represents 256 addresses or can be for ISPs that represent hundreds of thousands of addresses.

Overall, we observed the blocking of LGBTIQ websites on three different AS networks in the UAE. Most LGBTIQ sites are found blocked on the ISP du (AS15802), where we detected the blocking of forty-four out of fifty-one URLs found blocked in total. Twenty-five blocked URLs (or about half) were detected on Etisalat (AS5384), while three URLs were found blocked on a network that we cannot identify because those OONI Probe users opted out of ASN collection.

Rank	AS Number	AS Name	ISP	# of URLs Blocked
1	AS15802	Emirates Integrated Telecommunications Company PJSC (EITC-DU)	du ⁵¹¹	44
2	AS5384	Emirates Telecommunications Corporation	Etisalat ⁵¹²	25
3	AS Info Not Provided By OONI Probe User	AS Info Not Provided By User	N/A	3

The following table (**Table 5**) shares these AS networks, along with the number of LGBTIQ URLs found blocked on each network.

 Table 5: All AS networks in UAE where blocking measurements were present.

Variety of Filtering Behaviors in the UAE

We present the filtering behaviors seen in the UAE, which describe in detail the technical means by which the blocks are served. This information is provided both as a means of documenting frequently seen behavior, as well as being helpful to those that are doing circumvention work.

Even though blocking was only detected on a small number of networks (in comparison to other countries discussed in this report), we observed nine blocking annotations across networks in the UAE. As is evident through the below table (**Table 6**), we saw that ISPs in the UAE censored LGBTIQ sites by redirecting Internet users to domains that served block pages. Some of these blocking

⁵¹¹ du (website), du, accessed October 27, 2020, https://www.du.ae/personal.

⁵¹² Etisalat (website), Etisalat Group, accessed October 27, 2020, https://www.etisalat.ae/en/index.jsp.

annotations revealed the use of two filtering products: WireFilter and Netsweeper.513

- **WireFilter** is a middlebox product made for the ISP and commercial market, manufactured by Riyadh based Sewar Technologies Ltd.⁵¹⁴ Sewar Technologies promotes its expansive URL filtering database, described as being able to "provide a safe, secure Internet with one of the world's largest URL databases."⁵¹⁵ This could potentially explain why we see many of the same LGBTIQ URLs blocked in both the UAE and Saudi Arabia.
- Netsweeper is a Canadian company that sells Internet filtering products to ISPs around the world. In 2018, the Citizen Lab published a report documenting the global proliferation of Internet filtering systems manufactured by Netsweeper Inc.⁵¹⁶ This study revealed the use of Netsweeper filtering technology in ten countries, including the UAE, and that such technology was used to also censor LGBTIQ-related content. The blocking of LGBTIQ-related content in the UAE through the use of Netsweeper is further corroborated by OONI measurements, which included the blocking annotations shared in the table below.

The following table (**Table 6**) shares the blocking annotations, the number of URLs in each of these annotations, and a description of their behavior.

Annotation (with Sample OONI Measurement)	# of URLs	Behavior
isp_ae_du_surfsafely_block_2 ⁵¹⁷	39	Correct DNS response is given, an HTTP 302 redirect is done to domain lighthouse.du.ae (AS15802: Emirates Integrated Telecommunications Company PJSC) which returns a du branded block page.
prod_netsweeper_inject ⁵¹⁸	39	Matches any response where Netsweeper formatted URL arguments are used in a forward:
		"http <s>://<url>?dpid=1&dpruleid=3&- cat=23&dplanguage=-&url=<blocked_url>"</blocked_url></url></s>
isp_ae_du_surfsafely_forward_2 ⁵¹⁹	39	Correct DNS response is given, an HTTP 302 redirect is done to domain lighthouse.du.ae (AS15802: Emirates Integrated Telecommunications Company PJSC) which returns a du branded block page.

⁵¹³ WireFilter; Netsweeper.

⁵¹⁴ WireFilter.

^{515 &}quot;WireFilter URL Database," WireFilter, accessed September 6, 2018, https://wirefilter.com/solutions/wirefilter-url-database/.

⁵¹⁶ Dalek et al., Planet Netsweeper.

⁵¹⁷ OONI Explorer (Sample OONI measurement collected from UAE, displaying the `isp_ae_du_surfsafely_block_2` annotation, accessed October 26, 2020), https://explorer.ooni.org/measurement/20191118T063541Z_AS15802_ocKS0RbSg8GE1oLah-QKYeAozvsxM3HgIG8f3xMRkrWVOd4ajtN?input=http://gayguide.net/.

⁵¹⁸ OONI Explorer (Sample OONI measurement collected from UAE, displaying the `prod_netsweeper_inject` annotation, accessed October 26, 2020), https://explorer.ooni.org/measurement/20200127T092537Z_AS15802_GvFE8kAEn7C40Sq0vlu5OU-mUxAP89DajF7LRzqs51Bl8eztjip?input=http://www.gayscape.com/.

⁵¹⁹ OONI Explorer (Sample OONI measurement collected from UAE, displaying the `isp_ae_du_surfsafely_forward_2` annotation, accessed October 26, 2020), https://explorer.ooni.org/measurement/20191109T103319Z_AS15802_s92axm87tlXmT-FbSqH1aidJOgUKUEPA8jeFmRnxM6IWtYMjpog?input=http://www.bglad.com/.

Annotation (with Sample OONI Measurement)	# of URLs	Behavior
isp_ae_du_surfsafely_block_1 ⁵²⁰	32	Correct DNS response is given, an HTTP 302 redirect is done to domain lighthouse.du.ae (AS15802: Emirates Integrated Telecommunications Company PJSC) which returns a du branded block page. This matches the destination block page.
isp_ae_du_surfsafely_forward_1 ⁵²¹	32	Correct DNS response is given, an HTTP 302 redirect is done to domain lighthouse.du.ae (AS15802: Emirates Integrated Telecommunications Company PJSC) which returns a du branded block page. This matches the forward using the URL format: http://lighthouse.du.ae/index2.php?ucat=&M-
		TA1&uref= <base64_url></base64_url>
prod_wirefilter ⁵²²	25	This matches any response where the response contains the server tag: Protected By Wirefilter.
prod_netsweeper_inject_3523	24	Matches any response where Netsweeper formatted URL arguments are used in a forward:
		"http <s>://<url>?dpid=1&dpruleid=3&- cat=23&dplanguage=-&url=<blocked_url>"</blocked_url></url></s>
prod_netsweeper_inject_2524	24	Matches any response where Netsweeper formatted URL arguments are used in a forward:
		"http <s>://<url>?dpid=1&dpruleid=3&- cat=23&dplanguage=-&url=<blocked_url>"</blocked_url></url></s>
isp_ae_etisalat_block ⁵²⁵	22	Correct DNS response is given but the response is an iframe to domain proxy.etisalat.ae (AS5384: Emirates Telecommunications Corporation) and an Etisalat branded block page is returned.

Table 6: All annotations observed in UAE ranked by number of URLs blocked.

⁵²⁰ OONI Explorer (Sample OONI measurement collected from UAE, displaying the `isp_ae_du_surfsafely_block_1` annotation, accessed October 26, 2020), https://explorer.ooni.org/measurement/20190721T060341Z_AS15802_EozvPYbV4aBDcgw-BIO7gB4vPAi29QbKsV2K2ij1hohalL58ef5?input=http://arabgaypride.blogspot.com/.

⁵²¹ OONI Explorer (Sample OONI measurement collected from UAE, displaying the `isp_ae_du_surfsafely_forward_1` annotation, accessed October 26, 2020), https://explorer.ooni.org/measurement/20190721T060341Z_AS15802_EozvPYbV4aBDcgw-BIO7gB4vPAi29QbKsV2K2ij1hohalL58ef5?input=http://arabgaypride.blogspot.com/.

⁵²² OONI Explorer (Sample OONI measurement collected from UAE, displaying the `prod_wirefilter` annotation, accessed October 26, 2020), https://explorer.ooni.org/measurement/20190414T075649Z_AS5384_vzVwx6sO8izM1Mg5TDYL3WyPnDT1Lb-8nRXruFw15RkCgga0ACj?input=http://transsexual.org/.

⁵²³ OONI Explorer (Sample OONI measurement collected from UAE, displaying the `prod_netsweeper_inject_3` annotation, accessed October 26, 2020), https://explorer.ooni.org/measurement/20161123T211944Z_AS15802_El7j409KkKRD6fpLTCjjD-00842b0JaH7xpA7zuCDeYtwNImFtt?input=http://www.scruff.com/.

⁵²⁴ OONI Explorer (Sample OONI measurement collected from UAE, displaying the `prod_netsweeper_inject_2` annotation, accessed October 26, 2020), https://explorer.ooni.org/measurement/20161123T222029Z_AS15802_NcAwbSYqmNt50CakYls-JR53hWMuRtXzMBJ9OiCBA5G8YeZmTTt?input=http://www.sodomylaws.org/world/uae/united_arab_emirates.htm.

⁵²⁵ OONI Explorer (Sample OONI measurement collected from UAE, displaying the `isp_ae_etisalat_block` annotation, accessed October 26, 2020), https://explorer.ooni.org/measurement/20190216T155417Z_AS5384_V4ZxB8mF2tMrwZwkO6YPr-fA0MSkoBARGimSIMpGmbO6Cdv1A3z?input=http://www.glas.org/.

Conclusion

The UAE is increasingly popular as a tourist destination and it has cultivated its reputation as one of the more liberal countries in the Gulf. Yet, a 2018 report by the United Nations Office of the High Commissioner for Human Rights (OHCHR) revealed that rights violations are pervasive, particularly against the right to free expression, which includes gender expression. The UAE restricts access to content that is considered to be blasphemous or against Sharia law, as well as content that is offensive or contrary to the Islamic faith, in addition to liberal, secular, and atheist content.

Access to websites and webpages with prohibited content is blocked by UAE ISPs, which serve block pages. Block pages are often served through the use of WireFilter and Netsweeper filtering technologies. Many of the blocked websites in the UAE, however, are currently non-operational, suggesting that local ISPs may not have updated their block lists in recent years. Blocked sites in our findings include internationally-relevant LGBTIQ cultural, dating, human rights, and media sites, while a few Arabic LGBTIQ sites were found blocked as well. Most of these blocked sites received relatively limited OONI Probe testing coverage over the last few years. Hence, further testing is required to fully capture the extent of website blocking in the UAE.

The use of virtual private networks (VPNs) is common in the UAE to circumvent blocks. LGBTIQ communities in the UAE can also still access LGBTIQ-related content through platforms such as Netflix and Reddit, as well as other streaming platforms that host LGBTIQ-themed content. Local LGBTIQ communities, however, have fears of being surveilled or prosecuted by the authorities. As a result, many of them practice self-censorship to stay safe online and offline.



Highlights

- LGBTIQ website censorship in Saudi Arabia is implemented alongside many other rights violations. Homosexuality and non-normative gender expression, for example, are criminalized in the country.
- LGBTIQ individuals rely on the use of VPNs, texting apps, and some social media to circumvent state censorship. Those whom we interviewed stated that they must remain vigilant online due to the risk of entrapment by local authorities.
- Self-censorship exists in LGBTIQ communities due to threats of harassment, intimidation, and arrests. Attacks against LGBTIQ individuals are often perpetrated by those affiliated with the ruling class and by conservative members of Saudi society.
- **Twenty-six unique LGBTIQ-related URLs were found blocked in Saudi Arabia.** Most of these include internationally-relevant LGBTIQ sites, although a few local LGBTIQ sites were seen blocked as well.
- Internet Service Providers (ISPs) in Saudi Arabia implement Internet censorship in the same way, by serving the same green-coloured English and Arabic block page. Most filtering was seen on three ISPs: Saudi Telecom (STC), Mobily, and Zain.

Population (2016)	32,157,974 ⁵²⁶
Internet Penetration (February 2020)	93 percent ⁵²⁷
Growth of Internet Population (2010-2018)	52.31 percent ⁵²⁸
Active social media users	Facebook: 68.1 percent penetration rate (February 2020) ⁵²⁹
Mobile subscriptions (per 100 inhabitants [2018]	122.57 ⁵³⁰
ICCPR Ratification	No
ECSR Ratification	No
Freedom on the Net ranking (2015)	27; Not free ⁵³¹
Freedom on the Net ranking (2020)	26; Not free ⁵³²
Consensual same-sex sex relations	Not legal 533

Table 1: Selected Saudi Arabian LGBTIQ, demographic and internet penetration indicators.

^{526 &}quot;Population Clock: World," U.S. Census International Data Base, accessed July 1, 2020, https://www.census.gov/popclock/world/sa.

⁵²⁷ Simon Kemp, Digital 2020: Saudi Arabia (Data Reportal, February 12, 2020), https://datareportal.com/reports/digi-tal-2020-saudi-arabia.

⁵²⁸ International Telecommunications Union, "Percentage of Individuals Using the Internet, 2000-2018."

^{529 &}quot;Middle East Internet Stats and Telecommunications Reports: Saudi Arabia," Internet World Stats, 2019, https://www.internetworldstats.com/middle.htm#sa.

⁵³⁰ International Telecommunications Union, "Mobile-Cellular Telephone Subscriptions, 2000-2018."

⁵³¹ Freedom on the Net 2015; Please note that Freedom House flipped their Freedom on the Net (FOTN) Internet Freedom Score since their 2015 report, switching a score of 100 from signifying "least free" to "most free". 2015 FOTN scores thus have been flipped to map to the current scoring system.

⁵³² Freedom House, "Saudi Arabia," in Freedom on the Net 2020 (Freedom House, 2020), https://freedomhouse.org/country/saudi-arabia/freedom-net/2020.

⁵³³ Mendos, State-Sponsored Homophobia: Global Legislation Overview Update.

Background

Saudi Arabia has a high Internet penetration rate (93 percent as of January 2020), and Saudis are known to be some of the most active social media users in the region.⁵³⁴ Yet, strict limits imposed by the monarchy on information and services that can be accessed online has resulted in the country being ranked as "Not Free" by Freedom House's Freedom on the Net 2020 ranking.535 Internet censorship in the Kingdom follows a pattern seen among many Muslim-majority countries, with censorship policies that are based on state-sponsored interpretations of the Islamic faith.536 For example, websites deemed to host harmful, illegal, indecent, or anti-Islamic content, as well as websites of minority faith groups (e.g., Shi'a Muslims), secular ideologies, and atheist groups are blocked in Saudi Arabia.537 Overtly political Internet content is censored, while the government is also sensitive to online criticism against its royal family or its allies among the Gulf states.538 Saudi Arabia's politicization of social spaces, with its "with us or against us" approach, has created limited spaces for alternative or diverse voices.539

Mohammad bin Salman (MBS), the crown prince of Saudi Arabia, has portrayed himself

as a reformer, while simultaneously cracking down on dissent.540 An LGBTIQ former senior official for the Saudi Ministry of Media, who fled the country in 2019, stated in an interview with TIME magazine that the arrests of human rights activists and writers in Saudi Arabia were likely due to the regime's fears that a revolution could arise from the changes that MBS was making.541 Threat of imprisonment and further controls over the media could therefore be seen as the regime's way of showing that those opposed to MBS would be silenced. The situation in the country remains challenging today for those who espouse views that are perceived to be contrary to the regime's or are generally engaged in activism.

In recent years, journalists, dissidents, and rights activists have been subjected to increasing attacks. The Saudi government was globally condemned in 2018 for the murder of prominent journalist Jamal Khashoggi, perpetrated by Saudi agents inside the Saudi consulate in Istanbul, Turkey. The Citizen Lab has published several reports showing that Saudi dissidents and a *New York Times* journalist had been targeted by NSO Group's Pegasus spyware, and that these attacks were linked to Saudi Arabia.⁵⁴² Attacks have also impacted minorities, including members of LGBTIQ communities. In 2019, five

⁵³⁴ Kemp, "Digital 2020,"; Nigel Stanger, Noorah Alnaghaimshi, and Erika Pearson, How Do Saudi Youth Engage with Social Media? (First Monday, April 10, 2017), https://firstmonday.org/article/view/7102/6101.

⁵³⁵ Freedom House, "Saudi Arabia," in Freedom on the Net 2020.

⁵³⁶ Noman, In the Name of God: Faith-Based Internet Censorship in Majority Muslim Countries.

⁵³⁷ Ibid.

⁵³⁸ W. Sean McLaughlin, "The Use of the Internet for Political Action by Non-State Dissident Actors in the Middle East," First Monday 8, no. 11 (October 27, 2007), https://doi. org/10.5210/fm.v0i0.1791; Rafid Fatani, Securing Internet Rights in Saudi Arabia, Global Information Society Watch (Association for Progressive Communications, 2011), https:// www.giswatch.org/en/country-report/internet-rights/securing-internet-rights-saudi-arabia.

⁵³⁹ Email exchange between OutRight and Kevin Schumacher, June 17, 2020; Joseph Hincks, "A Gay Saudi Journalist Detained While Seeking Asylum in Australia Speaks Out," *Time*, December 17, 2019, https://time.com/5751229/saudi-arabia-gay-journalists-australia/.

⁵⁴⁰ Bessma Momami, "What Happened to the 'Reformist' Ways of Saudi Arabia's Crown Prince?," The Globe and Mail, May 22, 2018, https://www.theglobeandmail.com/opinion/article-what-happened-to-the-reformist-ways-of-saudi-arabias-crown-prince/.

⁵⁴¹ Hincks, "A Gay Saudi Journalist Detained While Seeking Asylum in Australia Speaks Out."

⁵⁴² Bill Marczak et al., Stopping the Press: New York Times Journalist Targeted by Saudi-Linked Pegasus Spyware Operator (Toronto: The Citizen Lab, January 28, 2020) under "Key Findings," https://citizenlab.ca/2020/01/stopping-the-press-new-yorktimes-journalist-targeted-by-saudi-linked-pegasus-spywareoperator/; Bill Marczak et al., The Kingdom Came to Canada: How Saudi-Linked Digital Espionage Reached Canadian Soil (Toronto: The Citizen Lab, October 1, 2018), https://citizenlab.ca/2018/10/ the-kingdom-came-to-canada-how-saudi-linked-digital-espionage-reached-canadian-soil/; Bill Marczak, John Scott-Railton, and Ronald Deibert, NSO Group Infrastructure Linked to Targeting of Amnesty International and Saudi Dissident (Toronto: The Citizen Lab, July 31, 2018), https://citizenlab.ca/2018/07/ nso-spyware-targeting-amnesty-international/.

men accused of same-sex relations, who were part of a larger group that protested against the marginalization of the Shi'a community, were beheaded.⁵⁴³ Eleven women's rights activists were detained in 2018, some of whom were reportedly tortured in detention, including with electric shocks and whippings.⁵⁴⁴ Three of these activists were released on bail on March 28, 2020.⁵⁴⁵

Public Opinion and Legal Situation for LGBTIQ People in Saudi Arabia

Saudi Arabia is one of a few countries in the world that applies Sharia law as its criminal law. Saudi's interpretation of Sharia law is largely influenced by an adherence to the Wahhabi tradition, which is part of a larger and stringently orthodox school of thought within Sunni Islam called Salafism.⁵⁴⁶ Saudi Arabia has a history of applying strict interpretations of Wahhabism on homosexuality and cross-dressing.⁵⁴⁷ Under Sharia law, there are three major crime groups: Hadd, Tazir, and Qisas crimes.⁵⁴⁸ The most serious of crimes

543 Tamara Qiblawi and Ghazl Balkiz, "Exclusive: Saudi Arabia Said They Confessed. Court Filings Show Some Executed Men Protested Their Innocence," CNN, April 26, 2019, https://www.cnn.com/2019/04/26/middleeast/saudi-executions-court-documents-intl/index.html.

544 Ruth Michaelson, "Saudi Arabia Bails Three Women on Trial for Human Rights Activism," *The Guardian*, March 28, 2019, sec. World news, http://www.theguardian.com/ world/2019/mar/28/saudi-arabia-releases-three-human-rights-activists-on-bail; *Saudi Arabia: Abusive Charges Against Women Activists* (Beirut: Human Rights Watch, March 21, 2019), https://www.hrw.org/news/2019/03/21/saudi-arabia-abusive-charges-against-women-activists.

545 Michaelson, "Saudi Arabia Bails Three Women on Trial for Human Rights Activism."

546 Frank E. Vogel, "Shari'a in the Politics of Saudi Arabia," *The Review of Faith & International Affairs* 10, no. 4 (December 2012): 18, https://doi.org/10.1080/15570274.2012.739892.

547 Haya Al-Noaimi, "The State of Sexuality: Formation and Regulation of Sexual Norms in the Persian Gulf," Hawwa 16, no. 1–3 (November 27, 2018): 205–35, https://doi. org/10.1163/15692086-12341335.

548 Andrew Jones, Fahad Alanazi, and Catherine Menon, "Sharia Law and Digital Forensics in Saudi Arabia," Journal of Digital Forensics, *Security & Law* 13, no. 3 (July 2018): 7, are Hadd crimes (also commonly known as Hudud crimes), which include murder, robbery, the abandoment of religious or political beliefs from Islam, and acts of zina, described as "sexual intercourse between a man and woman outside a valid marriage," which can be used to describe adultery, same-sex relations, fornication, and homosexuality.⁵⁴⁹ Punishments for Hadd crimes are pre-established in the Qur'an; therefore, judges cannot modify or reduce punishments for them as they were "set by God."⁵⁵⁰

Saudi Arabia does not have any written penal code, code of criminal procedure, or code of judicial procedure.⁵⁵¹ As a result, those in law enforcement or the judicial system have wide discretion to determine what activities are considered criminal offenses and what sentences these "crimes" deserve; for example, they may be based on judges' interpretation of the Sharia law.552 Those found guilty of samesex relations in Saudi Arabia may be subject to flogging, imprisonment, or the death penalty.⁵⁵³ Furthermore, if the Committee for the Promotion of Virtue and the Prevention of Vice (CPVPV) (also known as the *mutaween*) learns that a person identifies as LGBTIQ or engages in same-sex relations, then that person may be subjected to lifelong harassment (including sexual harassment) and blackmail by the CPVPV.554

https://doi.org/10.15394/jdfsl.2018.1568.

⁵⁴⁹ Ibid.

⁵⁵⁰ Ibid.

⁵⁵¹ Rights Trends in Saudi Arabia, World Report 2019 (Human Rights Watch, December 17, 2018), https://www.hrw. org/world-report/2019/country-chapters/saudi-arabia.

⁵⁵² Mohamed Elewa Badar, "Islamic Law (Shari'a) and the Jurisdiction of the International Criminal Court," *Leiden Journal of International Law* 24, no. 2 (June 2011): 411–33, https://doi.org/10.1017/S0922156511000082.

⁵⁵³ Achim Hildebrandt, "Christianity, Islam and Modernity: Explaining Prohibitions on Homosexuality in UN Member States," Political Studies 63, no. 4 (June 2, 2014): 852, https:// doi-org.myaccess.library.utoronto.ca/10.1111/1467-9248.12137.

⁵⁵⁴ Rehman and Polymenopoulou, "Is Green a Part of the Rainbow?" 1.

In Saudi Arabia, homosexuality is often linked to other criminal actions, in that those accused of engaging in same-sex relations are often accused of other criminal actions (e.g., rape, assault, blackmail, or murder). This association creates a perception of LGBTIQ people as individuals who assault others, molest children, or commit murder due to "unrestrained sexual urges."⁵⁵⁵ Meanwhile, a promotional video posted on Twitter in November 2019 by a verified account of the State Security Presidency portrayed feminism, homosexuality, and atheism as "extremist ideas," and argued that "all forms of extremism and perversion are unacceptable" in the country.⁵⁵⁶ information network or computers."⁵⁵⁸ When this law is invoked by the Specialized Criminal Court, authorities have offered "tweets and other online messages as evidence."⁵⁵⁹

Activists have been targeted using Saudi Arabia's terrorism law, which has seen multiple changes over the years. In particular, the Penal Law for Crimes of Terrorism and its Financing of 2017, as well as its predessor, the Penal Law for Crimes of Terrorism and its Financing of 2014, are known for their vague and overly broad definitions of "terrorism." For example, "terrorist crime" is defined as acts that "endanger national unity" or "destabilize public order and the security of

...the State Security Presidency portrayed feminism, homosexuality, and atheism as "extremist ideas," and argued that "all forms of extremism and perversion are unacceptable" in the country. the community."⁵⁶⁰ As a result, virtually all dissident thought or expression can be criminalized as terrorism. Saudi courts have also relied heavily on the 2014 law to target Internet users.⁵⁶¹

Since 2011, Saudi Arabia's Specialized Criminal Court has been a major instrument of repression. The court has extensively resorted to the Anti-Cyber Crime and terrorism laws when delivering severe punishments to activists, journalists, human rights defenders, and others for peacefully exercising their rights.⁵⁵⁷ Introduced by royal decree in March 2007, the Anti-Cyber Crime Law criminalizes the "production, preparation, transmission, or storage of material impinging on public order, religious values, public morals and privacy, through the

557 Amnesty International, Muzzling Critical Voices: Politicized Trials Before Saudi Arabia's Specialized Criminal Court (London: Amnesty International, 2019): 7, https://www.amnesty.org/download/Documents/MDE2316332020ENGLISH.PDF. A study conducted by OutRight Action International found that there are no registered LGBTIQ organizations in Saudi Arabia.⁵⁶² This is because Saudi Arabia's Law on Associations and Foundations of 2015 forbids non-governmental organizations advocating for sexual orientation and gender identity (SOGI) from being established in the Kingdom.⁵⁶³ With LGBTIQ

⁵⁵⁵ Wahid Ferchichi, Law and Homosexuality: Survey and Analysis of Legislation Across the Arab World (Middle East and North Africa Consultation of the Global Commission on HIV and the Law, Global Commission on HIV and the Law, 2011): 12, http:// bibliobase.sermais.pt:8008/BiblioNET/upload/PDF/0576.pdf.

^{556 &}quot;Saudi Arabia Labels Feminism, Homosexuality, Atheism As 'Extremist Ideas," NDTV, November 12, 2019, https://www.ndtv.com/world-news/saudi-arabia-labels-feminism-homo-sexuality-atheism-as-extremist-ideas-2130970.

⁵⁵⁸ Anti-Cyber Crime Law, Article 6, (2007).

⁵⁵⁹ Amnesty International, Muzzling Critical Voices, 19.560 Penal Law for Crimes of Terrorism and its Financing, Article 1, (2017).

⁵⁶¹ Wafa Ben Hassine, The Crime of Speech: How Arab Governments Use the Law to Silence Expression Online - Saudi Arabia (Electronic Frontier Foundation, April 25, 2016): 21, https://www.eff.org/pages/crime-speech-how-arab-governments-use-law-silence-expression-online

⁵⁶² Felicity Daly, The Global State of LGBTIQ Organizing: The Right to Register (OutRight Action International, 2018): 15, https://outrightinternational.org/sites/default/files/ CSOReportJuly2018_FINALWeb.pdf.

⁵⁶³ Aengus Carroll and Lucas Ramon Mendos, State Sponsored Homophobia 2017: A World Survey of Sexual Orientation Laws: Criminalisation, Protection and Recognition (ILGA, May 2017): 135, https://ilga.org/downloads/2017/ILGA_State_

organizations unable to legally register and gain accreditation, civil society's ability to advocate for LGBTIQ rights has been severely inhibited.⁵⁶⁴ Meanwhile, fears of harassment, intimidation, and arrests have led individuals to exercise self-censorship. In 2018, Human Rights Watch was unable to identify Saudi activists willing to speak publicly on LGBTIQ activism.⁵⁶⁵

Saudi Arabia has used its position in international bodies to oppose LGBTIQ rights. In 2015, its Foreign Minister requested that LGBTIQ human rights be removed from the UN Sustainable Development Goals.⁵⁶⁶ The following year, Saudi Arabia also objected to a UN Human Rights Council resolution condemning the use of torture by law enforcement, due to the resolution's inclusion of sixty-five examples of torture which referenced sexual orientation and gender identity in its supporting text.⁵⁶⁷

Despite threats to LGBTIQ rights in Saudi Arabia, one interviewee, "Mohammed," a gay man living in Riyadh, argued that the 'underground' LGBTIQ scene is vibrant and somewhat safer now than in the past.⁵⁶⁸ This was confirmed by a digital protection expert in the region, but who also noted that the COVID-19 pandemic has curbed the community's ability to physically connect or travel to nearby Bahrain for socializing.⁵⁶⁹

Sponsored_Homophobia_2017_WEB.pdf.

- 565 Audacity in Adversity: LGBT Activism in the Middle East and North Africa (Human Rights Watch, April 2018): 72, https://www.hrw.org/sites/default/files/report_pdf/ lgbt_mena0418_web_0.pdf.
- 566 Samuel Osborne, "Saudi Arabia Insists UN Keeps LGBT Rights out of Its Development Goals," *The Independent*, September 29, 2015, http://www.independent.co.uk/news/ saudi-arabia-insists-un-keeps-lgbt-rights-out-of-its-development-goals-a6671526.html.
- 567 "Saudi Arabia," Human Dignity Trust, accessed July 21, 2020, https://www.humandignitytrust.org./country-profile/saudi-arabia/.

568 Interview with "Mohammed" (pseudonym), March 10, 2020.569 Interview with a digital protection expert in the region, October 27, 2020. This expert also stated that online censorship is likely increasing as more people are home and spending more time online.⁵⁷⁰

Access Restrictions to LGBTIQ Content in Saudi Arabia

Saudi Arabia has implemented Internet filtering mechanisms since 2007 to complement strict traditional media controls and stop individuals from accessing content that may be politically and culturally subversive.571 As part of their responsibilities of enforcing Sharia law, the CPVPV works in coordination with the Information and Communication Technologies Authority to censor content, including shutting down or blocking Twitter accounts for "committing religious and ethical violations."572 A digital protection expert we interviewed also maintained that the Kingdom devotes extensive resources (e.g., monitoring online activities twenty-four hours a day) so that "if someone publishes content that is deemed unacceptable, they may be immediately tracked, summoned or arrested by the police."573 To avoid being traced, VPN use is preferred by Internet users, even when accessing websites that are unlikely to be blocked.574

Some dating applications that are popular among LGBTIQ individuals are blocked (e.g.,

570 Ibid.

⁵⁶⁴ Global Assault on NGOs Reaches Crisis Point (Amnesty International, February 21, 2019), https://www.amnesty.org/ en/latest/news/2019/02/global-assault-on-ngos-reachescrisis-point/.

⁵⁷¹ Internet Filtering in Saudi Arabia in 2006-2007 (OpenNet Initiative, 2007), https://opennet.net/studies/saudiarabia2007; Justin D. Clark et al., "The Shifting Landscape of Global Internet Censorship," Berkman Klein Center for Internet & Society, 2017, 11, https://dash.harvard.edu/bitstream/handle/1/33084425/ The%20Shifting%20Landscape%20of%20Global%20Internet%20Censorship-%20Internet%20Monitor%202017.pdf.

⁵⁷² Office of International Religious Freedom, 2018 Report on International Religious Freedom: Saudi Arabia, 2018 Report on International Religious Freedom (U.S. Department of State, 2019): 15, https://www.state.gov/wp-content/uploads/2019/05/SAUDI-ARABIA-2018-INTERNATIONAL-RE-LIGIOUS-FREEDOM-REPORT.pdf.

⁵⁷³ Interview with a digital protection expert in the region, October 27, 2020.

⁵⁷⁴ Ibid.

Grindr), but others, such as Scruff and Tinder, are not. Similarly, some websites popular in LGBTIQ communities remain accessible, including `mykalimag.com`, an online magazine covering LGBTIQ and feminist issues throughout the Middle East and North Africa. According to Khalid Abdel-Hadi, the Founder and Editor-in-Chief of My.Kali, his e-magazine has a "huge reach" in Saudi Arabia.⁵⁷⁵ Even so, LGBTIQ advocates and individuals have to work and exist covertly to avoid prosecution.⁵⁷⁶ Entrapment, especially through dating apps, is also a serious risk, as these apps do little to verify members and there may be fake accounts set up by the government to expose LGBTIQ users.⁵⁷⁷

According to the US Justice Department, two men (a US citizen and a Saudi Citizen) were charged for spying on behalf of Saudi Arabia in November 2019. These men gave private information to a Saudi official regarding more than six thousand Saudi Twitter users, some of whom are regime critics.⁵⁷⁸ While not specifically targeting LGBTIQ people, this breach in privacy suggests that the Saudi government is actively infiltrating social media and other technology platforms to identify dissenters.

Sean Howell, the co-founder of the Hornet LGBTIQ dating and social network app used in Saudi Arabia, stated that the company has received malicious attacks against their servers in the past, although its website remained accessible during our testing period.⁵⁷⁹ Threats against LGBTIQ platforms mirror those facing LGBTIQ communities in Saudi Arabia, and these challenges are likely to persist well into the future. As a digital protection expert in the region noted, "It is a black picture. The LGBT community is becoming very strong in other places, but in [Gulf] countries, no. It is a shame."⁵⁸⁰

Technical Analysis of LGBTIQ Website Blocking in Saudi Arabia

Summary of Technical Findings

Our findings are based on an analysis of OONI measurements collected from Saudi Arabia between June 1, 2016 to July 31, 2020.⁵⁸¹ We summarize our findings below.

- Twenty-six unique LGBTIQ-related URLs were found blocked in Saudi Arabia. Most of the blocked URLs are of internationally-relevant LGBTIQ websites, although a few local LGBTIQ sites were seen blocked as well. Additionally, a number of currently non-operational LGBTIQ sites were found blocked, suggesting that Internet Service Providers (ISPs) in Saudi Arabia may not have updated their block lists in recent years.
- ISPs in Saudi Arabia implement Internet censorship in the same way, by serving the same green-coloured English and Arabic `Internet.sa` block page to users. Most filtering is seen implemented by ISPs Saudi Telecom (STC), Mobily, and Zain.
- Block pages served by ISPs in Saudi Arabia contain the tag "Server: Wirefilter" in the response. This suggests that the filtering was implemented through the use of WireFilter, a Saudi Internet filtering tool.

⁵⁷⁵ Khalid Abdel-Hadi (Founder and Editor-in-Chief of My.Kali), in discussion with the author, March 5, 2020.

⁵⁷⁶ Audacity in Adversity: LGBT Activism in the Middle East and North Africa, 72.

⁵⁷⁷ Interview with a digital protection expert in the region, October 27, 2020.

⁵⁷⁸ Morgan Meaker, Authoritarian Nations Are Turning the Internet Into a Weapon (Medium, December 10, 2019), https:// onezero.medium.com/authoritarian-nations-are-turning-the-internet-into-a-weapon-10119d4e9992.

⁵⁷⁹ Howell, interview.

⁵⁸⁰ Interview with a digital protection expert in the region, October 27, 2020.

⁵⁸¹ Citizen Lab, "Analysis of OONI measurements collected from Saudi Arabia," accessed October 23, 2020, https:// github.com/citizenlab/lgbtiq-report-data/blob/main/ sa.csv; OONI Explorer (OONI Measurements Collected from Saudi Arabia, accessed October 26, 2020), https://explorer. ooni.org/search?until=2020-10-02&probe_cc=SA.

Analysis of LGBTIQ Website Blocking in Saudi Arabia

Saudi Arabia has been filtering access to websites since at least 2007 by using transparent proxies, or network devices that sit between users and the requested website that can redirect (or proxy) web requests or responses.⁵⁸² A wide variety of content is filtered, including sites with political and social content, as well as sites related to the topics of conflict and security.583 To determine the nature of website blocking in Saudi Arabia, we compiled LGBTIQ sites to be tested by volunteers running OONI Probe in Saudi Arabia. After the sites were requested by OONI Probe, the details of the response were returned to a central OONI server where the test results were automatically processed and openly published. We then looked at these results and developed 'annotations' (or text patterns) to match block pages and other behaviors indicative of filtering.

As this testing is opportunistically performed by volunteers, there may be a variation between how often URLs were tested and when. See the Methodology section for a more detailed explanation of this process.

In total, we found twenty-six unique URLs in our LGBTIQ testing lists that were blocked at least once in Saudi Arabia. We were able to confirm their blocking because page also gave users the option to request a review of any blocking through a web form, but in an interview, a digital protection expert stated that no one would dare to challenge the blocking of LGBTIQ content in Saudi Arabia, as this would likely result in immediate arrest.⁵⁸⁴

Block pages served by ISPs in Saudi Arabia contain the tag "Server: Wirefilter" in the response, which suggests that the filtering was implemented through the use of the WireFilter product. WireFilter is a middlebox product made for the ISP and commercial market, manufactured by Riyadh-based Sewar Technologies Ltd.⁵⁸⁵ Previous research suggests that WireFilter began censoring content in 2011.⁵⁸⁶ Sewar Technologies lists their key clients on their website as Saudi-based ISPs like Saudi Telecom (STC), Etisalat, Mobily, and Zain, among others.⁵⁸⁷ Sewar also promotes its expansive URL filtering database, which it describes as being able to "provide a safe,

Dear User,	عزيزي المستخدم،
Sorry, the requested page is unavailable.	عفواً، الموقع المطلوب غير متاح.
If you believe the requested page should not be blocked please <u>click here</u> .	 إن كنت ترى أن هذه الصفحة ينبغي أن لا تُحجب تفضل <u>بالمنغط هنا</u> .
For more information about internet service in Saudi Arabia, please click here: <u>www.internet.gov.sa</u>	لمزيد من المعلومات عن خدمة الإنترنت في المملكة العربية السعودية، يمكنك زيارة الموقع التالي: www.internet.gov.sa

Image 1: The main and only block page seen in Saudi Arabia (annotation: `nat_sa`).

all ISPs in Saudi Arabia (on whose networks relevant OONI Probe tests were run) served the same green-coloured English and Arabic `Internet.sa` block page to users. This block

⁵⁸² Internet Filtering in Saudi Arabia in 2006-2007, under "Oni Testing Results."

⁵⁸³ Clark et al., "The Shifting Landscape of Global Internet Censorship," 9.

⁵⁸⁴ Interview with a digital protection expert in the region, October 27, 2020.

⁵⁸⁵ WireFilter (website), WireFilter, April 25, 2018, https://wirefilter.com.

⁵⁸⁶ Ben Jones et al., Automated Detection and Fingerprinting of Censorship Block Pages (Internet Measurement Conference (IMC '14), New York: Association for Computing Machinery, 2014): 303, https://doi.org/10.1145/2663716.2663722.
587 Ibid.

secure Internet with one of the world's largest URL databases."588

When Internet users in Saudi Arabia encounter a block page through the use of WireFilter, they see the previous image in their web browser, instead of the content of the censored site.

Examples of LGBTIQ Websites Blocked in Saudi Arabia

Among LGBTIQ websites that were found blocked and categorized as "Culture and Community" (see **Table 2** below for explanation of categories), the most blocked sites by percentage (i.e., 100 percent of times tested) are `gayguide.net`, a worldwide directory of gay businesses, and `bisexual.org`, a site related to advocacy and information about bisexuality.

Four websites were identified as blocked in more than 75 percent of times tested during the study period, despite being non-operational ("404 Page Not Found").

`helem.net` `samesexmarriage.ca` `glas.org` `gayegypt.com`

The website of Grindr (<u>www.grindr.com</u>), a popular application among gay, bisexual, queer, and transgender men, was also found blocked during the study period, but it does not necessarily impact the functionality of the Grindr app.

588 "WireFilter URL Database," WireFilter, September 6, 2018, https://wirefilter.com/solutions/wirefilter-url-database/.

Furthermore, we observed the blocking of many internationally-relevant LGBTIQ sites in Saudi Arabia. Some of these websites were also seen blocked in countries like Iran, Indonesia, and Malaysia.

`www.lesbian.org` `gayromeo.com` `www.thegailygrind.com` `www.gay.com` `www.queernet.org` `www.advocate.com` `gaytoday.com`, `www.grindr.com`

Several local LGBTIQ sites were blocked as well, such as `saudislgbt.tumblr.com` and `www.gayarab.org`. "Saudis LGBT" (`saudislgbt. tumblr.com`) is a Tumblr page set up by Saudi LGBTIQ communities where they discuss LGBTIQ-related issues in Saudi Arabia. 90 percent of all OONI measurements collected from the testing of `saudislgbt.tumblr.com` between 2016 to 2020 consistently showed that access to this site has been blocked, while recent OONI measurements showed that access to the site remains blocked on (at least) several networks in Saudi Arabia.589 The Tumblr weblogging platform's website ('www.tumblr. com') is accessible in Saudi Arabia, suggesting that the blocking of `saudislgbt.tumblr.com` may have been specifically targeted. However, since most recent testing has involved the HTTPS version of `www.tumblr.com` (rather than the HTTP version of the site), it may be the case that the entire HTTP version of the site is blocked, in which case the blocking would not necessarily target `saudislgbt.tumblr.com`.590

⁵⁸⁹ OONI Explorer (OONI Measurements Collected from Saudi Arabia on the Testing of `saudislgbt.Tumblr. Com`, accessed October 26, 2020), https://explorer.ooni. org/search?until=2020-10-16&domain=saudislgbt.tumblr. com&probe_cc=SA&test_name=web_connectivity.

⁵⁹⁰ OONI Explorer (OONI Measurements Collected from Saudi Arabia on the Testing of `www.Tumblr.Com`, accessed October 26, 2020), https://explorer.ooni.org/ search?until=2020-10-16&domain=www.tumblr.com&probe_ cc=SA&test_name=web_connectivity.

Number and Categories of LGBTIQ Websites Blocked in Saudi Arabia

The following chart (**Figure 1**) illustrates the number and types of LGBTIQ sites in Saudi Arabia that were seen blocked at least once during the study period. (See **Table 2** below for explanation of categories.)



Figure 1: Blocking of different types of LGBTIQ websites in Saudi Arabia, based on analysis of OONI measurements collected between June 1, 2016 to July 31, 2020.

Most of the LGBTIQ websites found blocked in Saudi Arabia belong to the "Culture" content category, representing eight out of twenty-six unique URLs. This trend is similarly seen in other countries in this study, such as Indonesia, Malaysia, and Iran. Websites that were no longer operational make up the second most blocked category ("404 Not Found"). This high number of inaccessible URLs indicates that Saudi Arabia's block list may not change frequently in practice, even though Internet users in Saudi Arabia are offered the option (through the block page) to request a review of blocked sites. Furthermore, all URLs found blocked in this study were served via HTTP, which may indicate either an inability to block HTTPS URLs or that they may be blocked through other means not identified during this study. (For more details regarding the composition of the testing lists, please see the Appendix: Methodology.)

Categories of LGBTIQ Websites Blocked in Saudi Arabia

Of the twenty-six URLs seen blocked at least once, only six URLs were found blocked 100 percent of the time, which include `gayguide.net`, `gayromeo.com`, `bisexual.org`, `helem.net`, `lavaplace.com`, and `thegailygrind.com`. The majority (twenty in total) were seen blocked in more than 75 percent of times tested during the study period, which indicates a consistent and effective blocking coverage among ISPs in the country.

The table below (**Table 2**) describes the content categories of the twenty URLs that were found to be blocked in more than 75 percent of times tested, along with a few examples of blocked domains. Each URL is included under only one category.
Category	Number (out of 20 URLs)	Description	Sample Domains Blocked
Culture and Community	7	Websites that serve primarily to create a community (includes sports, religion, Pride websites, personal blogs) as well as websites about art and culture.	gayguide.net, bisexual.org
Non-Operational	4	Sites that were non-operational during secondary categorization.	samesexmarriage.ca, gayegypt.com
Dating	3	Websites that focus on meeting romantic or sexual partners.	grindr.com, lavaplace.com
News Media	3	Websites that focus on providing news (mainstream or otherwise)	advocate.com, thegailygrind. com
Pornography	2	Websites relating to hardcore or softcore pornography.	gayscape.com, dubaihotties.org
Sexual Health	1	Websites that focus on health issues, sexual or otherwise. Includes so-called "conversion therapy" and "ex-gay" websites.	gmhc.org

Table 2: A breakdown of categories of all URLs seen blocked in Saudi Arabia more than 75 percent of the time.

Testing and Blocking Frequency of LGBTIQ Websites in Saudi Arabia

The more times a URL presents blocking ("Times Blocked"), in comparison to the total amount of times tested ("Times Tested"), the more confident we are with regards to its blocking. Out of the twenty-six LGBTIQ URLs found blocked, we are more confident regarding those that presented blocking in more than 75 percent of the times tested during our study period. These URLs are listed in the following table (**Table 3**).

URL	Category	Annotation percentage	Times Tested	Times Blocked
http://gayguide.net/	Culture and Community	100.00 percent	15	15
http://gayromeo.com	Dating	100.00 percent	27	27
http://www.bisexual.org	Culture and Community	100.00 percent	38	38
http://www.helem.net/	Non-Operational	100.00 percent	16	16
http://www.lavaplace.com/	Dating	100.00 percent	17	17
http://www.thegailygrind.com/	News Media	100.00 percent	27	27
http://www.lesbian.org	Culture and Community	96.67 percent	30	29
http://www.gay.com/	Culture and Community	96.10 percent	77	74
http://www.samesexmarriage.ca/	Non-Operational	95.90 percent	122	117
http://www.dubaihotties.org/	Pornography	94.74 percent	19	18

URL	Category	Annotation percentage	Times Tested	Times Blocked
http://www.glas.org/	Non-Operational	93.33 percent	15	14
http://www.gmhc.org/	Sexual Health	93.02 percent	129	120
http://www.grindr.com/	Dating	92.54 percent	134	124
http://www.queernet.org/	Culture and Community	91.80 percent	122	112
http://www.advocate.com/	News Media	91.34 percent	127	116
http://www.tsroadmap.com/	Culture and Community	91.06 percent	123	112
http://saudislgbt.tumblr.com/	Culture and Community	90.91 percent	11	10
http://www.gayscape.com/	Pornography	90.24 percent	123	111
http://www.gayegypt.com/	Non-Operational	88.00 percent	125	110
http://gaytoday.com/	News Media	79.03 percent	124	98

Table 3: All URLs seen blocked in Saudi Arabia more than 75 percent of the time.

Table 4 below contains six URLs that were blocked less frequently (i.e., they were seen blocked in less than 75 percent of the times tested). We are therefore less confident regarding their blocking, in comparison to URLs presented in Table 3.

URL	Category	Annotation percentage	Times Tested	Times Blocked
http://www.glas.org/lazeeza.html	Non-Operational	68.75 percent	16	11
http://www.glas.org/ahbab/	Non-Operational	68.42 percent	19	13
http://www.gayarab.org/	Not Relevant	66.67 percent	15	10
http://transsexual.org/	Culture and Community	53.49 percent	129	69
http://www.bglad.com/	Pornography	28.57 percent	14	4
http://amygoodloe.com/lesbian-dot-org/	Human Rights	1.12 percent	89	1

 Table 4: All URLs seen blocked in Saudi Arabia less than 75 percent of the time.

Blocking on AS Networks in Saudi Arabia

Autonomous System (AS) networks are logical divisions given to computer networks on the Internet. They are officially registered and given to commercial entities such as telecom companies, Internet Service Providers, educational institutions, or large businesses among others. In this analysis AS networks are used to organize where filtering is observed. The AS networks where annotations appear regularly indicate which service providers have filtering policies in place. This division is not always clearly divided, however, as an ISP may have more than one AS network, such as when mergers or rebranding occurs, as well as when size dictates splitting up a network. It is important to note when interpreting this data that AS networks vary widely in size. A single AS network may be alloted for an office that represents 256 addresses or can be for ISPs that represent hundreds of thousands of addresses. During the course of this study, we observed blocking on twelve different AS networks in total. The top three ISPs in terms of number of blocked URLs were Saudi Telecom (STC), Mobily, and Zain. These ISPs blocked anywhere from twenty-three to twenty-six different LGBTIQ URLs. This low variation across ISPs indicates consistency in terms of blocking across different providers.

Rank	AS Number	AS Name	ISP	# of URLs Blocked
1	AS39891	Saudi Telecom Company JSC	STC ⁵⁹¹	26
2	AS25019	Saudi Telecom Company JSC	STC	25
3	AS35819	Bayanat Al-Oula For Network Services Limited Co.	Mobily ⁵⁹²	24
4	AS43766	MTC KSA	Zain ⁵⁹³	23
5	AS Not Provided By Tester	AS Not Provided By Tester	N/A	12

The following table (**Table 5**) shares the top five AS networks where we observed the most blocking in Saudi Arabia, along with the number of LGBTIQ URLs found blocked on each network.

Table 5: Top five AS networks that have blocked at least one URL during testing in Saudi Arabia.

Variety of Filtering Behaviors in Saudi Arabia

The way in which blocks are communicated to users in Saudi Arabia is very consistent. In all cases, the same green-coloured English/Arabic `internet.sa` block page is presented to users, irrespective of the ISP they use in the country. All of these cases also include a WireFilter server tag in the response headers, which self-reports that filtering was implemented through the use of the WireFilter product. This consistency of the filtering tool that is used and the block page that is seen is unique among the other countries in our study, where there are different products used, different block pages, or other variations. In the results from our study on Saudi Arabia, there is no such variation.

The table below (**Table 6**) presents the filtering behaviors seen in Saudi Arabia and describes in detail the technical means by which the blocks are served. This information is provided both as a means of documenting frequently seen behavior, as well as being helpful to those that are doing circumvention work. The first annotation ('prod_wirefilter') was detected when the server tag ("Protected By WireFilter") returned a block page, while the second annotation ('nat_sa`) was observed in any response where the main Saudi block page was returned.

⁵⁹¹ STC (website), Saudi Telecom Company JSC, accessed October 26, 2020, https://www.stc.com.sa/.

⁵⁹² Mobily (website), Mobily, accessed October 26, 2020, https://www.mobily.com.sa/.

⁵⁹³ Zain (website), Zain, accessed October 26, 2020, https://sa.zain.com/ar.

Annotation (with Sample OONI Measurement)	# of URLs	Behavior
prod_wirefilter ⁵⁹⁴	26	Response where the server tag "Protected By Wirefilter" is returned with a block page.
nat_sa ⁵⁹⁵	26	Any response where the main Saudi block page is returned.

 Table 6: All annotations seen in Saudi Arabia and the blocking behavior associated with it.

Conclusion

Saudi Arabia has a high Internet penetration rate, while social media use is widespread among its citizens. Yet, its Internet is characterized as "Not Free" by Freedom House's Freedom on the Net 2020 ranking, due to extensive limits on what information and services can be accessed online. The Committee for the Promotion of Virtue and the Prevention of Vice works in coordination with the Information and Communication Technologies Authority to enforce online censorship policies, including shutting down or blocking Twitter accounts that are deemed to have violated the Kingdom's religious, social, or cultural norms.

Some dating applications that are popular among LGBTIQ individuals are blocked (e.g., Grindr), but others, such as Scruff and Tinder, are not, while some websites have remained accessible, including `mykalimag.com`, an online magazine covering LGBTIQ and feminist issues throughout the Middle East and North Africa. Even so, LGBTIQ advocates and individuals exist surreptitiously to avoid prosecution and harassment by the authorities. VPN use is widespread as users seek to avoid being traced, even when accessing websites that are unlikely to be blocked.

Twenty-six unique LGBTIQ-related URLs were found blocked in Saudi Arabia, most of which are internationally-relevant LGBTIQ sites, although a few local LGBTIQ sites were seen blocked as well. Overall, we see a fairly consistent filtering system in place in Saudi Arabia. First, there is only a single block page returned no matter which ISP service is used. Second, there is consistency in how the blocks are performed, as the tag "Server: Wirefilter" was seen in the responses, and in terms of blocking percentage, as most URLs in the study were found blocked in more than 75 percent of the times tested. And finally, ISPs are consistent in terms of URLs that are blocked, as the top three ASNs differ only by three URLs. Many URLs that were identified blocked, however, are currently non-operational, which account for the second most blocked category within the country. This occurrence suggests that ISPs in Saudi Arabia may not have updated their block lists in recent years.

⁵⁹⁴ OONI Explorer (Sample OONI measurement collected from Saudi Arabia, displaying the `prod_wirefilter` annotation, accessed October 26, 2020), https://explorer.ooni.org/measurement/20200203T184315Z_AS39891_j5iXtTj5s7CKf8EkC1Eiun-Sjc7UBTfpjTtLLwQTKHBGHGQT5gG?input=http://saudislgbt.tumblr.com/.

⁵⁹⁵ OONI Explorer (Sample OONI measurement collected from Saudi Arabia, displaying the `nat_sa` annotation, accessed October 26, 2020), https://explorer.ooni.org/measurement/20200126T115304Z_AS25019_N2lylrUGOAwlaINNC9UziWsSvk-C9VMZHswj1tqgQK8jklRDHNh?input=http://www.advocate.com/.

Conclusion

This report investigates LGBTIQ website censorship in six countries–Indonesia, Iran, Malaysia, Russia, Saudi Arabia, and the United Arab Emirates (UAE). Using a combination of network measurement, interviews, and literature research, we have documented the negative impact of this censorship on LGBTIQ communities and their ability to access timely information and resources. We have also found that in some of these countries, the criminalization of LGBTIQ individuals, in

addition to the shrinking space for civil society online and offline, has hampered coalition- and movement-building efforts for equality. As LGBTIQ people often must contend with societal, religious, and family condemnation, Internet censorship furthers their isolation and harms efforts to publicize human rights violations.

As Khalid Abdel-Hadi, publisher of queer e-magazine, My.Kali, notes, censorship "challenges people['s "...it is like an unspoken conversation between us and governments—we find a way because the Internet is so creative in distributing information. They can block, and we can find another medium...our goal is to make information as reachable as possible—the Internet is so big, so vast. We can find options."

ability] to find resources-to connect and be connected, and to ask for help...It also sends a message from the government that [being LGBTIQ] is still taboo, it is still wrong...Instead, we want you to be unaware, to be uneducated. We don't want you to know about your rights or your body or sexuality.⁷⁵⁹⁶ At the same time, LGBTIQ communities continue to press forward, even risking harassment, fines, and imprisonment, to find ways to circumvent censorship and continue their activism. Abdel-Hadi says, "it is like an unspoken conversation between us and governments-we find a way because the Internet is so creative in distributing information. They can block, and we can find another medium...our goal is to make information as reachable as possible-the Internet is so big, so vast. We can find options.⁷⁵⁹⁷

596 Khalid Abdel-Hadi, interview.

597 Ibid.

Key Role of Private Sector Actors in Internet Censorship

Private sector actors play a key role in the implementation of Internet censorship. While censorship is generally mandated by governments, the responsibility of implementing it is often left to private companies. ISPs are, in some cases, operating with general guidelines about the types of content to be censored, but have discretion to identify which specific websites and platforms are blocked.

Given the technical complexity in identifying and maintaining lists of content that is targeted for blocking, ISPs may also rely upon filtering technology developed by one of the numerous companies who cater to this market. Such filtering products often market their ability to automatically identify and categorize web content, making such censorship easy for network providers. Several Western companies, including Netsweeper (Canada), Blue Coat (US), and Lightspeed Systems (US), have created dedicated content categories focused on LGBTIQ websites, before removing these categories in the face of public pressure.⁵⁹⁸ Previous research identified the use of Netsweeper filtering technology on the UAE ISP du being used to block LGBTIQ content belonging to Netsweeper's 'Alternative Lifestyles' content category, which was described by the company as including "the full range of non-traditional sexual practices, interests and orientations."⁵⁹⁹ While Netsweeper did remove this content category in 2019,⁶⁰⁰ this incident highlights the important role that filtering vendors play in shaping how censorship is applied.

⁵⁹⁸ Senft, Kenyon, and Deibert, Identities in the Crosshairs–Censoring LGBTQ Internet Content around the World.

^{599 &}quot;Category Definitions," Netsweeper 6.0 Documentation, accessed November 20, 2020, https:// helpdesk.netsweeper.com/docs/6.0/Policy_Management/06-PM-Categories/Category_Definitions. htm#_G_Information.

⁶⁰⁰ Pearson, "Netsweeper Says It's Stopped 'Alternative Lifestyles' Internet Censorship."

Companies involved in implementing censorship may maintain that they are only abiding by domestic laws in the jurisdictions in which they are operating. This research has shown, however, that censorship directives are often ambiguous and imprecise, and the given justification for why a given website is blocked does not always align with the content of that website. Such cases demonstrate the discretionary role played by companies like ISPs and filtering vendors in the implementation of censorship, and highlight the need for companies (in addition to governments) to ensure the transparency, proportionality, and necessity of such blocks.

International legal frameworks (such as the United Nations Human Rights Council-endorsed "Guiding Principles on Business and Human Rights") state that corporations' responsibility to human rights "exists over and above compliance with national laws and regulations protecting human rights."⁶⁰¹ The Guiding Principles further establish the need for companies to "know and show that they respect human rights" by establishing human rights practices and policies to assess the impact of their activities on human rights and the steps they will take to remediate them.⁶⁰² Given the role played by the private sector in facilitating and implementing censorship of LGBTIQ websites, it is integral that such companies publicly address their impact on the fundamental human rights of LGBTIQ communities.

⁶⁰¹ UN Human Rights Council, Report of the Special Representative of the Secretary-General on the issue of human rights and transnational corporations and other business enterprises, John Ruggie, A/HRC/17/31, (March 21, 2011), https://www.ohchr.org/Documents/Issues/Business/A-HRC-17-31_AEV.pdf.

⁶⁰² Ibid., 15.

Findings: Variation in the Blocking of LGBTIQ Websites Across Six Countries

Iran Blocks the Highest Number of LGBTIQ URLs in Our Test Lists

Out of the six countries, the highest instance of LGBTIQ URL blocking was seen in Iran, where seventy-five unique LGBTIQ URLs were detected as blocked. In Iran, we also observed the blocking of `www.outrightinternational.org`, the website of OutRight Action International, one of this report's authors. In second place is the UAE where fifty-one unique LGBTIQ URLs in our test lists were found blocked.

Russia has the Highest Number of Networks that Block LGBTIQ Websites

Russia has the highest number of networks that block LGBTIQ URLs. Specifically, we detected the blocking of LGBTIQ websites on 172 distinct Autonomous System (AS) networks. Iran has the second highest prevalence of blocking, with LGBTIQ websites being blocked on eighty-four AS networks. In Indonesia, LGBTIQ websites were blocked on forty-three AS networks, while in the UAE, LGBTIQ websites were found blocked on only three AS networks.

We should note, however, that while these figures may provide a sense of the breadth of LGBTIQ website censorship in these countries, they also reflect the diversity of each country's ISP market. That is, some of these countries have a larger and more diverse ISP market (and can therefore register more AS Networks) than others.

Saudi Arabia has the Highest Percentage of LGBTIQ Website Blocking Consistency

The highest blocking consistency was found in Saudi Arabia, where most LGBTIQ URLs that we

tested were found blocked more than 75 percent of the time. Blocking consistency refers to the amount of times that we found each LGBTIQ URL to be blocked in each country in comparison to the total amount of times tested throughout our analysis period. The more times a URL is found blocked in comparison to the times that it was tested, the higher its blocking consistency.

A high blocking consistency suggests that a website is consistently found to be blocked throughout the testing period, whereas a low blocking consistency can suggest variability between ISPs in what is blocked, a change in the accessibility of a URL, or could reflect anomalous results during testing. In Iran, Indonesia, and Malaysia, for example, most LGBTIQ URLs we tested were found blocked only about 50 percent of times that they were tested. Our research across the six countries, therefore, found variation in blocking consistency.

LGBTIQ Websites on "Culture and Community" were Blocked Most Often

In Indonesia, Iran, Malaysia, and Saudi Arabia, the most frequently blocked LGBTIQ websites were those that belong under the "Culture and Community" category. These are websites that aim primarily to create a sense of community among LGBTIQ individuals, as well as provide information about art and culture. This is not the case in Russia, however, where LGBTIQ websites under the "News Media" category instead presented the most blocking, while in the UAE, most of the websites found to be blocked were no longer operational (categorized as "404 Not Found"). In some cases, different ISPs within the same country also blocked different websites.

Variation in the Blocking of Internationally-Relevant LGBTIQ Websites vs. Locally-Relevant Ones

All six countries blocked LGBTIQ websites that are internationally-relevant and meant

for an international audience, including popular dating websites (e.g., `www.grindr.com`), news media sites (e.g., `www.advocate.com`), and websites of organizations defending LGBTIQ human rights around the world (e.g., `ilga.org`).

In Malaysia and Indonesia, all local LGBTIQ websites tested (e.g., queerlapis.com and suarakita.org), however, were accessible during our analysis period, and therefore, it appears that both countries block internationally-relevant LGBTIQ websites only. Local experts interviewed as part of this study mentioned that LGBTIQ communities in Indonesia and Malaysia primarily depend on the use of social media platforms to self-organize and share local language-specific content.

In contrast, Iran, Russia, Saudi Arabia, and the UAE blocked access to several local and regional LGBTIQ sites, in addition to blocking internationally-relevant LGBTIQ sites. For example:

- Iran blocked access to the Iranian Queer Organization's website (`www.irqo.org`), as well as the Iranian Lesbian and Transgender Network's website (`6rang.org`). The latter was found blocked the most out of all LGBTIQ URLs tested in Iran during our analysis period.
- In Russia, Deti 404's website (`www. deti-404.com`), which is no longer active, is most frequently blocked. Deti 404 provided an online space for Russian teenagers to have discussions about LGBTIQ issues and receive support.
- Many of the LGBTIQ websites found blocked in Saudi Arabia and the UAE are (currently) non-operational, which suggests that local ISPs may not update their blocklist frequently.

Variation in the Implementation of Internet Censorship

There is variation in terms of how Internet censorship is implemented across networks

in the six countries. For example, Iran appears to have a uniform censorship apparatus, as most ISPs not only blocked the same websites, but they also use the same set of censorship techniques. Nevertheless, Iranian ISPs appear to alternate between blocking and unblocking LGBTIQ URLs over time. In Indonesia, on the other hand, despite the Communications and Information Technology Ministry's (Kominfo) Trust Positif censorship program, we observed differences in LGBTIQ URLs blocked on different networks. This variation signals that different ISPs block access to different websites in different moments in time.

Variation in the Number of Blocking Annotations

Blocking annotations indicate the distinct ways by which Internet censorship was implemented. Where the implementation of Internet censorship varies from ISP to ISP, we would see a high number of blocking annotations in that country. The highest number was found in Russia with 148 different annotations, while in Indonesia, we detected eighty-four distinct blocking annotations. In contrast, we observed fewer than ten different blocking annotations each in Malaysia, Iran, and the UAE, while in Saudi Arabia (where ISPs consistently serve the same single blockpage) we only detected two blocking annotations.

All ISPs Serve Block Pages to Users Accessing Blocked Websites

Local Internet Service Providers (ISPs) in all six countries serve block pages when users try to access blocked content. This method is considered to be a more transparent form of Internet censorship because users are informed of their inability to access certain content. Although block pages were observed in all six countries, the technical means by which these pages are delivered by ISPs vary across countries—in some cases, they even vary between ISPs within the same country. ISPs in Indonesia and Malaysia serve block pages by means of DNS hijacking, whereas Iranian ISPs serve block pages primarily by means of DNS injection. In Russia, ISPs commonly make use of HTTP transparent proxies to serve block pages, but some Russian ISPs serve block pages by means of DNS hijacking instead. In both Saudi Arabia and the UAE, ISPs deliver block pages to Internet users through the use of WireFilter technology, which is a network filtering device made for the ISP and commercial market, manufactured by Riyadh-based Sewar Technologies Ltd. In the UAE, we also observed blocking using a tool manufactured by Netsweeper, which is a Canadian company that sells Internet filtering products to ISPs around the world.

In Malaysia, most ISPs implement censorship through a single block page. Some OONI measurements collected from Malaysia, however, suggest the presence of "censorship leakage" from Indonesia, which is likely because OONI Probe users who ran tests in Malaysia did so while using an Indonesian DNS resolver. Unlike other countries, some block pages in Russia contained affiliate ads, suggesting the presence of financial incentives. We have observed ads being served as part of censorship efforts previously. In 2018, both OONI and the Citizen Lab reported on the injection of ads by ISPs in Egypt, while implementing Internet censorship.⁶⁰³ Nevertheless, Russian ISPs appear to implement standardized censorship methods.

Dear User,	عزبزي المستخدم،
Sorry, the requested page is unavailable.	عفواً، الموقع المطلوب غير متاح.
If you believe the requested page should not be blocked please <u>click here</u> .	إن كنت ترى أن هذه الصفحة ينبغي أن لا تُحجب تفضل <mark>بالضغط هنا</mark> .
For more information about internet service in Saudi Arabia, please click here: <u>www.internet.gov.sa</u>	لمزيد من المعلومات عن خدمة الإنترنت في المملكة العربية السعودية، يمكنك زيارة الموقع التالي: <u>www.internet.gov.sa</u>

Figure 1: An example of a block page seen in Saudi Arabia.

All ISPs in Saudi Arabia consistently serve the same green-coloured English and Arabic `Internet.sa` blockpage to users, irrespective of the ISP that users are on. Moreover, Saudi Arabian ISPs' block page offers the option for visitors to request a review of the blocked website. But a Saudi digital security expert we interviewed argued that no one would dare to challenge the blocking of LGBTIQ content there, as this would likely result in immediate arrest.

Block pages would sometimes explain the reason for the blocking, but not in all instances. In these cases, therefore, the reason behind the blocking of some LGBTIQ websites (as opposed to others) largely remains unclear.

⁶⁰³ Evdokimov et al., The State of Internet Censorship in Egypt; Bill Marczak et al., Bad Traffic.

What is Blocked and Where?

Our technical findings, along with information on the criminalization of LGBTIQ related activities, are summarized for each country in the following table (**Table 1**).

	Indonesia	Malaysia	Iran	Russia	Saudi Arabia	UAE
Criminalization of same-sex relations ⁶⁰⁴	No	Yes	Yes	No	Yes	Yes
Other legislation used to curtail LGBTIQ human rights (e.g., so-called gay propaganda laws, pornography laws, anti-cross- dressing laws)	Yes	Yes	Yes	Yes	Yes	Yes
Unique LGBTIQ URLs blocked	38	6	75	32	26	51
International LGBTIQ sites blocked	Yes	Yes	Yes	Yes	Yes	Yes
Local/Regional LGBTIQ sites blocked	No	No	Yes	Yes	Yes	Yes
Block page mentions a law	No	Yes	No	Yes	No	Yes
Block page mentions the category of the web site	Yes	No	No	Yes	No	No
Block page provides an avenue to request unblocking	Yes	No	Yes	No	Yes	Yes
Number of AS networks where LGBTIQ site blocking detected	43/97 (44.33%)	8/41 (19.51%)	84/104 (80.77%)	172/1012 (17.00%)	12/23 (52.17%)	3/12 (25.00%)
Top ISP where most LGBTIQ site blocking detected	Telekomunikasi Indonesia (Telkom)	Telekom Malaysia (TM Net)	Shatel	MGTS	Saudi Telecom (STC)	Du

⁶⁰⁴ Mendos, State-Sponsored Homophobia.

	Indonesia	Malaysia	Iran	Russia	Saudi Arabia	UAE
How block pages are primarily served	DNS hijacking	DNS hijacking	DNS injection	HTTP transparent proxies	WireFilter technology	WireFilter and Netsweeper technologies
Number of blocking annotations	84	4	6	148	2	9
Average percentage of blocking consistency	> 50 percent	> 50 percent	> 50 percent	< 2 percent	> 75 percent	~ 25 percent
Censorship technology detected	No	No	No	No	WireFilter	WireFilter, Netsweeper
Other findings	Variance in the blocking of LGBTIQ websites across Indonesian ISP networks	Potential "censorship leakage" from Indonesia (involving fifteen other unique URLs)	Uniform censorship apparatus	Ads served in some block pages	All ISPs in Saudi Arabia consistently implement Internet censorship in the same way	Many of the blocked LGBTIQ websites are currently non- operational

Table 1: Summary of technical findings and information on the criminalization of LGBTIQ related activities by country.

Limitations to our Findings

This report does not necessarily reflect the full extent of LGBTIQ website censorship in each of these countries, but rather provides an indication of LGBTIQ website censorship based on available OONI measurements. This limitation is due to several reasons:

- The amount and type of LGBTIQ websites tested in each country varied during our analysis period.
- Since our measurement findings depend on OONI Probe tests run by local volunteers, there is not only variance in the testing coverage across networks within countries, but across countries as well.
- Different countries have different ISP markets, with a diverse number of registered ASNs.
- Finally, ISPs in each country implement Internet censorship in different ways to be in compliance with different laws and regulations.

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Appendix

Appendix: Network Measurement Methodology

Our research goal was to examine the blocking of LGBTIQ websites in six countries–Indonesia, Iran, Malaysia, Russia, Saudi Arabia, and the United Arab Emirates (UAE). We selected these countries because they are (a) known to serve block pages (i.e., pages that website visitors may see when access is restricted), which enable us to automatically confirm the blocking of LGBTIQ websites, and (b) known to censor LGBTIQ related content, based on prior research. Two additional goals for this research include to further examine the breadth and depth of LGBTIQ website blocking in these countries using empirical network measurement data, and to investigate how the blocking is conducted in these countries. These issues are of particular interest since some cases of blocking may have potentially gone unreported, and the blocking method may differ from network to network within each country. The timeframe that we selected for the analysis was June 1, 2016 to July 31, 2020.

Our analysis used network measurement data collected through the Open Observatory of Network Interference (OONI) measurement platform.⁶⁰⁶ OONI, which is one of this report's authors, provides a free and open source app, called OONI Probe, designed to measure various forms of Internet censorship.⁶⁰⁷ The OONI Probe app is available for both mobile and desktop platforms, and used by tens of thousands of users in around two-hundred countries and territories every month, including the six countries examined in this study.⁶⁰⁸ As soon as OONI Probe users run tests, their test results (referred to as "measurements") are automatically sent to OONI's servers, processed, and openly published in real-time.⁶⁰⁹

⁶⁰⁶ Open Observatory of Network Interference (OONI), https://ooni.org/.

⁶⁰⁷ OONI software, https://github.com/ooni/; Open Observatory of Network Interference (OONI), OONI Probe network measurement tests, https://ooni.org/nettest/.

⁶⁰⁸ Open Observatory of Network Interference (OONI), OONI Probe, https://ooni.org/install/; Open Observatory of Network Interference (OONI), OONI Explorer, https://explorer.ooni.org/.

⁶⁰⁹ Open Observatory of Network Interference (OONI), OONI data, https://ooni.org/data/.

OONI's open dataset on Internet censorship dates back to 2012, when OONI Probe was first released. Since then, OONI has openly published hundreds of millions of network measurements from tens of thousands of networks in more than two-hundred countries and territories. OONI continues to publish measurements from around the world every day.⁶¹⁰ This rich dataset allowed us to examine past censorship events, as well as research the blocking of LGBTIQ websites from June 1, 2016 to July 31, 2020. OONI measurement data is also openly published, which can be used in support of censorship findings in this research.

As a first step to this research, we updated existing test lists on Citizen Lab's Github account, so that measurements on a wide range of LGBTIQ websites can be obtained.⁶¹¹ These lists, which were initially compiled by the Citizen Lab, contain URLs that are tested for censorship by tools like OONI Probe.⁶¹² Moreover, to encourage widespread OONI Probe testing of LGBTIQ URLs among its users, OONI created an LGBTIQ-focused test list on its website, and published a blog post.⁶¹³

In the following sections, we share more details regarding our network measurement methodologies, particularly as they pertain to OONI Probe testing and OONI data analysis.

Examining the Blocking of LGBTIQ Websites Using OONI Probe

OONI Probe is a free and open source software designed to measure Internet censorship and other forms of network interference.⁶¹⁴ The OONI Probe app includes tests designed to measure the blocking of websites, instant messaging apps (e.g., WhatsApp, Facebook Messenger, and Telegram), and circumvention tools (e.g., Tor and Psiphon).⁶¹⁵ OONI Probe users can also measure network speed and performance, video-streaming performance, and other network properties. As soon as users run OONI Probe, and unless they opt out, their test results are automatically sent to OONI's servers, processed, and openly published in real-time.⁶¹⁶

As the aim of this research was to examine the blocking of LGBTIQ websites, we limited our analysis to measurements collected from the OONI Probe Web Connectivity test.⁶¹⁷ We further limited our analysis to OONI Probe Web Connectivity measurements collected from Indonesia, Iran, Malaysia, Russia, Saudi Arabia, and the UAE between June 1, 2016 to July 31, 2020.

OONI Probe Web Connectivity test is designed to measure the blocking of websites by attempting to perform a DNS lookup, TCP connection, and HTTP request of URLs included in the Citizen Lab test lists (see "Citizen Lab Test List Repository" section below). The objective is to obtain a comparison between a control vantage point (a non-censored network) and the local vantage

⁶¹⁰ Ibid.

⁶¹¹ Citizen Lab, Test List Repository, https://github.com/ citizenlab/test-lists.

⁶¹² Open Observatory of Network Interference (OONI), OONI Probe, https://ooni.org/install/.

⁶¹³ Open Observatory of Network Interference (OONI), Thematic OONI Probe testing, https://ooni.org/get-involved/run; Open Observatory of Network Interference (OONI), Call to Action: Let's measure the blocking of LGBTQI websites around the world!, 4th December 2019, https://ooni. org/post/2019-measure-blocking-lgbtqi-sites/.

⁶¹⁴ Open Observatory of Network Interference (OONI), OONI Probe, https://ooni.org/install/.

⁶¹⁵ Open Observatory of Network Interference (OONI), OONI Probe network measurement tests, https://ooni.org/nettest/.

⁶¹⁶ Open Observatory of Network Interference (OONI), OONI data, https://ooni.org/data/.

⁶¹⁷ Open Observatory of Network Interference (OONI), OONI Web Connectivity test, https://ooni.org/nettest/ web-connectivity/.

point of the OONI Probe user. The measurements collected from both vantage points are automatically compared. If the results from both vantage points are the same, then the tested URLs are considered accessible from the local vantage point of the user, which signals that there is no sign of network interference. If the results differ, however, then the result is flagged as "anomalous."⁶¹⁸

From the type of anomaly detected (e.g., DNS, TCP/IP, HTTP), we can infer the type of potential blocking (for example, a DNS anomaly may be a sign of DNS tampering). However, false positives can occur for a number of reasons, such as transient network failures (that is, if OONI Probe tests are performed on an unstable network), if a website is hosted on an unreliable server, or due to DNS misconfiguration, or if websites serve different content depending on the country that the user is connecting from.⁶¹⁹ Blocking is therefore neither confirmed automatically for these cases, nor is it determined based on a single measurement.

Rather, OONI analyzes relevant measurements by testing the same URL on the same network in bulk over a longer period of time to determine whether the same anomalies persist. If they do persist, then these anomalies provide a stronger signal of potential blocking. To arrive at a conclusion, this measurement data needs to be compared against other data, such as information on the global reachability of the tested URL, which would uncover global failure rates of access, and whether server-side blocking is occurring (i.e., whether the website owner is blocking IP addresses originating from a particular country), among others. The type of analysis would depend on the type of anomaly detected in OONI measurements. Currently, OONI only confirms cases of blocking

619 Open Observatory of Network Interference (OONI), OONI Frequently Asked Questions (FAQ), https://ooni.org/ support/faq/#what-are-false-positives. automatically when (a) a block page is served, and (b) the fingerprint of that block page has been added to OONI's database.⁶²⁰ All other cases of blocking are examined (and potentially confirmed) through manual data analysis, as explained here.

For this report, we further limited our analysis to LGBTIQ-related URLs, which we drew from two sources: (1) Citizen Lab test lists, and (2) LGBTIQ-focused OONI Run test lists.⁶²¹ We explain each of these in the following sections.

Citizen Lab Test Lists

The Citizen Lab and OONI maintain a repository of testing lists for use by the censorship measurement community.⁶²² These lists contain URLs that are assigned to content categories, and are separated into country-specific lists.623 Each of these lists contain two types of URLs: (1) URLs that are relevant to a specific country (such as local media websites and human rights websites) and (2) "global" URLs designed to be tested across all countries (e.g., facebook.com).624 An OONI Probe user will test URLs from the local list of the country that they are testing from (if a test list for that country exists), in addition to URLs from the global test list. All of the URLs in the global and country-specific test lists are manually categorized based on thirty diverse categories (including the "LGBTIQ" category).625

⁶¹⁸ Open Observatory of Network Interference (OONI), OONI Glossary, https://ooni.org/support/glossary/#network-anomaly.

⁶²⁰ Open Observatory of Network Interference (OONI), OONI Glossary, https://ooni.org/support/glossary/#block-page.

⁶²¹ Citizen Lab, Test List Repository, https://github.com/ citizenlab/test-lists; Open Observatory of Network Interference (OONI), Thematic OONI Probe testing, https://ooni. org/get-involved/run.

⁶²² Citizen Lab, Test List Repository, https://github.com/ citizenlab/test-lists.

⁶²³ Citizen Lab, Test List Repository: Categories of test URLs, https://github.com/citizenlab/test-lists/blob/master/lists/00-LEGEND-new_category_codes.csv; Citizen Lab, Test List Repository: Country-specific test lists, https:// github.com/citizenlab/test-lists/tree/master/lists.

⁶²⁴ Citizen Lab, Test List Repository: Global test list, https://github.com/citizenlab/test-lists/blob/master/lists/global.csv.

⁶²⁵ Citizen Lab, Test List Repository: Categories of test URLs, https://github.com/citizenlab/test-lists/blob/mas-ter/lists/00-LEGEND-new_category_codes.csv.

As we wanted to ensure that Citizen Lab test lists contain the most relevant URLs on LGBTIQ-related topics, OutRight Action International reached out to its partner networks, which are LGBTIQ communities and groups working on LGBTIQ-related topics, to gather URLs that they considered to be worth testing for potential censorship. These URLs were subsequently added to the global test list, in addition to multiple country-specific test lists.626 Some of these URLs were known to be blocked in some countries, based on previous research, while other LGBTIQ URLs were added to the test lists in order to measure their accessibility across networks over time. The newly added LGBTIQ URLs were merged into existing Citizen Lab test lists, so that OONI Probe users around the world could start testing these URLs.627

LGBTIQ-Focused OONI Run Test Lists

In addition to Citizen Lab test lists, we created two separate LGBTIQ-focused lists of websites, using the OONI Run platform. For this research, we selected URLs that were listed in the "Gay, Lesbian and Bisexual" category in Alexa Rank's top sites ranking because we aimed to test some of the most popular and commonly accessed LGBTIQ URLs around the world.⁶²⁸ These URLs were compiled as OONI Run test lists.⁶²⁹

The OONI Run platform can be used to generate mobile deep links and widget code for the coordination of OONI Probe testing.⁶³⁰ OONI Run enables OONI Probe users to test websites of their choice, rather than only URLs included in Citizen Lab test lists. This platform is helpful particularly for users who aim to limit their testing to a specific set of URLs, as well as for users who would like to test a long list of URLs without necessarily adding them to Citizen Lab test lists.⁶³¹ Test lists are generally limited to up to one-thousand URLs because they are used by most OONI Probe users, who may have bandwidth constraints. To use OONI Run, a website address is added in the URL section of "https://run.ooni.io/", then a mobile deep link would be generated, and that website can be tested through the use of the OONI Probe mobile app.⁶³²

We generated two OONI Run 'widgets' or lists on the OONI website to enable their testing using OONI Probe.⁶³³ The first widget contains six-hundred LGBTIQ URLs (typically used by users who are connected to WiFi and able to perform more extensive testing), while the second contains only twenty-six popular LGBTIQ websites (used by those who prefer to or can only perform testing that is short in duration). To encourage the OONI Probe testing of these LGBTIQ websites, we promoted a page that contains the two OONI Run widgets to our communities, and published a blog post, which also shares these widgets and relevant testing instructions.⁶³⁴ Moreover, we promoted this testing on our social media platforms, particularly in conjunction with LGBTIQ-related events, such as Global Pride 2020.635

Secondary categorizations were added to each URL in our custom lists to enrich our analysis of

⁶²⁶ Citizen Lab, Test List Repository: Pull request 539, https://github.com/citizenlab/test-lists/pull/539.

⁶²⁷ Open Observatory of Network Interference (OONI), OONI Probe, https://ooni.org/install/.

⁶²⁸ Alexa, The top 500 sites on the web, https://www.alexa.com/topsites.

⁶²⁹ Open Observatory of Network Interference (OONI), OONI Run, https://run.ooni.io/.

⁶³⁰ Open Observatory of Network Interference (OONI), OONI Run: Let's fight internet censorship together!, https:// ooni.org/post/ooni-run/.

⁶³¹ Citizen Lab, Test List Repository, https://github.com/ citizenlab/test-lists.

⁶³² Open Observatory of Network Interference (OONI), OONI Probe mobile app, https://ooni.org/install/mobile.

⁶³³ Open Observatory of Network Interference (OONI), Thematic OONI Probe testing, https://ooni.org/get-involved/run.

⁶³⁴ Open Observatory of Network Interference (OONI), Thematic OONI Probe testing, https://ooni.org/get-involved/run; Open Observatory of Network Interference (OONI), Call to Action: Let's measure the blocking of LGBTQI websites around the world!, 4th December 2019, https:// ooni.org/post/2019-measure-blocking-lgbtqi-sites/.

⁶³⁵ Global Pride 2020, https://www.globalpride2020.org/.

the tested LGBTIQ-related URLs even further. These secondary categorizations were based on an analyst visiting each URL and making a determination of this secondary category based on the content returned. The existing Citizen Lab test list categories were used as a guide to code each website.⁶³⁶ Many websites could likely fit into more than one category, but the analyst attempted to discern the primary function the website served, and assigned a category based on this function. As such, each URL is included under only one category. When the URL was found to be non-responsive or defunct, it was categorized as 404 or "non-operational."

In total, the combined number of LGBTIQ URLs used for analysis (from the Citizen Lab test lists) was 1,034 and is available in the data release corresponding to this report.⁶³⁷

Scope and Method of Data Collection

Using our LGBTIQ-focused URL lists as an input, we examined all OONI Web Connectivity measurement data, collected in the six countries of interest between June 1, 2016 and July 31, 2020.⁶³⁸ In total, 10,841,113 individual measurements were within the scope of our analysis. These measurements were examined to identify instances of deliberate blocking. Examples of blocking can include "block pages" (transparent messages explaining that the desired content has been blocked) or incorrect DNS responses. Once such instances are identified, measurement annotations were developed that allowed for similar blocking responses to be easily identified in the dataset. Internet Service Providers (ISPs) are typically responsible for implementing censorship in compliance with government requests or based on national legislation, and may each choose different technical methods for blocking content. As a result, the methods of blocking LGBTIQ content are in most cases unique to each ISP. In some cases (e.g., Iran), however, the government has implemented a national-level filtering system, which means that there is a blocking regime applied on all ISPs in the country.⁶³⁹

Our study was restricted to examining the blocking behavior implemented for users of commercial ISPs. Therefore, users at institutional settings, such as schools, libraries, or private workplaces, were considered out of scope for this project. The reason is because this study aims to identify censorship that impacts the average Internet user who may not have alternative methods to access LGBTIQ content that is blocked.

Developing the Annotations

As censors would typically use the same technical method to block different websites on their networks, we were able to develop signatures of blocking activity to automate the detection of blocking. To do so, we created what we call an "annotation" that includes the following:

- The text pattern identified in a measurement that indicates blocking behavior.
- Where in a response can we expect to see this text pattern.
- The ISP this response was identified on.
- All other relevant identifiers.

In total we developed 283 annotations that were seen at least once in the six countries.

⁶³⁶ Citizen Lab, Test List Repository: Categories of test URLs, https://github.com/citizenlab/test-lists/blob/mas-ter/lists/00-LEGEND-new_category_codes.csv.

⁶³⁷ Citizen Lab, Test List, https://github.com/citizenlab/ lgbtiq-report-data/blob/main/testlist.txt.

⁶³⁸ Open Observatory of Network Interference (OONI), OONI data, https://ooni.org/data/; This data was selected as a starting point as it is the first day *Web Connectivity* tests were collected.

⁶³⁹ Open Observatory of Network Interference (OONI), Internet Censorship in Iran: Network Measurement Findings from 2014-2017, 28th September 2017, https://ooni.org/post/ iran-internet-censorship/

Annotation Example: Censorship on the ISP "du" in UAE

The following is an example of an OONI measurement, which shows the blocking of "https://bisexual.org/" on the ISP du in the UAE.⁶⁴⁰ The measurement shows that when a user accessed the URL on July 21, 2019, they were forwarded to a page hosted on the "lighthouse.du.ae" domain, as illustrated through the block page below.



An annotation for

this block page identifies the text fragment "lighthouse.du.ae" appearing in the HTTP header as the pattern being matched, and as a result, any measurements observed that match this behavior will be identified by this annotation. The same process would also be used to create annotations based on incorrect DNS replies, if they were determined to reflect deliberate blocking.

SimpleBlockPagePattern(
name="isp_ae_du_surfsafely_forward_2",
common_name="UAE ISP du Block",
pattern="""lighthouse.du.ae""",
location_found="header",
source=[
"https://www.du.ae/personal"
],
exp_url="https://explorer.ooni.org/measurement/20171105T032733Z_AS15802_
HaY0S8nTvD8xcK50zBOzcdDFCLiqhjVRFAFhPnUowVNv582Tp6? input = http://amygoodloe.com/lesbian-dot-org/", http://amygoodlo
confidence_no_fp=10,
scope="isp",
expected_countries=["AE"],
notes="UAE ISP Du Surf Safely does an intermediate forward to Location: http://lighthouse.du.ae?dpid=X&
dpruleid=X&cat=X&dplanguage=-&url=X (netsweeper)",
),

Figure 2: An annotation developed to identify the blocking by the ISP du in UAE. This annotation matches a forward to the lighthouse.du.ae in the highlighted portion.

⁶⁴⁰ Open Observatory of Network Interference (OONI), OONI measurement collected from the United Arab Emirates testing https://bisexual.org, https://explorer.ooni.org/measurement/20190721T050517Z_AS15802_5FVS1n1qRhurPjVzgtnOoJ0WcFyYBT-Nh1m0C27iX4SGGndCT1C?input=https://bisexual.org/; The United Arab Emirates Integrated Telecommunications Company, commercially rebranded as "du" in 2007.

Additional metadata is included in each annotation as a means of documenting the analysis process, as shown in **Table 1**:

Field	Explanation			
name	Name of the signature to tag identified entries with (this is always unique).			
common_name	Name of the overall behavior (this can be shared among different entries).			
pattern	The text pattern fragment to match against.			
location_found	Where we do the matching against either "body" or "header" of the HTTP response.			
source	URLs related to the blocking behavior such as the ISP website, or other users reporting the behavior online.			
exp_url	A sample OONI Explorer ⁶⁴¹ URL of the behavior.			
confidence_no_fp	A self-assessed number of the likelihood that the signature may be a false positive from 1 (high likelihood) to 10 (low likelihood).			
scope	The assumed scope of the behavior. Either: "isp" - pattern related to ISP level filtering. "nat" - pattern related to national level filtering. "prod" - pattern related to a filtering product (such as default block pages) "inst" - pattern related to institutional filtering such as schools, offices, religious establishments "vbw" - patterns that have vague block words present (page blocked, page filtered, etc)			
expected_countries	The countries where we would expect to see a given signature.			
notes	Any extra text notes about the behavior.			

Table 1: A table of all metadata fields associated with a single annotation.

It is possible for a single blocked measurement to have more than one annotation developed to detect it. For example, if a website is blocked via an HTTP 302 redirect to a domain which hosts a block page, then we develop an annotation for both the redirect and the destination block page. There are also some instances where a block page does not contain sufficient unique text to match on. For example, many different block pages in Russia contain shared text, which makes it difficult to identify them separately from this text alone. In these cases, we ensured that at least one annotation was developed for the observed behavior, typically either the DNS response or HTTP redirect.

All annotations developed for this report are available on Citizen Lab's Github page.⁶⁴² Additional metadata such as a sample screenshot and HTML source of the observed block page are also published.

Identifying Blocking Behavior

Given the size of the dataset being analyzed (over ten million measurements) it was necessary to develop shortcuts to facilitate the detection of blocked content. As it is infeasible to examine such a large volume of individual measurements in depth, other indicators needed to be developed that narrowed the size of the initial dataset and highlighted aberrant results. Our initial examination

⁶⁴¹ Open Observatory of Network Interference (OONI), OONI Explorer, https://explorer.ooni.org/

⁶⁴² Citizen Lab, Filtering annotations, https://github.com/citizenlab/filtering-annotations.

of the data, and prior experience with this type of analysis, suggested that only a small proportion of the overall measurements would demonstrate instances of deliberate blocking.

With this assumption in mind, identifying instances of blocking becomes an exercise in identifying outliers. This is an iterative process, as any new annotations developed can be applied to the entire dataset to further shrink the dataset being analyzed. To achieve this, we developed a series of indicators that can be used to highlight potentially suspicious results.

Potential Indicators of Blocked Content

Consistency of Responses

We began by visualizing the responses received over time as a means of highlighting any changes or patterns observed. Assigning each result a status (e.g., normal/accessible, known to be blocked according to an annotation, etc.) would facilitate the highlighting of sudden changes in status, such as a previously blocked URL that is now appearing to be accessible because of a change to the blocking method. This consistency method is heavily inspired by previous OONI research reports, such as on Burundi,⁶⁴³ where URL accessibility is graphed over time.

We built on this approach by also tagging measurements we have documented through our signature development. An example of this graph is presented in **Figure 3**.



Figure 3: A graph of the consistency of how the measurements are categorized. Green indicates "normal/not blocked" and yellow indicates an error returned. Purple indicates that there is an automatic OONI determination on the measurement. In this graph, the 2017 period where errors are returned consistently may indicate a hosting issue on the website is contrasted with a later period (2019 onward) where inconsistent errors may indicate blocking and warrant further review.

⁶⁴³ Open Observatory of Network Interference (OONI), Burundi blocks social media amid 2020 general election, May 21, 2020, https://ooni.org/post/2020-burundi-blocks-social-media-amid-election/.

As these graphs may be difficult to read, we have also generated split bar graphs and separated all annotations, errors, and OONI determinations by name. An example of this is seen in **Figure 4** below.



Figure 4: A split bar graph showing all measurements for the URL gaytoday.com and those measurements which are tagged as belonging to the OpenDNS filtering product during a period in November/December 2019.

We also reviewed the consistency of the HTML body and HTTP header responses received by visualizing these measurements and identifying aberrant results. Since we assume that both of these measurements should be relatively consistent across a short time frame, any obvious aberrations may indicate an instance of blocking. While page body lengths may change over time as the contents of a website changes, our early experience indicated that sudden and extreme changes in body length would be both visible in such a figure and worthy of further analysis. (See **Table 1**)



Figure 5: A graph of body and header length over time for the beyondexgay.com site in Indonesia. The two spikes here are outliers that would have been investigated further.

Redirects Outside Domain Space

We looked closely at any cases where there is an HTTP 30* redirect response, but the user is redirected to a different top level domain than the tested URL. For example, in the example measurement of trying to access `https://bisexual.org` from UAE, we see an HTTP 302 redirect to the domain `lighthouse.du.ae`, which is outside of the `bisexual.org` domain space.⁶⁴⁴ But there is a high likelihood of false positives with this metric. For example, location-based redirects (such as from `google.com` to `google.ca`) would be considered outside the domain space, and therefore flagged as a potential block.

Small Responses

We looked at any distinct HTML body returned where the body was small (i.e., under six-hundred characters), as explicit block pages observed during analysis tended to be shorter in length than accessible websites. We found that this metric has a high incidence of false positives, as it included a high number of legitimate web server messages.

Iframes in Responses

During analysis we noticed that some block pages also tended to include HTML iframe tags at a higher rate than accessible pages, so we looked at this as a possible metric. This method also generated many false positives, but since they tended to be clustered with all the test list URLs which actually had iframes present, it was easy to parse on manual review.

Filtering the Final List of Blocked URLs

After using the above methods to identify instances of blocking, we needed to generate a final list of blocked URLs that were within the scope of our study. This final list of blocked URLs consisted of all measurements that matched an annotation on at least one occasion during the testing period. This included URLs which were found to be blocked consistently, as well as those only found to be blocked once or only blocked on a single network. From this list, we made three changes described in the sections below:

- We removed any results with only non-state and non-ISP scoped signatures because, for example, filtering implemented in institutional settings, such as schools, libraries and private workplaces, was outside the scope of this report.
- We removed URLs that we determined to be included in the list due to an abnormal blocking event in Indonesia.
- We merged URLs that differ only on a trailing slash character.

Removing Non-State and Non-ISP Scoped Signatures

Some measurements positively identified as blocking were removed from our final list of blocked URLs because filtering implemented in institutional settings, such as schools, libraries, and private workplaces, was outside the scope of this report. In other cases, there was insufficient information

⁶⁴⁴ Open Observatory of Network Interference (OONI), OONI measurement collected from the United Arab Emirates testing https://bisexual.org, https://explorer.ooni.org/measurement/20190721T050517Z_AS15802_5FVS1n1qRhurPjVzgtnOoJ0Wc-FyYBTNh1m0C27iX4SGGndCT1C?input=https://bisexual.org/.

to determine what actor was responsible for implementing blocking, such as measurements with non-specific or generic block pages of filtering products. Other factors included whether a particular filtering product is marketed to work at the scale that an ISP-level filtering system would require.

Due to these reasons, we excluded certain blocking behaviors from being included in our final list of blocks. These exclusions and the rationale behind their exclusion are presented in **Table 1** below.

Country	Signature to Exclude	Count	Rationale	
Indonesia	prod_gfi_kerio*	131	GFI Kerio Control is a filtering product that is marketed and used in office network settings. ⁶⁴⁵ Observed block pages did not have branding and we determined that we did not have enough information to determine a non- institutional scope.	
Indonesia, Malaysia	prod_paloalto*	ID: 1 MY: 1	Palo Alto Networks Firewalls are marketed and used in schools, and corporate environments such as retail and manufacturing. ⁶⁴⁶ We observed small measurement counts and did not have enough information to determine non-institutional scope.	
Indonesia, Malaysia	prod_fortiguard*	ID: 9 MY: 2	Fortiguard Web Filter products and marketed and used in office settings. ⁶⁴⁷ Small measurement counts were observed and we did not have enough information to determine a non-institutional scope.	
Russia, Malaysia, Saudi Arabia, Iran	dns_prod_opendns*, prod_opendns*, prod_cisco_opendns	RU: 1 MY: 1 SA: 1 IR: 1	Cisco OpenDNS is a public DNS server that can optionally filter content. ⁶⁴⁸ As any user can opt to set their DNS resolver to use this service, these were excluded as being not in scope.	
Indonesia	dns_inst_id_sehat_ telkomuniversity	12	The block page had institutional branding for Telkom University and was considered out of scope of this study.	
Russia, Malaysia	dns_br_localhost	RU: 194 MY: 19	This signature refers to the return of a DNS reply of 127.0.0.1 or the local host. Though this is sometimes used in DNS filtering, without additional context there was not enough information to determine if this was national or ISP level filtering.	

648 "Cloud Delivered Enterprise Security by OpenDNS," OpenDNS, accessed April 26, 2021, https://www.opendns.com.

^{645 &}quot;Kerio Control Small Business Firewall," GFI Software, accessed April 26, 2021, https://www.gfisoftware.de/products-and-solutions/network-security-solutions/kerio-control.

^{646 &}quot;Next-Generation Firewalls," Network Security, Palo Alto Networks, accessed April 26, 2021, https://www.paloaltonetworks. com/network-security/next-generation-firewall; "K-12 Education," Palo Alto Networks, accessed April 26, 2021, https://www. paloaltonetworks.com/security-for/industry/education/k-12; "Retail," Palo Alto Networks, accessed April 26, 2021, https://www. paloaltonetworks.com/security-for/industry/retail; "Manufacturing," Palo Alto Networks, accessed April 26, 2021, https://www. paloaltonetworks.com/security-for/industry/retail; "Manufacturing," Palo Alto Networks, accessed April 26, 2021, https://www. paloaltonetworks.com/security-for/industry/retail; "Manufacturing," Palo Alto Networks, accessed April 26, 2021, https://www. paloaltonetworks.com/security-for/industry/manufacturing.

^{647 &}quot;FortiGuard Web Filtering Service," FortiGuard Security Subscriptions, *Fortinet*, accessed April 26, 2021, https://www. fortinet.com/support/support-services/fortiguard-security-subscriptions/web-filtering; "Small Business Cyber Security in 4 Steps," *Fortinet*, accessed April 26, 2021, https://www.fortinet.com/solutions/small-business#:~:text=Fortinet%20Small%20 Business%20Security%20Solutions,protect%20against%20threats%20like%20ransomware.

Country	Signature to Exclude	Count	Rationale	
Russia	prod_juniper_webfilter	1	Juniper firewalls are heavily used in office environments. ⁶⁴⁹ Small measurement counts were observed and we did not have enough information to determine a non-institutional scope.	
Russia	prod_squid_*	35	Squid is an open source web caching proxy. ⁶⁵⁰ Since the signature matched on an uncustomized page provided by Squid, without further context we could not determine if this was non-institutional use.	
UAE, Russia	nat_ir	AE: 61 RU: 267	Iran has a known national DNS injection system that can cause incorrect DNS replies to leak to foreign networks. ⁶⁵¹ As a result of this, any DNS traffic upstream that crosses that border can potentially be injected with an incorrect reply. These were excluded because they did not geolocate to Iran and would lead to a mistaken picture of the target countries' filtering policy.	
Russia	dns_prod_yandex_ security_check	6	This signature refers to a security service by Yandex that checks if a site is secure. ⁶⁵² This is not an explicit block, as it allows users to still access the site. This response was excluded as a result.	
Malaysia	prod_sonicwall_cfc	1	Sonicwall firewalls are marketed for small business and office use. ⁶⁵³ Given the small measurement counts, we concluded that we could not determine a non- institutional use case.	
UAE	prod_forcepoint*	1	Forcepoint Websense proxy servers are devices that can filter web content for users. ⁶⁵⁴ Given the small measurement counts and the fact that block pages are non customized, we concluded that we could not determine a non-institutional use case.	
Saudi Arabia	prod_bluecoat_notify*	3	Bluecoat ProxySG devices can filter web content for users, however, this annotation matches on user notifications and not filtering so they were excluded. ⁶⁵⁵	

Table 1: A table of country/annotation pairs that were excluded from the final block list and the justification for the exclusion.

^{649 &}quot;SRX Series Next-Generation Firewalls," *Juniper Networks*, accessed April 26, 2021, https://www.juniper.net/us/en/prod-ucts-services/security/srx-series/; "Enterprise Networks | Solutions," Juniper Networks, accessed April 26, 2021, https://www.juniper.net/us/en/solutions/enterprise.

^{650 &}quot;Squid : Optimising Web Delivery," accessed April 26, 2021, http://www.squid-cache.org/.

⁶⁵¹ Wander et al., "Measurement of Globally Visible DNS Injection."

^{652 &}quot;Проверка сайта на безопасность," accessed April 26, 2021, https://yandex.ru/safety/.

^{653 &}quot;SonicWall Firewalls | Next-Generation Firewall Protection," SonicWall, accessed April 26, 2021, https://www.sonicwall.com/ products/firewalls/; Robert Van Kirk, "Cybersecurity for SMBs: Bundled Network Security Delivers Cost-Effective Protection," SonicWall, November 1, 2018, https://blog.dev.swweb.app2018/11/cybersecurity-for-smbs-bundled-network-security-delivers-cost-effective-protection/.

^{654 &}quot;How Forcepoint Web Security Cloud Works," *ForcePoint*, accessed April 26, 2021, https://www.websense.com/content/support/library/web/hosted/getting_started/how_wsc_works.aspx.

^{655 &}quot;ProxySG and Advanced Secure Gateway," accessed April 26, 2021, https://www.broadcom.com/products/cyber-security/ network/gateway/proxy-sg-and-advanced-secure-gateway.

Separating Out the June 2020 Telkom Blocking Event in Indonesia

In addition to the exclusions based on annotations, we excluded URLs in what we determined to be an abnormal blocking event in Indonesia. On June 27, 2020 there was a spike of measurements with blocking annotations (both HTTP and DNS) from users in Indonesia. Whereas the previous peak that year from Indonesian measurements was forty-six (on April 27, 2020), there were 232 anomalous measurements on June 27, 2020 as illustrated below.



Figure 6: A spike in measurements with annotations from Indonesian users in late 2020.

Upon further examination, within HTTP annotations on that day, all measurements except two took place on network AS7713 (PT Telekomunikasi Indonesia or "Telkom").⁶⁵⁶ There were nine-ty-seven new URLs that contained a previously seen annotation on this AS that were never seen blocked again in Indonesia. Within these ninety-seven URLs, many URLs that were related to other locales were seen blocked. For example, the website `gejowo.pl`, a now defunct Polish language LGBTIQ site, was blocked during this period despite being unrelated to Indonesia, and there were many similarly unrelated URLs that were blocked on this date.⁶⁵⁷ **Table 2** contains a sample of seemingly unrelated URLs that were only filtered during this event.

URL	Description of Site	
https://saskatoonpride.ca/	Site about Saskatoon area pride events in Canada.	
http://gaylifekenya.blogspot.com/	An explicit blog about LGBT life in Kenya	
http://www.gayguatemala.com/	Site about LGBT culture in Guatemala	
http://www.gayarab.org/	Spam page but domain name mentions another locality.	
http://www.afrakenya.org/	Dead page but domain name mentions another locality.	

Table 2: A table of unrelated URLs found blocked during the June 2020 blocking event.

⁶⁵⁶ BGP, AS7713 Telekomunikasi Indonesia, https://bgp.he.net/AS7713.

⁶⁵⁷ Open Observatory of Network Interference (OONI), OONI measurement collected from Indonesia on the testing of gejowo.pl, https://explorer.ooni.org/measurement/20200627T015246Z_AS7713_yGf9PgNztFPQt0WYX89qvYkvOBeKxdDC6Dd0x0LaVvK-THGjwh4?input=http://gejowo.pl/.

All the URLs that were blocked during this period were blocked by way of DNS forwarding users to the domain `internetpositif.uzone.id` (as tagged in annotation: dns_isp_id_sehat_telkom_uzone). The page presented to users was a block page matching a block page text with the any one or more of the following annotations:

nat_id_trustpositif_block_1
nat_id_trustpositif_block_3
nat_id_trustpositif_block_6
nat_id_trustpositif_forward_2
nat_id_trustpositif_forward_3





Situs yang kamu tuju tidak dapat diakses karena bermuatan negatif.

karena terindikasi mengandung salah satu unsur kekerasan, pornografi, judi, phising, SARA atau PROXY. Jika kamu merasa situs tersebut tidak termasuk dalam kategori di atas silahkan hubungi aduankonten@kominfo.go.id atau ke http://trustpositif.kominfo.go.id

Figure 7: The site hosted on "internetpositif.uzone.id" that was shown to users during the Telkom blocking event.

The text reads: "The website you are going to cannot be accessed because of its negative content. (sic) Because there are indications that it contains either violence, pornography, gambling, phishing, SARA, or proxy.⁶⁵⁸ If you feel that this website does not belong to any of the aforementioned categories, then please contact aduankonten@kominfo.go.id or http://trustpositif.kominfo.go.id".

All annotations are related to Internet Positif, a filtering system employed by Telkom. However, given (a) the atypical peak of measurements with annotations, (b) the unrelated nature of the blocked content, and (c) the fact that all occurred on the same AS network and on the same day, led us to determine that this was a likely malfunction or temporary misconfiguration in the filtering system used by Telkom. As this filtering policy was short lived, we chose to separate these results from the final blocks list for Indonesia. We did not want this event to lead to an inaccurate picture of the long term filtering policy in the country. Due to this phenomenon, we separated any URL that was only ever found to be blocked once on AS7713 (PT Telekomunikasi Indonesia), placed those in a separate file (id-telekomevent.csv), and removed these entries from the final Indonesia block list.⁶⁵⁹

⁶⁵⁸ SARA is an Indonesian abbreviation of "tribe/ethnicity, religion, race, and intergroup relations."

⁶⁵⁹ BGP, AS7713 Telekomunikasi Indonesia.

Separating Out the July 23, 2020 MNC Blocking Event in Indonesia

After examining the Indonesia block list and removing those that were determined to be a part of the June 2020 Telkom blocking event, we found additional URLs that were only found blocked on two days: June 27, 2020 (the Telkom event) and on July 23, 2020. On July 23, 2020 there were forty-nine URLs only ever seen blocked on this day and on June 27, 2020 and no other. These measurements were observed on a different network than the Telkom event, AS17670 (PT. MNC Kabel Mediacom) and matched a different annotation: either dns_isp_id_sehat_mncplay, isp_id_mncplay_sehat_blockpage, or both.

When users accessed these URLs on July 23, 2020 they were redirected to the domain `internetpositif.mncplaymedia.com`. This block page is a different block page than the one seen in the Telkom event, but they are both a part of the same Trust Positif program. Trust Positif is an Internet censorship program run by Indonesia's Communications and Information Technology Ministry (Kominfo) since 2010 that ISPs must follow.⁶⁶⁰

Redirection Page

Pelanggan yang terhormat, demi kenyamanan Anda situs yang dituju tidak dapat diakses.

Situs yang dituju terindikasi mengandung konten yang tidak diperkenankan pemerintah atau tidak memenuhi regulasi yang berlaku di wilayah Indonesia.





Figure 8: The site hosted on "internetpositif.mncplaymedia.com," which users were redirected to on July 23, 2020 on the MNC network in Indonesia.

⁶⁶⁰ Ronald Deibert et al., "Indonesia," in Access Contested.

Similar to the June 2020 Telkom event, there were many URLs that were blocked in this manner that did not appear to be relevant to the Indonesian context. For example, on this day the website of Antony and the Johnsons, an American recording artist, was blocked, as seen in an OONI measurement.⁶⁶¹ The website of Hyena films, a Hamburg-based independent production company, was also blocked, as seen in another OONI measurement.⁶⁶² Due to the fact that these URLs were only blocked on July 23, 2020 (in addition to June 23, 2020), and no other, we determined that this too was likely to be an abnormal blocking event and not reflective of a long-term filtering policy. We separated any URLs that were only ever blocked twice, on June 27, 2020 and July 23, 2020 on MNC's network with annotations related to the MNC Trust Positif system. We saved these entries to a different file (id-mncevent.csv) and removed them from the main Indonesia block list.

Merging URLs that Differ Only with a Slash Character

The OONI Probe software measures URLs exactly as they appear in Citizen Lab test lists (which include the websites tested by OONI Probe), or depending on how users format them when they manually test websites of their choice.

The OONI Probe software does not alter any given test URL; it takes this value from the clients "as-is." As a result, URLs may be functionally the same if visited directly, but be treated as different by OONI Probe based on the input URL value the clients sent. For example, the URL `http://www.gay.com` and `http://www.gay.com/` with a trailing slash ("/") at the end of the URL leads to the same page when visited in a web browser, but is treated as a different URL within OONI. Therefore, the testing of each version of the URL–with and without the slash– leads to a different measurement. As a result, we would keep these two URLs as distinct URLs, up until the process of determining the final block list when we merge them. This is only performed in cases where URLs differ by a single trailing slash character.

Other distinctions, such as HTTP and HTTPS URLs, and those with or without a leading `www`" are treated as different URLs, because they may lead to different results depending on the site in question. For example, sometimes ISPs only block the HTTP version of a site, but not the HTTPS version of the same site.⁶⁶³

⁶⁶¹ Open Observatory of Network Interference (OONI), OONI measurement collected from Indonesia on the testing of antonyandthejohnsons.com, https://explorer.ooni.org/measurement/20200723T073146Z_AS17670_VwgxSfl7V2yCWMyGvwCc0q3O354AtWateFUW07BvRadrAiEFJO?input=http://antonyandthejohnsons.com/.

⁶⁶² Open Observatory of Network Interference (OONI), OONI measurement collected from Indonesia on the testing of www. hyenafilms.com, https://explorer.ooni.org/measurement/20200723T073146Z_AS17670_VwgxSfl7V2yCWMyGvwCc0q3O354At-WateFUW07BvRadrAiEFJO?input=https://www.hyenafilms.com/.

⁶⁶³ Open Observatory of Network Interference (OONI), Measuring Internet Censorship in Cuba's ParkNets, August 28, 2017, https://ooni.org/post/cuba-internet-censorship-2017/.

The method of merging for each field is described in **Table 3**.

Field	Description	Method of Merge
URL	The tested URL.	The URL with the trailing slash is kept.
time_seen_dns_ann	The number of times any DNS based signature matches.	Addition.
times_seen_any_ann	The number of times any signature matches, either DNS or HTTP.	Addition.
times_seen_http_ann	The number of times any HTTP based signature matches.	Addition.
times_tested_total	The number of times the URL was tested with OONI Probe.	Addition.
first_time_an_annotation_ seen	The first date where any annotation is seen for the URL.	The earliest date is used in the merge.
last_time_an_annotation_ seen	The most recent date where any annotation is seen for the URL.	The most recent value in the merge is used.
block_duration_days	The number of days a block was present. As testing is opportunistic this refers to the number of days between first_time and last_time values.	Recalculate based on merge first_time and last_time values.
asn_name_list	All AS name values where an annotation is seen.	Union of only unique elements among both lists.
asn_num_list	All AS num values where an annotation is seen.	Union of only unique elements among both lists.
num_asns_seen	The number of distinct AS Numbers that see a single annotation.	Addition with new AS num list.
ann_list	All annotation names that match for the given tested URL.	Union of only unique elements among both lists
num_uniq_annotations	The number of unique annotations that match for the URL.	Addition with new ann_list value.
annotation_pct	The percentage of measurements that have any annotations.	Times_seen_any_ann value divided by new times_tested_total value.

Table 3: Table summarizing the logic used to merge URLs that were determined to be blocked.

Limitations

There are four limitations to our research.

First, OONI measurement data is opportunistic, as it relies upon volunteers choosing to run OONI Probe in our designated countries of interest. The quantity of data collected in each country and on individual ISPs will thus be unequal. Furthermore, when OONI Probe users opt out of ASN collection, we are unable to identify the network on which tests were performed. Not all URLs in our testing list were measured equally across networks and countries during the analysis period either. And finally, there is an unequal number of URLs across different categories of LGBTIQ websites that were tested, which has influenced the findings of this report. As seen in **Figure 9**, a substantial number of URLs in our test lists are categorized as "Culture and Community," which includes websites that seek to create a sense of community (includes sports, religion, Pride celebration websites, personal blogs), as well as art and culture websites.



Figure 9: Category composition and distribution of the testing list.

Second, we are only able to identify blocked URLs that are included in our testing list. While we have endeavoured to create a list that includes a broad array of LGBTIQ content, any URLs which are not included in this testing list will not be included in our results.

Third, our results are limited to the date range of analysis, between June 1, 2016 to July 31, 2020. Any censorship events (involving the tested URLs) before or after this date range are not considered as part of our analysis.

And fourth, we have limited our analysis to instances in which we see unambiguous evidence of a deliberate attempt to block a given website. Not all methods of blocking are transparent to users, and some methods can be difficult to distinguish from transient errors. As a result we are likely understating the extent of web censorship of LGBTIQ websites in our countries of interest.







