

Internet Monitoring Action Project

iMAP Vietnam 2024

Internet Censorship Report

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About iMAP

The Internet Monitoring Action Project (iMAP) aims to establish regional and in-country networks that monitor network interference and restrictions to the freedom of expression online in nine countries: Myanmar, Cambodia, Hong Kong, India, Indonesia, Malaysia, Philippines, Thailand, and Vietnam. Sinar Project is currently working with national digital rights partners in these nine countries. The project is done via Open Observatory Network Interference (OONI) detection and reporting systems, and it involves the maintenance of test lists as well as the collection and analysis of measurements.

More information is available at imap.sinarproject.org. Any enquiries and suggestions about this report can be directed to team@sinarproject.org.

About Sinar Project

Sinar Project is a civic tech initiative that uses open technology, open data, and policy analysis to systematically make important information public and more accessible to the Malaysian people. It aims to improve governance and encourage greater citizen involvement in the nation's public affairs by making the Malaysian Parliament and Government more open, transparent, and accountable. More information is available at <https://sinarproject.org>.

How to use this report

This report provides an overview of the state of internet censorship in Vietnam. It is not meant to provide a comparison of measurements across countries or measurements among different website categories covered by the iMAP project.

Recommendations to audience:

- Learn about supporting evidence related to internet censorship in Vietnam by reviewing research and case studies.
- Understand the latest developments of internet censorship in the country, in terms of methods of blockings and the websites affected by censorship.
- Support or advocate for changes in laws and policies to improve internet freedom in Vietnam.
- Take action and get involved by spreading awareness, signing petitions, or joining initiatives that fight against internet censorship.

Abbreviations

ALDR	Alcohol and Drugs
ANON	Anonymization and Circumvention tools
ASN	Autonomous System Number
COMT	Communication Tools
CTRL	Control Content
CULTR	Culture
DNS	Domain Name System
COMM	E-commerce
ECON	Economics
ENV	Environment
FILE	File-sharing
GMB	Gambling
GAME	Gaming
GOVT	Government
HACK	Hacking Tools
HATE	Hate Speech
HOST	Hosting and Blogging Platforms
HUMR	Human Rights Issues
HTTP	Hypertext Transfer Protocol
IGO	Intergovernmental Organisations
ICCPR	International Covenant on Civil and Political Rights
iMAP	Internet Monitoring Action Project
IP	Internet Protocol
ISP	Internet Service Provider
MMED	Media Sharing
MISC	Miscellaneous Content
NEWS	News Media
DATE	Online Dating
OONI	Open Observatory Network Interference

POLR	Political Criticism
PORN	Pornography
PROV	Provocative Attire
PUBH	Public Health
REL	Religion
SRCH	Search Engines
XED	Sex Education
GRP	Social Networking
MILX	Terrorism and Militants
TCP	Transmission Control Protocol
TLS	Transport Layer Security

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Introduction

As a country, Vietnam has one of the strictest surveillance methods in all aspects. Internet censorship is one of the methods used by the government for national security. To evaluate internet censorship in Vietnam, we examined 4,224,416 measurements (2,296 domains) that were tested from the global test list and country test list from 1 July 2023 to 30 June 2024. The country test list contains 439 URLs based on the selected URL test list. Of these, 176 URLs were reported as blocked (41) or likely blocked or inaccessible (135), mostly from political, news media, and human rights websites. Furthermore, freedom of speech and the press in Vietnam appear to be restricted without improvement. Independent news outlets such as the BBC, RFA, RFI, and VOA have also been blocked in the past. Accordingly, VPN tools have become very popular in the country.

This report aims to examine the current state of internet censorship in Vietnam by collecting and analyzing network measurements, and by sharing the findings, it hopes to increase the transparency regarding internet censorship in Vietnam and the related human rights issues.

The report comprises four parts. First, it provides information about Vietnam's network landscape and internet penetration. Second, it discusses the legal environment surrounding the freedom of expression, access to information, and privacy in Vietnam. The third part describes cases of censorship and surveillance reported in the country. The fourth part of the report documents this study's methodology and key findings.

Key Findings

- In 2023, the Ministry of Information and Communications (MIC) announced a Blacklist of 403 websites with signs of law violation, along with a Whitelist containing 2,653 websites.
- Based on OONI data, a total of 176 domains were found to experience instances of blockings from July 2023 to June 2024. The three website categories with highest anomaly rates were political criticism, porn, and gambling.
- Among the methods found used for censorship were DNS, HTTPS, TCP, and TLS.

Background

Vietnam is a socialist republic located in Southeast Asia, with a population of approximately 99.5 million people as of mid-2024.¹ Strategically located on the Indochina Peninsula, it shares borders with China to the north, Laos and Cambodia to the west, and has an extensive coastline along the South China Sea to the east.

Vietnam is home to a diverse population comprising 54 ethnic groups. The Kinh (or Viet) ethnic group forms the majority at 85.4%, while the remaining 53 ethnic groups collectively make up 14.6% of the population.² As of 2022, the Government of Vietnam has officially recognized 16 religions and 43 religious organizations: 86.32% of the population have no religion, 6.1% are Catholics, 4.79% are Buddhists, and other religions comprise 0.11%.³

Economically, Vietnam has had a remarkable journey from being one of the world's poorest nations in the 1980s to attaining lower middle-income status by 2010. The Doi Moi (Renovation) reforms initiated in 1986 transitioned the country from a centrally planned economy to a market-oriented one, significantly boosting foreign direct investment.⁴ Since the 1990s, Vietnam has maintained one of the world's highest GDP growth rates, averaging 6.89% annually from 1990 to 2019. This rapid growth has lifted millions out of poverty. Despite the challenges posed by the COVID-19 pandemic, Vietnam's economy has displayed considerable resilience and continues its positive trajectory by achieving a GDP growth of 8% in 2022.⁵

Population	99.5 million
Internet penetration (% of population using the internet) (2024)⁶	79.1%
Mobile subscriptions (2024)⁷	168.5 million
Freedom on the Net ranking (2024)⁸	22/100; Not free
Religion (%)	No religion: 86.32%; Catholicism: 6.1%; Buddhism: 4.79%; Other religion: 0.11%
ICCPR Ratification	Yes

¹ World Population Review. (2024). Vietnam Population 2024 Live Data. Retrieved from <https://worldpopulationreview.com/countries/vietnam-population>

² Open Development Vietnam. (2019). *Ethnic minorities and indigenous people*. Retrieved from <https://vietnam.opendevelopmentmekong.net/topics/ethnic-minorities-and-indigenous-people/>

³ Open Development Vietnam. (2023). Overview of Religions in Vietnam. Retrieved from <https://vietnam.opendevelopmentmekong.net/topics/overview-of-religions-in-vietnam/>

⁴ Cameron A, et al. (2019). *Vietnam's future digital economy - Towards 2030 and 2045*. CSIRO, Brisbane. Retrieved from <https://research.csiro.au/aus4innovation/foresight/>

⁵ World Bank. (2022). *World Development Indicators database*. Retrieved from <https://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG?locations=VN>

⁶ Data reportal. (2024). Digital 2024: Vietnam report. Retrieved from <https://datareportal.com/reports/digital-2024-vietnam>

⁷ Ibid

⁸ Freedom House. (2023). *Freedom on the Net - Viet Nam*. Retrieved from: <https://freedomhouse.org/country/vietnam/freedom-net/2022>

Socio-Political Economic Landscape

Political Environment

Vietnam's political landscape is characterized by the dominance of the Communist Party of Vietnam (CPV) – one single party that exercises significant control over the country's governance. While the ideological emphasis on communism has lessened over time, the CPV's influence remains strong. The General Secretary of the CPV holds the highest authority by overseeing the Politburo and the Central Military Commission, thus steering the political direction of the country.

The President serves as the head of state, while the Prime Minister is the head of government. Executive power is shared by the government and the state, and legislative authority is vested in the National Assembly of Vietnam.⁹ Although the judiciary is intended to be independent, the separation of powers among the executive, legislative, and judicial branches is weak. There is considerable overlap between the CPV and the government, which extends to lower levels of the political system.¹⁰

Significant political events in recent years include the resignation of President Nguyen Xuan Phuc in January 2023 amid an intensified anti-corruption campaign. This marked the first mid-term resignation of a state president in Vietnam. Subsequently, Vo Van Thuong was appointed as the new President in March 2023. His appointment is notable as he was previously the youngest member of the Politburo, suggesting a potential shift towards younger leadership within the CPV.¹¹

The anti-corruption campaign, initiated in 2019 to improve governance and reduce corruption, has been a key focus of the government. This campaign has resulted in the punishment of over 160,000 party members and the conviction of more than 7,000 people, reflecting ongoing efforts to address corruption within the political system. However, challenges such as market liberalization, infrastructure development, and reducing government intervention in economic activities remain areas of focus for future reforms.¹²

⁹ Wikipedia. (2022). *Politics of Vietnam*. Retrieved from: https://en.wikipedia.org/wiki/Politics_of_Vietnam

¹⁰ The Political System in Vietnam. (2012). In *The Vietnamese Health Care System in Change: A Policy Network Analysis of a Southeast Asian Welfare Regime* (pp. 259-264). ISEAS-Yusof Ishak Institute.

¹¹ The Diplomat. (2023). *Vietnam's New President: Key Takeaways for Domestic Politics and Foreign Relations*. Retrieved from:

<https://thediplomat.com/2023/03/vietnams-new-president-key-takeaways-for-domestic-politics-and-foreign-relations/>

¹² OOSGA. (2023). *Politics of Vietnam in 2023: Politics & Election Tracking*. Retrieved from: <https://oosga.com/politeia/vnm/>

Overall, while the CPV continues to maintain strong control over Vietnam's political environment, recent changes indicate a nuanced shift towards addressing internal challenges and fostering a more effective governance framework.

Economic Landscape

Vietnam's economy has continued its robust growth, benefiting from significant foreign direct investment (FDI) driven by its competitive labor costs, strategic trade agreements, and infrastructure improvements. Despite ongoing challenges such as corruption and infrastructure bottlenecks, Vietnam has maintained its status as one of the fastest-growing economies in the world. The government remains focused on market liberalization and reducing state intervention in business and economic activities. Accordingly, the anti-corruption effort is part of a broader strategy to attract more foreign investment by improving the business environment and reducing bureaucratic hurdles.

Vietnam's participation in major trade agreements like the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) and the Regional Comprehensive Economic Partnership (RCEP) is expected to further boost its economic performance by enhancing trade and investment flows.

Legal Environment

Regulations

Existing acts and regulations in Vietnam significantly influence internet access, digital rights, and freedom of expression online, albeit within a tightly controlled framework. Key legislative instruments include the following:

1. **Civil Code (2015):** This code recognizes the right to privacy and provides legal remedies for privacy violations.
2. **Cybersecurity Law (2018):** This law regulates internet activities and imposes requirements on internet service providers (ISPs) and online platforms. It mandates data localization, obliges ISPs to cooperate with authorities in removing content deemed illegal or harmful, and imposes penalties for violations.
3. **Decree 15/2020/ND-CP:** This decree focuses on combating online misinformation and fake news. It imposes fines for spreading false information online, thereby influencing the scope of online expression.
4. **Penal Code Articles:** Articles such as those on "anti-state propaganda" and "abusing democratic freedoms" are often used to prosecute individuals expressing dissent online and therefore restrict freedom of expression.
5. **Law on Information Technology (2006):** This law regulates various aspects of information technology, including data protection and cybersecurity. It provides a legal framework for internet-related activities but may also be used to restrict certain types of online content.
6. **Decree 72/2013/ND-CP:** This decree governs the management, provision, and use of internet services and online information. It outlines regulations for online content and user behavior, impacting digital rights and freedom of expression.
7. **Access to Information Law (2018):** While primarily focused on access to information held by public bodies, this law also influences digital rights by defining the parameters of information access online.
8. **Personal Data Protection Decree (PDPD)(2023):** Requires explicit consent for data processing and sets principles for data protection such as transparency and purpose.

Despite robust legal provisions, the effective implementation of these laws faces several constraints.¹³ Some of the factors that hinder enforcement efforts are a lack of public awareness of data protection rights, limited technological infrastructure, a shortage of trained data protection officers and legal experts, and a lack of understanding among businesses, particularly small and medium-sized enterprises (SMEs).

¹³ Bach Thi Nha Nam. (2022). Finalise the legislation on personal data protection. Vietnam legislation research journal. 05 (453), 03/2022. Retrieved from <http://lapphap.vn/Pages/TinTuc/211048/Hoan-thien-phap-luat-ve-bao-ve-du-lieu-ca-nhan.html>

Inconsistent enforcement practices across regions and overlapping regulations between governmental bodies further complicate compliance, while rapid technological advancements and emerging cybersecurity threats pose significant challenges.

Additionally, the requirement for government approval for cross-border data transfers adds complexity for businesses operating internationally. Addressing these constraints will necessitate ongoing efforts from the government, businesses, and civil society to enhance data protection practices, build capacity, raise awareness, and foster a culture of privacy awareness across Vietnam.

Despite purported aims to ensure cybersecurity and combat misinformation, these acts and regulations also restrict internet access and curtail freedom of expression online. They provide the government with legal mechanisms to monitor and control online activities, often leading to censorship, surveillance, and legal consequences for dissenting voices.

Censorship and Surveillance

Under Vietnam's authoritarian political system, freedoms of assembly, association, expression, press, and religion, as well as civil society activism, are tightly restricted and controlled by the Communist Party despite the Constitution recognizing civil and political rights.¹⁴ Content and topics deemed unfavorable to the party, such as political opposition, corruption, and human rights issues, are subject to various forms of censorship. In 2024, the Press Freedom Index ranked Vietnam at position 174 out of 180 countries, reflecting the severe restrictions on press freedom.¹⁵ Additionally, Freedom House classified Vietnam as “not free” in terms of internet freedom, citing significant obstacles to access, limited content, and substantial violations of user rights.

Censorship methods in Vietnam involve various measures aimed at regulating media outlets and online content. State-controlled media is prevalent to ensure that the information disseminated aligns with the government's policies and viewpoints. Furthermore, independent journalists and bloggers critical of the government often experience surveillance, and many are arrested and imprisoned for their activities.

Online content is governed by laws such as the Cybersecurity Law of 2018, which mandates local data storage and cooperation with authorities for content removal deemed objectionable. In addition, popular social media platforms like Facebook, YouTube, and Zalo are subject to government oversight, with frequent requests for content removal and site blocking. Legal frameworks, including Decree 15/2020/ND-CP and Penal Code articles, outline penalties for spreading dissenting views. Surveillance tactics, such as technological monitoring and direct surveillance, are employed with the aim of maintaining control over the public discourse. These are used to monitor online activities and individuals, including journalists and activists.

¹⁴ Freedom House. (2023). Vietnam Country Report. Retrieved from <https://freedomhouse.org/country/vietnam>

¹⁵ Reporter without borders. (2022). Vietnam country fact file. Retrieved from <https://rsf.org/en/country/vietnam>

Reported Cases of Internet Censorship

In Vietnam, cases of internet censorship and surveillance are not uncommon, reflecting the government's tight control over online content and dissenting voices. Several reported incidents demonstrate the extent of internet censorship in the country:

Official Announcement of Blacklisted Websites Not for Advertisement

The Ministry of Information and Communications (MIC) has issued official announcements regarding a blacklist of 403 websites deemed to contain signs of law violation in 2023 and not recommended for advertisement.¹⁶ According to the Government's Decree 70/2021/ND-CP dated July 20, 2021, advertising service dealers, advertising publishers, and advertisers shall not cooperate with the websites blacklisted by the MIC and named on the ministry's portal. The Blacklist¹⁷ includes gambling and betting-related websites and many websites that illegally broadcast and violate copyright of sports programmes. Besides, the MIC also published a list of websites with verified content (whitelisted websites), and brands and businesses are encouraged to advertise on those whitelisted websites.¹⁸

News Reports on Internet Censorship

Various news outlets and online platforms have reported instances of internet censorship in Vietnam. These include multiple websites critical of the government, which are often inaccessible from within Vietnam, such as Dân Luận,¹⁹ Luật Khoa,²⁰ The Vietnamese,²¹ Việt Nam Thời báo,²² and Dân Làm Báo.²³ Certain international websites have also been reported to have unstable and unpredictable access, such as the Human Rights Watch (HRW), the Vietnamese editions of Radio Free Asia (RFA), and the British Broadcasting Corporation (BBC).²⁴

¹⁶ Vietnam Plus. (2024). *Some 400 websites were blacklisted for legal violations*. Retrieved from: <https://en.vietnamplus.vn/some-400-websites-blacklisted-for-legal-violations-post275753.vnp>

¹⁷ Authority of Broadcasting and Electronic Information. (2024). *Blacklist websites with signs of violating the law in 2023, do not release advertising products*. Retrieved at: <https://abei.gov.vn/thong-tin-dien-tu/bo-thong-tin-va-truyen-thong-cap-nhat-danh-sach-cac-website-co-dau-hieu-vi-pham-phap-luat-nam-2023-de-nghi-khong-phat-hanh-san-pham-quang-cao-/108358>

¹⁸ Authority of Broadcasting and Electronic Information. (2024). *Whitelist websites with verified content for advertisement*. Retrieved from: <https://abei.gov.vn/thong-tin-dien-tu/danh-sach-noi-dung-%E2%80%9Cda-duoc-xac-thuc%E2%80%9D-tren-mang-white-list-su-dung-cho-hoat-dong-quang-cao/108016>

¹⁹ <https://www.danluan.org/>

²⁰ <https://www.luatkhoa.org/>

²¹ <https://www.thevietnamese.org/>

²² <https://vietnamthoibao.org/>

²³ <https://danlambaovn.blogspot.com/>

²⁴ Freedom house. (2021) Freedom on the net report - Vietnam country. Retrieved from <https://freedomhouse.org/country/vietnam/freedom-net/2021>

While disinformation and rising hate speech are legitimate concerns for governments in Southeast Asia, some governments including Vietnam's have used vague definitions to exert greater control over the digital space.²⁵

Exercise of Authority by Internet Service Providers (ISPs)

ISPs in Vietnam are required to comply with government regulations regarding internet censorship. There have been cases where ISPs have blocked access to specific websites or removed content at the government's request. Failure to comply with these requests can result in penalties or revocation of operating licenses for the ISP.

The government has implemented measures to force global technology firms to comply with government's requests on censorship, such as taking Facebook's local servers offline in 2020.²⁶ According to the Ministry of Public Security, in 2021, they requested Facebook and Google to arrange 24/7 permanent staff to review content. They then removed 621 accounts, articles, and videos with illegal content and prevented access to 4,214 web servers that post harmful and toxic information from foreign countries.²⁷ Another report from the Ministry of Information and Communication (MIC) states that they required ISPs to censor 3,000 websites regularly, preventing 2,000 websites and posts. The ministry also required cross-border service providers (Facebook, Google, and Apple) to remove harmful and toxic content.²⁸ Specifically, from 2018 to the end of 2023, Facebook has blocked or removed more than 15,691 posts; 48 groups affecting children, fake news, and distorted information; and 353 fake accounts with fake news, and distorted information. Youtube has removed 2,000 infringing advertisements about drugs and medical supplements, and blocked 33 channels and 83,082 infringing videos. TikTok has blocked and removed 1,906 links, 149 accounts, and 3,568 videos.²⁹

²⁵ BBC news.(2023). Vietnam to crack down on anonymous social media accounts. Retrieved from <https://www.bbc.com/news/business-65529716>

²⁶ Reuter. (2020). Vietnam threatens to shut down Facebook over censorship requests - source. Retrieved from <https://www.reuters.com/article/us-vietnam-facebook-shutdown-exclusive-idUKKBN27Z1MP>

²⁷ National army news. (2021). The Ministry of Public Security removed and blocked thousands of websites with bad and malicious content. Retrieved from <https://www.qdnd.vn/quoc-phong-an-ninh/tin-tuc/bo-cong-an-go-bo-ngan-chan-hang-nghin-trang-web-co-noi-dung-xau-doc-675020>

²⁸ MIC. (2022). The Ministry of Information and Communications is determined to prevent and handle malicious information on social networks. Retrieved from https://mic.gov.vn/mic_2020/Pages/TinTuc/152518/Bo-TT-TT-kien-quyet-ngan-chan--xu-ly-cac-thong-tin-xau-do-c-tren-mang-xa-hoi.html

²⁹ Public security news. (2023). Prevent and remove hundreds of thousands of infringing content on cross-border platforms. Retrieved from <https://cand.com.vn/cong-nghe/ngan-chan-go-bo-hang-tram-nghin-noi-dung-vi-pham-tren-cac-nen-tang-xuyen-bien-gioi-i714910/>

Surveillance

Citizens enjoy more freedom in online discussions, and blogging and social media have become alternative sources of information and opinions to official public media. Bloggers, activists, and social media users have written about controversial subjects in Vietnam, such as human rights, democracy, religions, political figures, the communist party, and the state. However, they have been made subject to strict censorship and surveillance by authorities, especially high-profile figures with many followers and readers.³⁰ Worse, many journalists and bloggers have been arrested, assaulted, and given criminal convictions.³¹ Notable recent cases include Hoang Thi Minh Hong,³² Ngo Thi To Nhien,³³ Pham Tat Thanh,³⁴ Truong Huy San, and Tran Dinh Trien³⁵, Le Minh The,³⁶ Nguy Thi Khanh,³⁷ Dang Dinh Bach,³⁸ Pham

³⁰ Mai Duong.(2017). Blogging Three Ways in Vietnam's Political Blogosphere. Contemporary Southeast Asia (39:2 ed.)

³¹ Mai Duong.(2017). Blogging Three Ways in Vietnam's Political Blogosphere. Contemporary Southeast Asia (39:2 ed.)

³² The Guardian. (2023). Vietnam jails leading climate activist Hoang Thi Minh Hong for tax evasion. Retrieved from:
<https://www.theguardian.com/world/2023/sep/28/vietnam-jails-leading-climate-activist-hoang-thi-minh-hong-for-tax-evasion>

³³ The straitstimes. (2023).Vietnam confirms arrest of energy think-tank chief. Retrieved from:
<https://www.straitstimes.com/asia/se-asia/vietnam-confirms-arrest-of-energy-think-tank-chief>

³⁴ Thoibao.de. (2024). Former admin of Fanpage “Patriot Diary” arrested on “conducting anti-state propaganda” . Retrieved from:
<https://thoibao.de/blog/2023/07/25/former-admin-of-fanpage-patriot-diary-arrested-on-conducting-anti-state-propaganda>

³⁵ Tuoi tre news. (2024). Arrest Mr. Truong Huy San (Osin Huy Duc) and Mr. Tran Dinh Trien. Retrieved from:
<https://tuoitre.vn/bat-ong-truong-huy-san-osin-huy-duc-va-ong-tran-dinh-trien-20240602083151396.htm>

³⁶ Radio Free Asia.(2023).Vietnam arrests Facebook user for allegedly posting ‘illegal content’. Retrieved from:
<https://www.rfa.org/english/news/vietnam/le-minh-the-02222023172419.html>

³⁷ The Guardian. (2022). Award-winning Vietnamese environmentalist arrested as rights groups fear ‘clamp down’. Retrieved from:
<https://www.theguardian.com/global-development/2022/feb/09/award-winning-vietnamese-environmentalist-arrested-as-rights-groups-fear-clamp-down>

³⁸ The Vietnamese. (2022). Dang Dinh Bach: Director Of A Nonprofit Environmental Organization Receives 5 Years In Jail. Retrieved from:
<https://www.thevietnamese.org/2022/01/dang-dinh-bach-director-of-a-nonprofit-environmental-organization-receives-5-years-in-jail/>

Thi Doan Trang,^{39,40} Nguyen Quoc Duc Vuong,⁴¹ Nguyen Ngoc Nhu Quynh⁴², and Tran Thi Nga,⁴³ among many other people imprisoned.⁴⁴

In the 2024 World Press Freedom rankings, Vietnam was ranked 173 out of 180. This marked a marginal improvement from the 2023 ranking of 178 out of 180, just above North Korea and China.⁴⁵

Network Landscape

In 2024, Vietnam's internet penetration rate stood at 79.1% of the total population with 78.44 million internet users. On average, Vietnamese spend 6 hours and 18 minutes daily on the internet on all devices, and 98.9% of users access the internet via their mobile phones. In addition, there were 168.5 million cellular mobile connections in Vietnam at the start of 2024.⁴⁶

In terms of fixed broadband internet service providers, VNPT (a state-owned enterprise), Viettel (a military-owned enterprise), and FPT (a private-owned enterprise) are the three leading companies that cover 92% of the market share.⁴⁷ In terms of mobile service, Viettel, Mobiphone, and Vinaphone are the three market leaders, providing services to 98.1% of the market.⁴⁸ August 2024 data from Ookla showed that the median download speed via cellular mobile connections stood at 47.06 Mbps, placing Vietnam in the 58th place out of 144 countries. The median speed provided by fixed broadband internet connections was 105.04 Mbps, which ranked at 43 out of 181 countries.⁴⁹

³⁹ The Washington Post. (2021). Vietnam jails its 'most famous activist' for nine years Retrieved from

https://www.washingtonpost.com/world/asia_pacific/vietnam-press-freedom-pham-doan-trang/2021/12/14/8ed0f008-57e4-11ec-8396-5552bef55c3c_story.html

⁴⁰ National army news. (2021). After Pham Thi Doan Trang's trial court. Retrieved from

<https://cand.com.vn/Chong-dien-bien-hoa-binh/lai-tung-hoa-mu-sau-phien-toa-xet-xu-pham-thi-doan-trang-i638333/>

⁴¹ Reuter. (2020). Vietnam jails Facebook user for eight years over 'anti-state' posts. Retrieved from

<https://www.reuters.com/article/us-vietnam-security-trial-idUSKBN24814T>

⁴² The New York times. (2016). Vietnam arrests Mother Mushroom, a top blogger, for criticizing government.

Retrieved from <https://www.nytimes.com/2016/10/12/world/asia/vietnam-arrest-blogger-mother-mushroom.html>

⁴³ CPJ. (2020). Freedom at a high cost for Vietnamese blogger Tran Thi Nga. Retrieved from

<https://cpj.org/2020/02/vietnam-blogger-jail-exile-tran-thi-nga/>

⁴⁴ Bass, Thomas. (2017). Censorship in Vietnam: Brave New World. University of Massachusetts Press. ISBN 978-1625342959.

⁴⁵ Reporters without borders. (2024). World Press Freedom Index. Retrieved at:

<https://rsf.org/en/index?year=2024>

⁴⁶ Data reportal. (2024). Digital 2024: Vietnam report. Retrieved from

<https://datareportal.com/reports/digital-2024-vietnam>

⁴⁷ Tienphong news. (2020). New trend in cable internet market. Retrieved from

<https://tienphong.vn/he-lo-ve-lan-gio-moi-tren-thi-truong-internet-cap-quang-post1276350.tpo>

⁴⁸ Vietstock. (2020). Technology - Telecommunication industry report 2020. Retrieved from

<https://finance.vietstock.vn/downloadedoc/7540>

⁴⁹ Ookla. (2024). Speedtest global index. Retrieved from <https://www.speedtest.net/global-index>

In terms of connectivity, Vietnam has seen significant expansion in 4G and emerging 5G technology in urban centers, leading to faster internet speeds and improved connectivity for users. However, access to these high-speed networks may still be limited in remote or underdeveloped areas and contribute to connectivity disparities across the country.

In terms of pricing, Vietnam has one of the cheapest Internet rates for both fixed and mobile internet. The average monthly package cost for broadband internet in Vietnam is \$8.72, ranking it 7th out of 223 countries.⁵⁰ The average price of 1GB of mobile data in Vietnam is \$0.29, ranking it 21th out of 237 countries.⁵¹

With 72.7 million users, social media is widely used in Vietnam. An increase of 6.5 million (+9.8 percent) in social media users was noted between early 2023 and the beginning of 2024. Facebook, YouTube, Zalo, Tiktok, and Instagram are the most popular social media platforms in Vietnam. In Vietnam, there are 72.7 million Facebook users, 63 million YouTube users, 67.2 million TikTok users, and 10.9 million Instagram users, forming a highly promising and dynamic market for advertising and e-commerce.⁵² Vietnam's digital economy is projected to exceed US\$43 billion by 2025 as the country continues to pursue projects in e-government, internet of things, smart cities, financial technology, artificial intelligence, and so on.⁵³

There are no specific details about internet shutdowns in Vietnam from mid-2023 to mid-2024 in the available data.

⁵⁰ Cable.co.uk. (2024). Global broadband pricing 2024. Retrieved from <https://www.cable.co.uk/broadband/pricing/worldwide-comparison/>

⁵¹ Cable.co.uk. (2024). Worldwide Mobile Data 2024. Retrieved from <https://www.cable.co.uk/mobiles/worldwide-data-pricing/#pricing>

⁵² Data reportal. (2023). Digital 2023: Vietnam report. Retrieved from <https://datareportal.com/reports/digital-2023-vietnam>

⁵³ World Bank. (2020). Digital Economy in Vietnam: Building the Foundations for Future Growth. Retrieved from

<https://blogs.worldbank.org/eastasiapacific/digital-economy-vietnam-building-foundations-future-growth>

Findings on Internet Censorship in Vietnam

All of the findings are based on data collected through OONI from 1 July 2023 to 30 June 2024.

Blocking of Websites

A total of 4.2 million measurements from 2,296 websites were tested on OONI throughout the one-year period. At time of writing (30 June 2024), the current test list contains 1,666 websites in the Global Test List and 417 websites in the Vietnam Test List and other websites under event/project testing.

[A known DNS redirect address, i.e. 103.192.236.94](#), led to a block page and the Confirmed Blocked domains were found using this fingerprint. However, due to lack of measurements, very few blockings were able to be confirmed as blocked for this round of reporting. A few known blockings based on news reports and/or court orders appear to be [corroborated by OONI data](#), presenting ambiguous anomalies such as http failures and generic timeout errors. Therefore, it is likely that those anomalies provide a signal of censorship or are true positives.

Thus in this report, Likely Blocked or Inaccessible websites were those that either had a redirect to an ISP address or page, or those with a high weighted anomaly ratio.⁵⁴ As the [OONI blocking fingerprints](#) also include redirects to the ISP page as confirmed blocks, these were also marked as Likely Blocked or Inaccessible in this report.



⁵⁴ *Weighted anomaly ratio: It is calculated by finding the ratio of the Anomaly and Confirmed counts over the total measurements per ASN factoring weights based on number of measurements per domain and per ASN. A high anomaly ratio is when the P90 of the anomaly ratio of a domain exceeds 90%.*

	Jul-Sep 2023	Oct-Dec 2023	Jan-Mar 2024	Apr-Jun 2024	Total
Measured	363,306	444,819	1,681,506	1,734,785	4,224,416
Blocked	55	87	1,237	420	1799
Block rate	0.02%	0.02%	0.07%	0.02%	0.04%
Domain	2,166	2,077	2,166	2,091	2,296
ASNs	15	16	13	13	23

Table 1: Summary of OONI web connectivity measurements for Vietnam from 1 July 2023 to 30 June 2024.

These measurements were analyzed using the heuristics as in Annex IV, and it was found that there were 5 confirmed blocked websites and 171 likely blocked or inaccessible websites. The full list of these confirmed blocked websites are mentioned in Annex I.

Category	Number of websites tested	Number of blocked websites	Percentage of blocked websites	Number of likely blocked or inaccessible websites	Percentage of likely blocked or inaccessible websites
ALDR	38		0.00%		0.00%
ANON	123		0.00%	3	2.44%
COMM	37		0.00%	1	2.70%
COMT	135		0.00%	4	2.96%
CTRL	23		0.00%		0.00%
CULTR	108		0.00%	2	1.85%
DATE	25		0.00%	1	4.00%
ECON	46		0.00%	1	2.17%
ENV	51	1	1.96%		0.00%
FILE	79		0.00%	3	3.80%
GAME	38	1	2.63%	2	5.26%
GMB	37		0.00%	10	27.03%
GOVT	43		0.00%	1	2.33%
GRP	96		0.00%	6	6.25%
HACK	48		0.00%	2	4.17%

Category	Number of websites tested	Number of blocked websites	Percentage of blocked websites	Number of likely blocked or inaccessible websites	Percentage of likely blocked or inaccessible websites
HATE	10		0.00%	2	20.00%
HOST	140		0.00%	6	4.29%
HUMR	181		0.00%	15	8.29%
IGO	21		0.00%		0.00%
LGBT	87	1	1.15%	1	1.15%
MILX	3		0.00%		0.00%
MISC	8		0.00%		0.00%
MMED	66		0.00%	2	3.03%
NEWS	207	1	0.48%	25	12.08%
POLR	92		0.00%	40	43.48%
PORN	27		0.00%	8	29.63%
PROV	21		0.00%	2	9.52%
PUBH	64		0.00%	3	4.69%
REL	93		0.00%	10	10.75%
SRCH	51		0.00%	1	1.96%
XED	45		0.00%	3	6.67%
Uncategorized	253	1	0.40%	17	6.72%

Table 2: Summary of OONI web connectivity measurements for Vietnam from 1 July 2023 to 30 June 2024 by category.

Note: Blocked and likely blocked measurements include Confirmed Blocked, Anomaly and Failures on OONI measurements.

Political Criticism Websites

A total of 40 domains under the category of political criticism were found to be blocked, likely blocked, or inaccessible in Vietnam. Among those, 14 domains were confirmed blocked by Ooni. Most of the listed websites are the same as the 2023 report, but there are two sites added: newosin.wordpress.com⁵⁵ and paulusleson.wordpress.com.⁵⁶ While these two sites are not confirmed blocked, they have a high anomaly rate, which can be considered as likely blockings.

News Media Websites

There were 26 domains under the category of news media found to be either blocked, likely blocked, or inaccessible. Among these, seven domains were confirmed blocked. At the time of writing, BBC⁵⁷ and RFI⁵⁸ are still inaccessible, along with vietinfo.eu.⁵⁹

Human Rights Websites

There were 15 sites under the human rights category found to be likely blocked or inaccessible, and none of them were confirmed to be blocked. Notably, the inaccessible sites included Amnesty International⁶⁰ and Vietnamese Women for Human Rights.⁶¹

⁵⁵ This is a social and political commentary blog of famous journalist Truong Huy San - who recently arrested in June 2024 for "Abusing democratic freedoms to infringe on the interests of the State, the legitimate rights and interests of organizations and individuals" as prescribed in Clause 2, Article 331 of the Penal Code.

⁵⁶ This is a personal blog of a Catholic blogger Paulus Le Son, who was arrested several times for the "plot to overthrow the government".

⁵⁷ www.bbc.com

⁵⁸ vi.rfi.fr

⁵⁹ Vietinfo.eu is also the newly founded to be blocked this year. This is a news service of Vietnamese People in Eastern Europe based in the Czech Republic, providing information about Vietnam and the world to the Vietnamese community abroad. Their focus of discussion on politics, government, elections issues of Vietnam. However, as announced on March, 24, the site was officially closed after 10 years of operation, but they moved to bring news on Facebook.

⁶⁰ www.amnesty.org - a global movement of more than 10 million people in over 150 countries and territories who campaign to end abuses of human rights.

⁶¹ vnwhr.net - an independent, non-profit, non-governmental organization, which acts to protect and promote human rights, especially women's rights, and protect the interest and promote the role of Vietnamese women in the society

Methods of Blocking of Websites

In this section, a well known blocked website in Vietnam, www.bbc.com, was selected to analyze using OONI data. As shown in Chart 1, the analysis covered eight ASNs and found that the common methods of blocking are DNS, HTTPS, TCP, and TLS. It should be noted that there may be other methods of censorship used beyond OONI measurements, particularly for other domains or ASNs that were not covered.

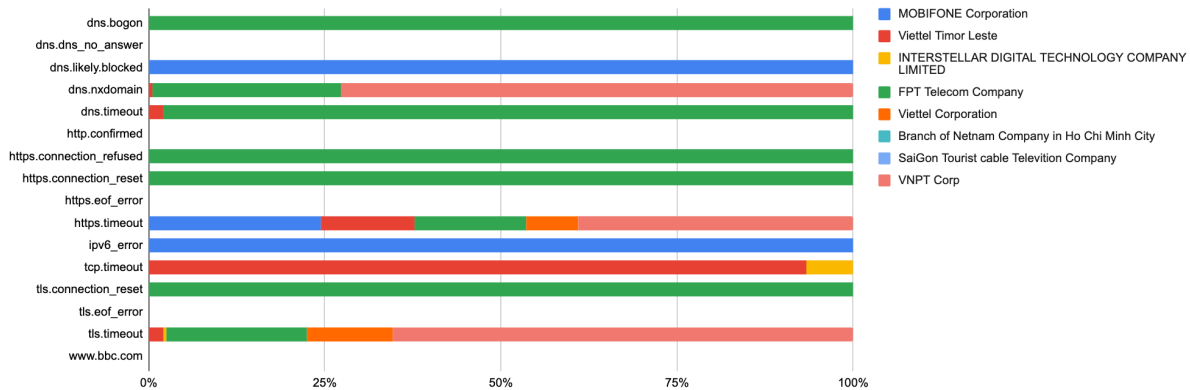


Chart 1: Methods of blockings used to block www.bbc.com in Vietnam.

Findings on Takedown Requests

Meta recently reported that between July and December 2023, they restricted access to over 2,300 items in Vietnam, including personal posts and comments. This action was taken in response to reports from the Ministry of Information and Communications' (MIC) Authority of Broadcasting and Electronic Information (ABEI) and the Ministry of Public Security (MPS). The reports cited alleged violations of local laws regarding the dissemination of information that distorts, slanders, or insults the reputation of an organization or the honor and dignity of an individual, as per Article 5.1(d) of Decree No. 72/2013/ND-CP. The remaining items were restricted for alleged violations of other local laws.

Acknowledgement of Limitations

- **Period of study**

To examine the most recent censorship trends and events, we limited the findings of this study to OONI network measurements collected from 1 July 2023 to 30 June 2024.

- **Vantage points**

Although OONI network measurements were collected from several vantage points in the country, the OONI Probe tests were not run consistently on each network, nor on all networks in the country.

- **Use of domain as a unit of measurement of websites**

In general, “URL” (or in OONI’s terms – input) and “domain” are interchangeable terms used to refer to a website. In the OONI test list, the full URLs are input in the probe to be tested for censorship, similar to a URL starting with “https” or “http” in a browser. The URLs are measured for censorship by [OOONI Probe](#) with the [Web Connectivity experiment](#), which is designed to measure whether access to tested URLs is interfered with through DNS tampering, TCP/IP blocking, an HTTP transparent proxy, or through TLS interference. However, when analyzing results on OONI, the reader should be aware that there are differences in the numbers concerning the specific input or domain, as a different volume of measurements may have been collected for a URL (e.g. <https://www.hrw.org/asia/cambodia>) in comparison to a domain (e.g. www.hrw.org).

In this 2024 [report](#), we based our analysis primarily on URLs because they were thought to provide more context on the reason why the web page was blocked and could be categorized more similarly to the [Citizen Lab test lists](#), which are URL format. However, in this 2024 report, we based our analysis on domains, so readers will need to be cautious about making year-to-year comparisons.

- **Confirmed blockings vs Likely blockings or Inaccessible**

The confirmed blocked websites are based on the data where the testing result shows a trace to a government or ISP block page. This typically means that there is a block page served when the user tries to access the website on a particular network, or that DNS resolution returns an IP address associated with censorship. These cases are automatically annotated as “confirmed blocked” based on fingerprints added to OONI’s database. When a website is found confirmed blocked, it may only be blocked on specific networks and still remain accessible on the rest.

Confirmed blockings may also be specific based on the URL; for example, <https://abc.com/> may be censored but not <https://www.abc.com/>.

In this 2024 report, confirmed blockings and likely blockings were consolidated based on the country. See [Verifying OONI measurements](#).

- **Test lists**

The websites tested for censorship on OONI are either from the [Citizen Lab test lists](#) or additional websites tested by [OONI Probe](#) users. While the websites in the test lists are categorized based on specific [standardised categories](#), the percentage of blocked or likely blocked cases may not necessarily reflect the entire state of internet censorship in the country, as only sampled websites are included in the testing.

- **Differences in numbers with OONI data**

The findings in this report were obtained after further processing the data from OONI. This involved obtaining more confirmed blockings and eliminating false positives through additional heuristics and manual verification by iMAP researchers based on country or local context. While these heuristics will eventually be added to OONI's fingerprints, OONI will only process them for future testing.

Additionally, iMAP researchers have categorized blocked websites that were not part of the Citizen Lab test lists but were tested on OONI via custom test lists. Hence, the figures in this report may differ from the results on [OONI Explorer](#).

- **Testing of instant messaging apps and circumvention tools**

The instant messaging apps and circumvention tools are limited to those tested on OONI. Therefore, the results may not reflect the state of censorship of apps more commonly used in individual countries.

Conclusion

Under Vietnam's authoritarian political system, the internet continued to be tightly restricted and controlled by the Communist Party despite the Constitution recognizing civil and political rights. Content and topics deemed unfavorable to the party, such as political opposition, corruption, and human rights issues, are subject to various forms of censorship.

The blocklist released by the Ministry of Information and Communications (MIC) contained mostly gambling websites and websites that illegally broadcast media content, however based on OONI data it was found that political criticism websites were likely blocked as well. However, these websites that were detected during the period of coverage were not recent and many have not been updated for years. Independent news websites are also blocked, including BBC and RFI; as well as human rights websites like Amnesty International and Vietnamese Women for Human Rights.

Based on an analysis of censorship of the BBC website in the country across 8 ASNs, the methods used for censorship were DNS, HTTPS, TCP and TLS.

Contribute to the Study

If you would like to contribute to the OONI measurements, there are several ways to get involved:

- Perform testing on [various platforms](#), both on Mobile (iOS and Android) and Desktop, including on the CLI on Linux platforms. The domains you test can be either randomly selected from the [Citizenlab Test Lists](#) or custom test lists specific to your needs.
- Contribute to the test lists on GitHub or on [OONI](#).
- Translate the OONI Probe to your local language [here](#).
- Participate in community discussions on the [OONI Slack channel](#) or our Volunteers Telegram Channel.

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Annex I: List of Confirmed or Likely Blockings

List of Confirmed Blockings

Blocked Websites	Categories	ASN	Details
hanhtinhtitani.c.org	Environment	AS7552, AS18403, AS45903, AS45899	Link
kenhgamez.com	Gaming	AS18403, AS45899, AS7552	Link
www.giaitriluke.com		AS18403, AS45899, AS7552	Link
www.haaretz.com	LGBT	AS7552, AS18403, AS24086, AS45899, AS131429	Link
www.xaluan.com	News Media	AS7552, AS18403, AS45899	Link

List of Likely Blockings

Blocked Websites	Categories	ASN	Details
1xbet.com	Gambling	AS131429	Link
360game.vn	Gaming	AS7552, AS18403, AS45899, AS150881	Link
anhbasam.wordpress.com	Political Criticism	AS7552, AS18403, AS45899, AS131429	Link
anhduong.net		AS18403, AS45899, AS131429	Link
assets.gitlab-static.net	Hosting and Blogging Platforms	AS7552	Link
bacaytruc.blogspot.com	Political Criticism	AS18403, AS131429, AS7552	Link
banthis.tv	News Media	AS7552	Link
baotiengdan.com	Political Criticism	AS18403, AS45899, AS131429	Link
basam.vet	Political Criticism	AS7552, AS24086, AS45899, AS131429	Link

Blocked Websites	Categories	ASN	Details
beeg.com	Pornography	AS18403, AS45899	Link
bitcoin-mix.org	E-commerce	AS7552	Link
camnanggioitinh.edu.vn	Sex Education	AS7552	Link
caodai.com.vn	Religion	AS7552	Link
cdn-client.medium.com	Hosting and Blogging Platforms	AS7552, AS18403	Link
chiase.io		AS7552	Link
danlambaovn.blogspot.com	Political Criticism	AS18403, AS131429	Link
danoanviet.blogspot.com	Political Criticism	AS18403, AS131429	Link
danquyen.com	News Media	AS7552, AS18403, AS24173, AS45899, AS131429	Link
datviet.free.fr	Political Criticism	AS7552, AS18403, AS45899, AS131429	Link
diendanctm.blogspot.com	Political Criticism	AS18403, AS131429, AS7552	Link
doithoaionline.wordpress.com	Political Criticism	AS7552, AS18403, AS24086, AS45899, AS131429	Link
dungday.tripod.com	Political Criticism	AS7552, AS24086, AS131429	Link
endtorturevn.org		AS131429	Link
ethongluan.org	Political Criticism	AS7552, AS18403, AS24086, AS45899, AS131429	Link
exodusforvietnam.wordpress.com	Political Criticism	AS7552, AS18403, AS24086, AS45899, AS131429	Link
fstimes.org		AS7552, AS18403	Link
giaoducgioitinh.online	Sex Education	AS7552	Link
goken.free.fr	Political Criticism	AS7552, AS24086	Link

Blocked Websites	Categories	ASN	Details
haingoaiphiedam.com	News Media	AS7552, AS24086, AS131429	Link
hot.gamevatruyen.com	Provocative Attire	AS7552	Link
huynhngocche.nh.blogspot.com	Political Criticism	AS18403, AS131429	Link
im0-tub-com.yandex.net	Search Engines	AS7552, AS18403, AS45899, AS150881	Link
khmerkrom.org	Religion	AS7552, AS45899	Link
khai8406vn.blogspot.com	Political Criticism	AS18403, AS131429	Link
lamsaodevao.com	Hacking Tools	AS7552, AS18403, AS45899, AS150881	Link
leguocquan.blogspot.com	Political Criticism	AS18403, AS131429	Link
mec.org.vn	Human Rights Issues	AS7552	Link
medium.com	Hosting and Blogging Platforms	AS7552, AS18403, AS45899	Link
miro.medium.com	Hosting and Blogging Platforms	AS7552, AS18403	Link
newsin.wordpress.com	Political Criticism	AS7552, AS18403, AS45899, AS131429	Link
nghiathuc.com	Political Criticism	AS45899, AS131429	Link
nguoibuongio1972.blogspot.com	Political Criticism	AS131429	Link
nguoidan.net	Political Criticism	AS7552, AS24086, AS131429	Link
nguyenthaihocfoundation.org	Political Criticism	AS18403, AS45899, AS131429	Link

Blocked Websites	Categories	ASN	Details
nhacaionline.com		AS18403, AS7552, AS45899	Link
nhatnguyet2014.wordpress.com	Political Criticism	AS7552, AS18403, AS45899, AS131429	Link
ntuongthuy.blogspot.com	Political Criticism	AS18403, AS131429, AS7552	Link
nuyeunu.vn	LGBT	AS7552	Link
ocsp.int-x3.letsencrypt.org	Anonymization and circumvention tools	AS7552	Link
pastebin.com	Hosting and Blogging Platforms	AS18403, AS45899	Link
paulusleson.wordpress.com	Political Criticism	AS7552, AS24086	Link
phamthanhnguyen.blogspot.com	Political Criticism	AS18403, AS131429, AS7552	Link
pornhub.com	Pornography	AS7552, AS18403, AS45899	Link
quediem.org		AS7552	Link
radiothongluan.free.fr	Political Criticism	AS7552, AS18403, AS45899, AS131429	Link
sapphovn.com		AS7552	Link
scontent-ams4-1.cdninstagram.com	Social Networking	AS7552	Link
scontent-frt3-2.cdninstagram.com	Social Networking	AS24086, AS7552, AS24088	Link
scontent-vie1-1.cdninstagram.com	Social Networking	AS7552	Link
secure.flickr.com	Media sharing	AS7552, AS45899, AS18403	Link

Blocked Websites	Categories	ASN	Details
sex-hay.pro	Pornography	AS18403, AS45899, AS7552	Link
site.voicepulse.com	Communication Tools	AS7552, AS45899, AS18403	Link
taz.de	News Media	AS7552, AS18403, AS45899	Link
tdngonluan.com	Political Criticism	AS7552, AS45899, AS131429	Link
techroute.vn		AS7552	Link
the88project.org	Human Rights Issues	AS18403, AS45899, AS131429	Link
thoibao.com	News Media	AS7552, AS18403, AS45899, AS131429	Link
tiengnoidanchu.wordpress.com	Political Criticism	AS7552, AS18403, AS45899, AS131429	Link
tokhaiyte.vn	Public Health	AS7552	Link
topbet1.com	Gambling	AS45899	Link
truongduynhat.org	Political Criticism	AS7552, AS18403, AS45899, AS131429	Link
us.tvnet.gov.vn	Media sharing	AS7552, AS18403, AS45899, AS150881	Link
vi.rfi.fr	News Media	AS131429, AS18403	Link
vietbao.com	News Media	AS7552, AS45899	Link
vietfederation.ca	Culture	AS7552, AS18403, AS45899	Link
vietinfo.eu	News Media	AS7552, AS18403, AS45899, AS131429	Link
vietnamrightnow.com	News Media	AS7552, AS131429	Link
vietnamthoibao.org	Political Criticism	AS18403, AS131429	Link
vietnamvoice.org	Human Rights Issues	AS7552, AS18403, AS24086, AS45899, AS45543	Link
vietquoc.com	Political Criticism	AS7552, AS45899, AS131429	Link
vietsingle.vietfun.com	Online Dating	AS7552	Link
viettan.org	Political Criticism	AS7552, AS18403, AS24086, AS45899, AS131429	Link

Blocked Websites	Categories	ASN	Details
vn.theasianparent.com	Public Health	AS18403, AS45899	Link
vnctcmd.blogspot.com	Political Criticism	AS18403, AS131429	Link
vnhrdmay11.org		AS7552	Link
vnhrnet.org	Human Rights Issues	AS18403, AS45899, AS131429	Link
vnunion.org		AS7552	Link
vnwhr.net	Human Rights Issues	AS7552, AS18403, AS45899, AS131429, AS133606, AS150881	Link
www.888casino.com	Gambling	AS7552, AS45899	Link
www.8game08.com	Gambling	AS7552	Link
www.amnesty.org	Human Rights Issues	AS7552, AS18403, AS45899, AS131429	Link
www.anhemdanchu.org	Political Criticism	AS45899, AS131429	Link
www.anpm.tl	Government	AS133606	Link
www.appzplanet.com	File-sharing	AS7552	Link
www.baocalitoday.com	News Media	AS7552, AS24086, AS131429	Link
www.bbc.co.uk	News Media	AS18403, AS45899, AS131429	Link
www.bbc.com	News Media	AS7552, AS18403, AS45899, AS131429	Link
www.boxitvn.net		AS7552, AS18403, AS24086, AS45899, AS131429	Link
www.bpsos.org	Human Rights Issues	AS45899, AS131429	Link
www.caodai.org	Religion	AS7552	Link
www.casino.com	Gambling	AS7552	Link

Blocked Websites	Categories	ASN	Details
www.catholic.org	Religion	AS7552	Link
www.change.org	Human Rights Issues	AS7552, AS18403, AS45899, AS131429	Link
www.chanlyviet.org	Religion	AS18403, AS45899	Link
www.chuavietnam.com	Religion	AS45899, AS150881, AS7552	Link
www.coithienthai.com	Pornography	AS7552	Link
www.danchimviet.info	News Media	AS18403, AS45899, AS131429	Link
www.danluan.org	Political Criticism	AS7552, AS18403, AS45899, AS131429	Link
www.datviet.com	News Media	AS18403, AS45899, AS131429	Link
www.diendan.org	Social Networking	AS7552, AS24086, AS45899	Link
www.dongcong.net	Religion	AS7552	Link
www.freeexpression.org	News Media	AS7552	Link
www.freehomepage.com	Hosting and Blogging Platforms	AS7552	Link
www.gambling.com	Gambling	AS7552	Link
www.gamespot.com	Gaming	AS7552	Link
www.gapo.vn	Social Networking	AS150881	Link
www.giaitri09.com	Gambling	AS18403, AS45899, AS7552	Link
www.gofundme.com	Economics	AS7552	Link
www.hon.ch	Public Health	AS7552	Link

Blocked Websites	Categories	ASN	Details
www.hrw.org	Human Rights Issues	AS7552	Link
www.inetprivacy.com	Anonymization and circumvention tools	AS131429	Link
www.islamdoor.com	Religion	AS7552	Link
www.itsyoursexlife.com	Sex Education	AS7552	Link
www.luatkhao.org		AS7552, AS45899, AS131429	Link
www.megaproxy.com	Anonymization and circumvention tools	AS7552	Link
www.metacafe.com	News Media	AS7552, AS18403	Link
www.mevietnam.org		AS7552	Link
www.mhro.org	Human Rights Issues	AS131429	Link
www.minds.com	Social Networking	AS18403, AS45899, AS131429, AS7552, AS24086	Link
www.montagnards.org	Human Rights Issues	AS131429	Link
www.ms88vtv.com	Gambling	AS7552	Link
www.mywebcalls.com	Communication Tools	AS7552, AS18403, AS45899, AS150881	Link
www.nazi-lauk-nsdapao.com	Hate Speech	AS7552	Link
www.nguoi-viet.com	News Media	AS18403, AS45899, AS131429	Link
www.oic-oci.org	Religion	AS7552, AS18403, AS45899, AS150881	Link

Blocked Websites	Categories	ASN	Details
www.on-instagram.com	Communication Tools	AS24086, AS7552	Link
www.persecution.org	Religion	AS7552	Link
www.phamdoantrang.com	Political Criticism	AS7552, AS18403, AS131429	Link
www.phenoelit.org	Hacking Tools	AS7552	Link
www.pokerstars.com	Gambling	AS7552, AS45899	Link
www.pornhub.com	Pornography	AS7552, AS18403, AS45899	Link
www.radiodln.com	News Media	AS18403, AS45899, AS131429, AS7552, AS24086	Link
www.rarbg.to	File-sharing	AS7552	Link
www.rfa.org	Human Rights Issues	AS131429, AS7552	Link
www.rfi.fr	News Media	AS7552	Link
www.ruf-ch.org		AS7552	Link
www.saigonbaobao.com	Political Criticism	AS18403, AS45899	Link
www.sbs.com.au	News Media	AS7552	Link
www.sbntv.tv	News Media	AS18403, AS45899	Link
www.serials.ws	File-sharing	AS7552	Link
www.spinpalace.com	Gambling	AS18403, AS45899, AS7552	Link
www.tamtay.vn	Culture	AS7552, AS18403, AS45899, AS150881	Link
www.tawk.to	Communication Tools	AS7552	Link
www.the-interpreter.org	News Media	AS7552	Link

Blocked Websites	Categories	ASN	Details
www.thevietnamese.org	Political Criticism	AS45899, AS7552	Link
www.thongluan.blog	Political Criticism	AS18403, AS7552, AS45899	Link
www.tinparis.net		AS24086, AS7552	Link
www.tqlcvn.org	Hate Speech	AS7552, AS18403, AS45899	Link
www.venus.com	Provocative Attire	AS7552, AS18403, AS45899, AS150881	Link
www.vietnamdaily.com	News Media	AS7552, AS133606	Link
www.vietnamhumanrights.net	Human Rights Issues	AS18403, AS45899, AS7552	Link
www.vietnamhumanrightsdefenders.net	Human Rights Issues	AS18403, AS45899, AS7552	Link
www.vietnamprocs.com	Human Rights Issues	AS7552	Link
www.voanews.com	News Media	AS18403, AS7552	Link
www.voatiengviet.com	News Media	AS18403, AS7552	Link
www.vuicungdafa.com		AS7552, AS45899	Link
www.xvideos.com	Pornography	AS7552, AS18403, AS45899	Link
www.youporn.com	Pornography	AS7552, AS18403, AS45899	Link
xamvn.me		AS131429	Link
xhamster.com	Pornography	AS18403, AS45899	Link
xinloiong.jonathanlondon.net	Political Criticism	AS7552, AS18403, AS45899	Link

Annex II: List of ISPs

ASN	ASN Name
AS55836	Reliance Jio Infocomm Limited
AS138730	Sns Internet Services Private Limited
AS16276	OVH SAS
AS45609	Bharti Airtel Limited
AS45271	<unknown>
AS9829	Bharat Sanchar Nigam Ltd
AS24560	Bharti Airtel Limited
AS24309	Atria Convergence Technologies Pvt. Ltd.,
AS134033	HIREACH BROADBAND PRIVATE LTD
AS31898	Oracle Corporation
AS58966	<unknown>
AS133982	Excitel Broadband Private Limited
AS17665	ONEOTT ENTERTAINMENT LIMITED
AS38266	Hutchison Max Telecom Limited
AS147267	GBPL GLOBAL BROADBAND PRIVATE LIMITED
AS132770	Gazon Communications India Limited
AS135718	<unknown>
AS55577	Beam Telecom Pvt Ltd
AS55352	Microscan Computers Private Limited
AS45820	TTSL-ISP DIVISION
AS141806	SANSOM NETTECH PVT LTD
AS134674	Tata Play Broadband Private Limited
AS55824	National Knowledge Network
AS138245	Xpress Net Solution
AS55947	Bangalore Broadband Network Pvt Ltd
AS135760	Speednet Unique Network Pvt Ltd
AS136714	Stampede Communications Pvt. Ltd.
AS17488	HATHWAY CABLE AND DATACOM LIMITED

ASN	ASN Name
AS14061	DigitalOcean, LLC
AS24186	RailTel Corporation of India Ltd.
AS58906	Shivansh Infotech pvt Ltd
AS141317	Neha Infonet
AS23860	Alliance Broadband Services Pvt. Ltd.
AS18209	Beam Telecom Pvt Ltd
AS17747	SITI NETWORKS LIMITED
AS9498	Bharti Airtel Limited
AS45916	Gujarat Telelink Pvt Ltd
AS133596	Infranet Services Private Limited
AS141556	Rv Infotainment Private Limited
AS138754	Kerala Vision Broad Band Private Limited
AS17465	Asianet Satellite Communications Pvt Ltd
AS133311	Maxtech Broadband Pvt Ltd
AS136334	Vortex Netsol Private Limited
AS133696	Fastway Transmission Private Limited
AS138225	One Eight Technologies Private Limited
AS133968	Logon Broadband
AS45769	D-Vois Broadband Pvt Ltd
AS4755	Tata Communications Limited
AS13335	Cloudflare, Inc.
AS133648	MNR Broadband Services Pvt. Ltd.
AS132453	TRIPLE PLAY BROADBAND PRIVATE LIMITED
AS132758	Eye Fastnet Service Private Limited
AS133301	DWANIRINN
AS132754	Realtel Network Services Pvt Ltd
AS45194	Syscon Infoway Pvt. Ltd.
AS7633	Software Technology Parks of India - Bangalore
AS21859	Zenlayer Inc
AS133287	Andhra Pradesh State FiberNet Limited
AS16509	Amazon.com, Inc.
AS17813	Mahanagar Telephone Nigam Limited

ASN	ASN Name
AS131442	Digital Network Associates Pvt Ltd
AS131473	SRM University
AS133007	UCN CABLE NETWORK PVT. LTD
AS131269	Beam Telecom Pvt Ltd
AS45184	DEN Networks Limited
AS132296	Seven Star Digital Network Private Limited
AS58762	Candor infosolution Pvt Ltd
AS136318	Inter Net Ly Private Limited
AS58678	Intech Online Private Limited
AS18002	World Phone Internet Services Pvt. Ltd.
AS134946	Indophone Networks
AS131210	2713/4 lakshmi building adipampa road v.v.mohalla
AS45775	WISH NET PRIVATE LIMITED
AS56268	Northeast Dataa Network Pvt Ltd
AS132215	Power Grid Corporation of India Limited
AS137956	Indian Institute of Technology Ropar
AS17754	Excellmedia
AS133661	Netplus Broadband Services Private Limited
AS10029	SHYAM SPECTRA PVT LTD
AS56166	Indian Institute of Science Education and Research Bhopal
AS58898	Rainbow communications India Pvt Ltd
AS40676	Psychz Networks
AS133001	Airnet Cable And Datacom Pvt Ltd
AS138296	Juweriyah Networks Private Limited
AS58765	Bittel Telecom Pvt Ltd
AS58971	Shine Communications Pvt Ltd
AS24554	Fivenetwork Solution India Pvt Ltd Internet
AS132116	Ani Network Pvt Ltd
AS45582	VAINAVI INDUSTRIES LTD, INTERNET SERVICE PROVIDER, INDIA
AS45117	Ishan's Network
AS18229	CtrlS Datacenters Ltd.
AS45536	Readylink Internet Services Limited

ASN	ASN Name
AS18196	7 STAR DOT COM Pvt. Ltd
AS137000	VIJAYALAKSHMI NET SERVICES PVT LTD
AS135834	Multicraft Digital Technologies Private Limited
AS135031	RI Networks Pvt. Ltd.
AS138790	Sankrish Systems And Technologies Pvt Ltd
AS45804	Meghbela Cable & Broadband Services (P) Ltd
AS138771	Specific Net Pvt. Ltd.
AS141514	Sancfil Technologies Internet Services Pvt.Ltd
AS134259	Skynet
AS17483	City Online Services Ltd
AS9830	SWIFT ONLINE BORDER AS
AS135139	SKYLINK NETWORKS
AS17917	Quadrant Televentures Limited
AS55847	National Knowledge Network
AS141536	Interlock Communication
AS18101	Reliance Communications Limited
AS63949	Linode, LLC
AS137085	Ani Broadband Service Pvt Ltd
AS147216	Solanki Fibre Connect Pvt Ltd
AS133590	Wow Solutions and Systems Pvt Ltd
AS137282	KALINGA INSTITUTE OF INDUSTRIAL TECHNOLOGY
AS146902	BIGVENTURES MEDIA PVT LTD
AS42201	PVDataNet AB
AS58405	18A/19,DODDANEKUNDI
AS141270	Indian Institute Of Technology Indore
AS136284	Paradise Telecom Pvt Ltd
AS132768	Five network Broadband Solution Pvt Ltd
AS134426	Mahataa Information India Private Limited
AS18207	YOU Broadband & Cable India Ltd.
AS45415	Vasai Cable Pvt. Ltd.
AS59164	Apollo Online Services Pvt ltd
AS133973	Net Connect Wifi Pvt Ltd

ASN	ASN Name
AS136946	Weebo networks Pvt Ltd
AS132757	Sristi Sanchar Webnet Ltd.
AS135719	Lm Energy And Software Private Limited
AS134023	Aligarh Muslim University
AS55862	Wan and lan Internet Pvt.Ltd
AS132497	DIGITAL NETWORK ASSOCIATES PRIVATE LIMITED
AS136336	Thamizhaga Internet Communications Private Limited
AS135722	Teleglobal Communications Pvt Ltd
AS45528	Tikona Infinet Ltd.
AS10199	Tata Communications Limited
AS45235	GEOCITY NETWORK SOLUTIONS PVT LTD
AS133997	E and U Technology Services LLP
AS134875	ZPOINT KOTA
AS132556	Blue Lotus Support Services Pvt Ltd
AS135801	C32 Broadband Pvt. Ltd.
AS135207	Cloudnet Communications Pvt Ltd
AS17426	Primesoftex Ltd
AS138272	Hi5 Multimedia Services Pvt Ltd
AS55839	Microsense Private Limited
AS136373	Allied It Infrastructure And Services Pvt Ltd
AS17762	Tata Teleservices (Maharashtra) Ltd
AS135247	K Net Solutions Pvt Ltd
AS58965	ANJANI BROADBAND SOLUTIONS PVT.LTD.
AS135872	<unknown>
AS136374	Microtalk Communications Pvt Ltd
AS210777	Daryll Swer
AS133652	Zapbytes Technologies Pvt. Ltd.
AS132559	Gatik Business Solutions
AS133232	SAMPARK ESTATES PVT. LTD.
AS141799	INDTEL INFRA PRIVATE LIMITED
AS133589	DECO MEDIA AND COMMUNICATIONS PVT LTD
AS135239	Sonali Internet Services Pvt Ltd

ASN	ASN Name
AS55410	Vodafone Idea Ltd. (VIL)
AS58659	Quest Consultancy Pvt Ltd
AS132971	Sikka Star powered by Sikka Broadband
AS134026	Ultranet services private limited
AS139537	SFour Cablenet Pvt. Ltd.
AS135845	Krishiinet Infocom Private Limited
AS134886	Super Sonic Broadband Pvt Ltd
AS133647	ELXIRE DATA SERVICES PVT. LTD.
AS135697	Tachyon Communications Pvt Ltd
AS134009	NETCOM ENTERPRISES PVT LTD
AS134177	Rural Broadband Pvt. Ltd
AS132785	Shiv Nadar University
AS135208	<unknown>
AS141834	Neolog Online Services Private Limited
AS137133	Billa Broadband Network Pvt Ltd
AS138671	SAHYOG OPTIC PVT. LTD.
AS134052	LANCEFIBERNET PVT LTD
AS212238	Datacamp Limited
AS135692	Global Ra Net Services Pvt. Ltd.
AS136323	Ngc Broadband Pvt. Ltd.
AS141340	IIT Madras
AS137679	Shree Net Online Services Private Limited
AS59162	U.P. COMMUNICATION SERVICES PVT LTD
AS134053	ETHERNET XPRESS PVT. LTD.
AS134042	MAHA Mediacom LLP
AS138281	Hybrid Hash Pvt. Ltd.
AS135734	Birla Institute Of Technology And Science
AS134375	Fusionnet Web Services Private Limited
AS138778	Skyrocket Network Solutions
AS134032	INFONET COMM ENTERPRISES
AS142508	Netfirst Communication Pvt Ltd
AS135763	GAYATRI COMMUNICATIONS

ASN	ASN Name
AS140137	Starplanet Technovision Private Limited
AS36351	SoftLayer Technologies Inc.
AS55644	Vodafone Idea Ltd. (VIL)
AS146860	Skytech Mediacom Opc Private Limited
AS134316	World Star Communication
AS136696	Arktel Networks Pvt. Ltd
AS138277	Radinet Info Solutions Private Limited
AS135817	ESTO MEDIA PRIVATE LIMITED
AS134341	jdm broadband services pvt ltd
AS135738	Adn Broadband
AS133278	Dehradun Enet Solutions Private Ltd
AS132420	E2E Networks Limited
AS132220	JPR Digital Pvt. Ltd.
AS136633	Sanhati Infocom Services Private Limited
AS132335	LeapSwitch Networks Pvt Ltd
AS4758	National Informatics Centre
AS133227	Anish Infoline Pvt Ltd
AS141303	Dvr Broadband Services
AS20473	The Constant Company, LLC
AS133685	SDN TELECOM PVT LTD
AS136724	Praction Networks Pvt Ltd
AS135706	Ddc Broadband Pvt. Ltd.
AS140171	Reis Network Solutions
AS140118	Indian Institute Of Technology Banaras Hindu University
AS142498	AJINKYA INTERNET PVT LTD
AS134307	Classicnet Broadband Network
AS137125	Netsat Communications Private Limited
AS8075	Microsoft Corporation
AS133720	SOFT CALL CUST-O-CARE PRIVATE LIMITED
AS36492	Google, LLC
AS139557	Abis Badlapur Network Private Limited
AS138290	Unigro Infranet Online Pvt. Ltd.

ASN	ASN Name
AS133273	Tata Institute of Social Sciences
AS55814	Siliguri Internet & Cable TV Pvt. Ltd.
AS30337	Deloitte Services LP
AS135780	AirFiber Networks Pvt Ltd
AS135269	Fast 4 Technologies
AS131299	tornado net private limited
AS140952	Strong Technology, LLC
AS132934	Skymax Broadband Services Pvt. Ltd.
AS139490	Aspt Networks Pvt Ltd
AS134860	Entire Cable And Broadband Opc Private Limited
AS141014	Balaji Teleworks Development Pvt Ltd
AS45648	Bell Teleservices India Pvt Ltd
AS146872	Weblink Systems Private Limited
AS136704	Apex Broadband Network Pvt. Ltd.
AS45433	Kappa Internet Services Private Limited
AS133255	Elxer Communications Private Limited
AS135214	Spider Broadband Pvt. Ltd.
AS134337	R2 Net Solutions Pvt Ltd
AS134899	Cityzone Infonet Pvt Ltd
AS137087	Sb Networks
AS55832	HOME SYSTEMS PVT.LTD
AS138311	Limerick Technologies Pvt Ltd
AS58763	Balaji Services
AS133275	Gigantic Infotel Pvt Ltd
AS137114	Kwikzo Telecomm Pvt Ltd
AS134258	Bhawani Cable and Broadband Services
AS137678	Protoact Digital Network Pvt. Ltd.
AS141837	Goodluck Broadband Private Limited
AS133674	Adarsh Infosolutions
AS136637	Cify IT Services Pvt Ltd
AS133289	Deshkal Network Pvt Ltd
AS141295	Madhya Pradesh Agency For Promotion Of Information Technology

ASN	ASN Name
AS135714	Fans Networks Private Limited
AS132976	Kings Broadband Pvt Ltd
AS38207	Rajesh Multi Channel Pvt Ltd.
AS45194	Joister Group of Companies.
AS134343	VIGHNAHARTA TELEINFRA PRIVATE LIMITED
AS132774	Niss Internet services private limited
AS38266	Vodafone Idea Ltd. (VIL)
AS18229	Pioneer Elabs Ltd.
AS133000	ARJUN TELECOM PVT. LTD.
AS146855	MEGHLINK INDIA LLP
AS45271	Idea Cellular Limited
AS63949	Akamai Technologies, Inc.
AS133661	Capsule Networks
AS9583	Sify Limited Service Provider India
AS137166	Satellite Netcom Private Limited
AS135217	Peak Air Pvt Ltd
AS135872	GTPL KCBPL BROADBAND PVT LTD
AS38623	VIETTEL (CAMBODIA) PTE., LTD
AS134047	Live Line Network Technology Pvt Ltd
AS13335	Cloudflare Inc
AS139508	Wide Netcom India
AS203020	HostRoyale Technologies Pvt Ltd
AS9009	M247 Europe SRL
AS138220	Sasa Broadband Technologies Pvt. Ltd.
AS141329	Udupi Fastnet Private Limited
AS149584	SCNSKY DIGITAL OPC PRIVATE LIMITED
AS141266	Inri Communications Pvt Ltd
AS141529	Vmps Internet Private Limited
AS135258	Sdh Network Pvt Ltd
AS132423	Indian Institute of Technology Bombay
AS134732	Dot Internet
AS135212	Digiway Net Pvt Ltd

ASN	ASN Name
AS138746	Live Fibernet
AS146881	DAAN COMMUNICATIONS PRIVATE LIMITED
AS132137	Shree Omkar Infocom Pvt Ltd
AS137409	GSL Networks Pty LTD
AS55734	Symbios Creation Pvt. Ltd.
AS136641	RIZWAN CABLE NETWORK
AS149268	Roarnet Broadband Pvt Ltd
AS134940	Faridabad Netcom Pvt. Ltd.
AS134333	SS BROADBAND SERVICES PVT LTD
AS47589	Kuwait Telecommunication Company (Under Association)
AS137101	RENU TECHNOLOGIES
AS136370	SAI NETWORKS
AS20940	Akamai International B.V.
AS135813	Rush Me Broadband Private Limited
AS151476	IBOX Communications
AS147221	INSPITELE SOLUTIONS PRIVATE LIMITED
AS139567	Nirija Solutions Private Limited
AS133300	Soibam Technology Private Limited
AS137157	Skynet Datacom Pvt Ltd
AS147277	C FIBER COMMUNICATIONS PVT LTD
AS45884	RVR Infrastructure Limited Service provider hyderabad india
AS134858	iForce Networks
AS146884	SKYCOMM INTERNET SERVICES PRIVATE LIMITED
AS199524	G-Core Labs S.A.
AS134014	NET 4 U SERVICES PVT LTD
AS141253	Hyosec Solutions Private Limited
AS38625	CJONLINE ISP India
AS132771	Fibre Air Services Private Limited
AS55333	Tatanet Services Limited
AS134292	Limrafiber Mvc Info Pvt Ltd
AS150008	Pioneer Elabs Ltd.
AS133989	SBR Telecom Pvt. Ltd

ASN	ASN Name
AS136308	Deenet Services Pvt Ltd
AS211585	Canopus It Solutions Pvt Ltd
AS132974	Suraj Network
AS135685	INET FIBER PVT LTD
AS137604	Sahjanand Telecom Pvt Ltd
AS149550	MAZENTA CREATIONS
AS135777	Shreenortheast Connect And Services Pvt Ltd
AS139195	Seans Media Pvt Ltd
AS135226	Jeecomunications
AS133317	srinagar Net tech P ltd
AS133711	Home Broadband Services LLP
AS137138	S A Internet Solution Pvt Ltd
AS133668	Eikon Technologies
AS137594	Flashcom Network Private Limited
AS133469	Multinet (Udaipur) Private Limited
AS134939	DYSINT NETWORKS PVT LTD
AS136342	Winux Communications Pvt. Ltd.
AS133676	Precious netcom pvt ltd
AS132572	Fasthook Networks Pvt Ltd
AS135208	Megahertz Internet Network Pvt. Ltd.
AS134033	Mithril Telecommunications Private Limited
AS135774	MANGALURU BROADBAND NETWORK PRIVATE LIMITED
AS45469	Elecon Information Technology Ltd.
AS133270	Hps Digital Broadband Pvt Ltd
AS135259	SKYLINE INFONET PRIVATE LIMITED
AS135177	Sgci Private Limited
AS141269	Fast Net Telecommunications Private Limited
AS140160	Spaceworld Communications India Private Limited
AS132780	Indian Institute of Technology Delhi
AS17483	CityOnline Services Ltd
AS138796	Earthlink Broadband Pvt. Ltd.
AS149240	Megatel Networks Private Limited

ASN	ASN Name
AS142485	SUNDARAM BROADBAND PRIVATE LIMITED
AS133313	Saha Institute of Nuclear Physics
AS137109	Grace Teleinfra Pvt Ltd
AS134022	Genstar Network Solutions Pvt Ltd.
AS141275	Maxnet Digital Pvt Ltd
AS134922	R G TECHNOSOLUTIONS PVT LTD
AS55286	B2 Net Solutions Inc. US
AS135765	WEBMAX NETWORK SOLUTIONS PRIVATE LIMITED
AS142527	KKD BROADBAND PRIVATE LIMITED
AS134884	ARICHWAL IT SERVICES PRIVATE LIMITED
AS136902	Alegra Communication Private Limited
AS141281	Max Computer
AS139549	Crisp Enterprises
AS18002	AS Number for Interdomain Routing
AS58640	NEXTRA TELESERVICES PVT. LTD.
AS139524	A C N Fiber Private Limited
AS135193	SRI SAI COMMUNICATION AND INTERNET PRIVATE LIMITED
AS149222	DREAMNET GIGAFIBER PRIVATE LIMITED
AS140120	Graceway Infrastructure And Services Private Limited
AS136365	Shri Samarth Broadband
AS140189	Treelink Broadband Private Limited
AS139559	Prayag Broadband Pvt Ltd
AS131215	116 MADHAV DARSHAN
AS133271	Willaegis Online Private Limited
AS136358	Omsai Cable Systems India Pvt Ltd
AS134944	Sri Lakshmi Networks Private Limited
AS147213	KOSHI BROADBAND COMMUNICATIONS OPC PVT LTD
AS136290	Country Online Services PVT LTD
AS135772	Powernet
AS134323	UNIQUE NET SERVICE
AS135775	Proline Datatech Services Pvt. Ltd.
AS136175	Serverhosh Internet Service

ASN	ASN Name
AS46844	Sharktech
AS138794	Deenet Internet Services Pvt Ltd
AS135266	AAKASH INTERNET SERVICES PRIVATE LIMITED
AS141261	More Wifi Internet Pvt Ltd
AS132960	Mukand Infotel Pvt Ltd.
AS140164	ConnectSpacelink Infomedia Pvt Ltd
AS135724	Allnet Broadband Network Pvt Ltd
AS135679	Suncity Broadband Pvt Ltd
AS55441	TTSL-ISP DIVISION
AS56209	R. K. INFRA TEL LIMITED
AS38794	United Information Highway Co.,Ltd.
AS140174	Mithril Telecommunications Private Limited
AS59191	PEERCAST TELECOM INDIA PVT LTD
AS134055	Intermedia Cable Communication Pvt Ltd
AS135761	Userlinks Netcom Pvt. Ltd.
AS135818	Green Tech Net Com Pvt Ltd
AS134877	Sri Vari Network Private Limited
AS138737	Antarjal It Communication Pvt. Ltd.

Annex II: List of ISPs

ASN	ASN Name	Anomaly	Confirmed	Failure	Measurement Count
AS45899	VNPT Corp	51,094	457	15,042	559,568
AS18403	The Corporation for Financing & Promoting Technology	134,007	9	52,414	1,717,012
AS7552	Viettel Group	66,505	1,326	18,650	562,347
AS131429	MOBIFONE Corporation	1,417	6	520	8,435
AS45543	SaiGon Tourist cable Television Company	58	0	39	2,025
AS38247	Vietnamobile Telecommunications Joint Stock Company	0	0	0	2
AS38731	Vietel - CHT Company Ltd	2	0	0	27
AS24086	Viettel Corporation	528	0	203	5,574
AS135905	VIETNAM POSTS AND TELECOMMUNICATIONS GROUP	0	0	0	12
AS45903	CMC Telecom Infrastructure Company	363	1	234	8,307
AS24088	Hanoi Telecom Joint Stock Company - HCMC Branch	243	0	10	855
AS133606	Viettel Timor Leste	6,286	0	4,872	74,474
AS9009	M247 Europe SR	0	0	0	40
AS13030	Init7 (Switzerland) Ltd	2	0	2	20
AS24173	Netnam Company	144	0	65	3,618
AS135918	VIET DIGITAL TECHNOLOGY LIABILITY COMPANY	0	0	0	15
AS135967	Bach Kim Network solutions Join stock company	0	0	0	20
AS137409	GSL Networks Pty LTD	18	0	30	1,927
AS140787	LAM A ARCHITECTURE CONSTRUCTION COMPANY LIMITED	1	0	11	495
AS140803	HQDATA · vnnic.vn	0	0	0	21

AS140815	HTTPSERVER TECHNOLOGY COMPANY LIMITED	0	0	0	20
AS212238	Datacamp Limited · datacamp.co.uk	3	0	12	718
AS150881	INTERSTELLAR DIGITAL TECHNOLOGY COMPANY LIMITED	20,641	0	29,896	1,259,389

Annex III: Glossary

DNS	<p>DNS, which stands for Domain Name System, maps domain names to IP addresses.</p> <p>A domain is a name that is commonly attributed to websites (when they're created), so that they can be more easily accessed and remembered. For example, twitter.com is the domain of the Twitter website.</p> <p>However, computers can't connect to internet services through domain names, but based on IP addresses: the digital address of each service on the internet. Similarly, in the physical world, you would need the address of a house (rather than the name of the house itself) in order to visit it.</p> <p>The Domain Name System (DNS) is what is responsible for transforming a human-readable domain name (such as ooni.org) into its numerical IP address counterpart (in this case:104.198.14.52), thus allowing your computer to access the intended website.</p>
HTTP	<p>The Hypertext Transfer Protocol (HTTP) is the underlying protocol used by the World Wide Web to transfer or exchange data across the internet.</p> <p>The HTTP protocol allows communication between a client and a server. It does so by handling a client's request to connect to a server, and the server's response to the client's request.</p> <p>All websites include an HTTP (or HTTPS) prefix (such as http://example.com/) so that your computer (the client) can request and receive the content of a website (hosted on a server).</p> <p>The transmission of data over the HTTP protocol is unencrypted.</p>
Heuristics	<p>Heuristics obtain further confirmed blockings other than that which are detected based on OONI blocking fingerprints. More detailed explanation can be found here.</p>
ISP	<p>An Internet Service Provider (ISP) is an organization that provides services for accessing and using the internet.</p> <p>ISPs can be state-owned, commercial, community-owned, non-profit, or otherwise privately owned. Vodafone, AT&T, Airtel, and MTN are examples of ISPs.</p>
Middle boxes	<p>A middlebox is a computer networking device that transforms, inspects, filters, or otherwise manipulates traffic for purposes other than packet forwarding.</p> <p>Many Internet Service Providers (ISPs) around the world use middleboxes to improve network performance, provide users with faster access to websites, and for a number of other networking purposes.</p>

	<p>Sometimes, middleboxes are also used to implement internet censorship and/or surveillance.</p> <p>The OONI Probe app includes two tests designed to measure networks with the aim of identifying the presence of middleboxes.</p>
TCP	<p>The Transmission Control Protocol (TCP) is one of the main protocols on the internet.</p> <p>To connect to a website, your computer needs to establish a TCP connection to the address of that website.</p> <p>TCP works on top of the Internet Protocol (IP), which defines how to address computers on the internet.</p> <p>When speaking to a machine over the TCP protocol you use an IP and port pair, which looks something like this: 10.20.11:8080.</p> <p>The main difference between TCP and (another very popular protocol called) UDP is that TCP has the notion of a “connection”, making it a “reliable” transport protocol.</p>
TLS	<p>Transport Layer Security (TLS) - also referred to as “SSL” - is a cryptographic protocol that allows you to maintain a secure, encrypted connection between your computer and an internet service.</p> <p>When you connect to a website through TLS, the address of the website will begin with HTTPS (such as https://www.facebook.com/), instead of HTTP.</p>

A comprehensive glossary related to OONI can be accessed here:
<https://ooni.org/support/glossary/>.

Annex IV: Methodology

Data

Data computed based on the heuristics for this report can be downloaded here: <https://github.com/Sinar/imap-data> whereas aggregated data can be downloaded from [OONI Explorer](#).

Coverage

The iMAP State of Internet Censorship Country Report covers the findings of network measurement collected through Open Observatory of Network Interference (OONI) [OONI Probe App](#) that measures the blocking of websites, instant messaging apps, circumvention tools and network tampering. The findings highlight the websites, instant messaging apps and circumvention tools confirmed to be blocked, the ASNs with censorship detected and method of network interference applied. The report also provides background context on the network landscape combined with the latest legal, social and political issues and events which might have an effect on the implementation of internet censorship in the country.

In terms of timeline, this second iMAP report covers measurements obtained in the one-year period from 1 July 2022 to 30 June 2023. The countries covered in this round are Cambodia, Hong Kong (China), Indonesia, Malaysia, Myanmar, Philippines, Thailand, India, Vietnam and Timor-Leste.

How are the network measurements gathered?

Network measurements are gathered through the use of [OONI Probe app](#), a free software tool developed by [Open Observatory of Network Interference \(OONI\)](#). To learn more about how the OONI Probe test works, please visit <https://ooni.org/nettest/>.

iMAP Country Researchers and anonymous volunteers run OONI Probe app to examine the accessibility of websites included in the [Citizen Lab test lists](#). iMAP Country Researchers actively review the country-specific test lists to ensure up-to-date websites are included and context-relevant websites are properly categorised, in consultation with local communities and digital rights network partners. We adopt the [approach taken by Netalitica](#) in reviewing country-specific test lists.

It is important to note that the findings are only applicable to the websites that were examined and do not fully reflect all instances of censorship that might have occurred during the testing period.

How are the network measurements analysed?

OONI processes the following types of data through its [data pipeline](#):

Country code

OONI by default collects the code which corresponds to the country from which the user is running OONI Probe tests from, by automatically searching for it based on the user's IP address through their [ASN database](#) the [MaxMind GeoIP database](#).

Autonomous System Number (ASN)

OONI by default collects the Autonomous System Number (ASN) of the network used to run OONI Probe app, thereby revealing the network provider of a user.

Date and time of measurements

OONI by default collects the time and date of when tests were run to evaluate when network interferences occur and to allow comparison across time. UTC is used as the standard time zone in the time and date information. In addition, the charts generated on OONI MAT will exclude measurements on the last day by default.

Categories

The 32 website categories are based on the Citizenlab test lists: <https://github.com/citizenlab/test-lists>. As not all websites tested on OONI are on these test lists, these websites would have unclassified categories.

No.	Category Description	Code	Description
1	Alcohol & Drugs	ALDR	Sites devoted to the use, paraphernalia, and sale of drugs and alcohol irrespective of the local legality.
2	Religion	REL	Sites devoted to discussion of religious issues, both supportive and critical, as well as discussion of minority religious groups.
3	Pornography	PORN	Hard-core and soft-core pornography.

No.	Category Description	Code	Description
4	Provocative Attire	PROV	Websites which show provocative attire and portray women in a sexual manner, wearing minimal clothing.
5	Political Criticism	POLR	Content that offers critical political viewpoints. Includes critical authors and bloggers, as well as oppositional political organizations. Includes pro-democracy content, anti-corruption content as well as content calling for changes in leadership, governance issues, legal reform. Etc.
6	Human Rights Issues	HUMR	Sites dedicated to discussing human rights issues in various forms. Includes women's rights and rights of minority ethnic groups.
7	Environment	ENV	Pollution, international environmental treaties, deforestation, environmental justice, disasters, etc.
8	Terrorism and Militants	MILX	Sites promoting terrorism, violent militant or separatist movements.
9	Hate Speech	HATE	Content that disparages particular groups or persons based on race, sex, sexuality or other characteristics
10	News Media	NEWS	This category includes major news outlets (BBC, CNN, etc.) as well as regional news outlets and independent media.
11	Sex Education	XED	Includes contraception, abstinence, STDs, healthy sexuality, teen pregnancy, rape prevention, abortion, sexual rights, and sexual health services.
12	Public Health	PUBH	HIV, SARS, bird flu, centers for disease control, World Health Organization, etc
13	Gambling	GMB	Online gambling sites. Includes casino games, sports betting, etc.
14	Anonymization and circumvention tools	ANON	Sites that provide tools used for anonymization, circumvention, proxy-services and encryption.
15	Online Dating	DATE	Online dating services which can be used to meet people, post profiles, chat, etc
16	Social Networking	GRP	Social networking tools and platforms.

No.	Category Description	Code	Description
17	LGBT	LGBT	A range of gay-lesbian-bisexual-transgender queer issues. (Excluding pornography)
18	File-sharing	FILE	Sites and tools used to share files, including cloud-based file storage, torrents and P2P file-sharing tools.
19	Hacking Tools	HACK	Sites dedicated to computer security, including news and tools. Includes malicious and non-malicious content.
20	Communication Tools	COMT	Sites and tools for individual and group communications. Includes webmail, VoIP, instant messaging, chat and mobile messaging applications.
21	Media sharing	MMED	Video, audio or photo sharing platforms.
22	Hosting and Blogging Platforms	HOST	Web hosting services, blogging and other online publishing platforms.
23	Search Engines	SRCH	Search engines and portals.
24	Gaming	GAME	Online games and gaming platforms, excluding gambling sites.
25	Culture	CULTR	Content relating to entertainment, history, literature, music, film, books, satire and humour
26	Economics	ECON	General economic development and poverty related topics, agencies and funding opportunities
27	Government	GOVT	Government-run websites, including military sites.
28	E-commerce	COMM	Websites of commercial services and products.
29	Control content	CTRL	Benign or innocuous content used as a control.
30	Intergovernmental Organizations	IGO	Websites of intergovernmental organizations such as the United Nations.
31	Miscellaneous content	MISC	Sites that don't fit in any category (XXX Things in here should be categorised)

IP addresses and other information

OONI does not collect or store users' IP addresses deliberately. OONI takes measures to remove them from the collected measurements, to protect its users from [potential risks](#). However, there may be instances where users' IP addresses and other potentially personally-identifiable information are unintentionally collected, if such information is included in the HTTP headers or other metadata of measurements. For example, this can occur if the tested websites include tracking technologies or custom content based on a user's network location.

Network measurements

The types of network measurements that OONI collects depend on the types of tests that are run. Specifications about each OONI test can be viewed through its [git repository](#), and details about what collected network measurements entail can be viewed through [OONI Explorer](#) or through [OONI's measurement API](#).

In order to derive meaning from the measurements collected, OONI processes the data types mentioned above to answer the following questions:

- Which types of OONI tests were run?
- In which countries were those tests run?
- In which networks were those tests run?
- When were tests run?
- What types of network interference occurred?
- In which countries did network interference occur?
- In which networks did network interference occur?
- When did network interference occur?
- How did network interference occur?

To answer such questions, OONI's pipeline is designed to answer such questions by processing network measurements data to enable the following:

- Attributing measurements to a specific country.
- Attributing measurements to a specific network within a country.
- Distinguishing measurements based on the specific tests that were run for their collection.
- Distinguishing between “normal” and “anomalous” measurements (the latter indicating that a form of network tampering is likely present).
- Identifying the type of network interference based on a set of heuristics for DNS tampering, TCP/IP blocking, and HTTP blocking.
- Identifying block pages based on a set of heuristics for HTTP blocking.
- Identifying the presence of “middle boxes” within tested networks.

According to OONI, false positives may occur within the processed data due to a number of reasons. DNS resolvers (operated by Google or a local ISP) often provide users with IP addresses that are closest to them geographically. While this may appear to be a case of DNS tampering, it is actually done with the intention of providing users with faster access to websites. Similarly, false positives may emerge when tested websites serve different content depending on the country that the user is connecting from, or in the cases when websites return failures even though they are not tampered with.

Furthermore, measurements indicating HTTP or TCP/IP blocking might actually be due to temporary HTTP or TCP/IP failures, and may not conclusively be a sign of network interference. It is therefore important to test the same sets of websites across time and to cross-correlate data, prior to reaching a conclusion on whether websites are in fact being blocked.

Since block pages differ from country to country and sometimes even from network to network, it is quite challenging to accurately identify them. OONI uses a series of heuristics to try to guess if the page in question differs from the expected control, but these heuristics can often result in false positives. For this reason OONI only says that there is a confirmed instance of blocking when a block page is detected.

Upon collection of more network measurements, OONI continues to develop its data analysis heuristics, based on which it attempts to accurately identify censorship events.

The full list of country-specific test lists containing confirmed blocked websites in Myanmar, Cambodia, Hong Kong, Indonesia, Malaysia, Philippines, Thailand, and Vietnam can be viewed here: <https://github.com/citizenlab/test-lists>.

Verifying OONI measurements

Confirmed blocked OONI measurements were based on fingerprints recorded here <https://github.com/ooni/blocking-fingerprints>. These fingerprints are based on either DNS or HTTP blocking. Fingerprints recorded as confirmed blockings are either those implemented nationally or by ISPs.

Hence, heuristics as below were run on raw measurements on all countries under iMAP to further confirm blockings.

Firstly, IP addresses with more than 10 domains were identified. Then each of the IP address was checked for the following:

Does the IP in question point to a government blockpage?					
Yes	No, page timed out or shows Content Delivery Network (CDN) page.				
↓	↓				
Confirmed blocking	What information can we get about the IP by doing a whois lookup?				
	Government entity	Local ISP ⁶²	CDN ⁶³ / Private IP		
	↓	↓	↓		
	Confirmed blocking	Likely Blocked or Inaccessible	Do we get a valid TLS certificate for one of the domains in question when doing a TLS handshake and specifying the SNI		
			Yes	No, there were blocking fingerprints found.	No, timed out
			↓	↓	↓
			False positive	Confirmed blocking	Sampled measurement is analyzed on

⁶² In the case of India, there was [evidence](#) of popular websites hosting their site on the ISPs network for quicker loading times as the ISPs sometimes offer such edge networking services, hence websites redirected to local websites not marked as blocked.

⁶³ In general, websites redirected to popular CDN such as CloudFlare, Amazon, Google, etc. are marked as not blocked.

					OONI Explorer.
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When blocking is determined, any domain redirected to these IP addresses would be marked as 'dns.confirmed'.

Secondly, HTTP titles and bodies were analyzed to determine blockpages. This [example](#) shows that the HTTP returns the text 'The URL has been blocked as per the instructions of the DoT in compliance to the orders of Court of Law'. Any domain redirected to these HTTP titles and bodies would be marked as 'http.confirmed'.

As a result, false positives are eliminated and more confirmed blockings are obtained.

In the [2022 report](#), only confirmed blockings based on OONI or new fingerprints were reported.

For this round of reporting in 2023, we had also further identified confirmed blockings by verifying blockings shown in news reports with OONI measurements. This is because there were blockings that could be not identified using the DNS or HTTP fingerprints. Typically, these websites were redirected to an unknown or bogon IP address, or had other unknown errors which are ambiguous on whether they are true or false positives of censorship. Hence, based on the news reports where the blocked websites were cited, confirmed blockings were further found by comparing available measurements on OONI. In particular for this study, we would mark them as confirmed blockings if there are more than 30 measurements and have an anomaly rate of more than 1% throughout the one-year period of study, in addition to manually checking the OONI measurements by cross-checking across networks, countries and time periods.

For this round of reporting in 2024, the confirmed blockings were further consolidated based on OONI’s existing fingerprints and heuristics processed on the data during the coverage period, in addition to taking into account a weighted anomaly ratio, measurement count and past analysis of the country. In summary, these were the rules applied to obtain this year’s list of confirmed and likely blockings.

Confirmed blockings		Likely blockings or inaccessible
Malaysia	Confirmed by OONI only	None
Myanmar	<ul style="list-style-type: none"> Confirmed by heuristics (govt block page) Confirmed by OONI (govt block page) 	High weighted anomaly ratio and confirmed by news report/ block notice
Thailand	<ul style="list-style-type: none"> Confirmed by heuristics (govt block page) Confirmed by OONI (govt block page) 	High weighted anomaly ratio
Philippines	<ul style="list-style-type: none"> Confirmed by heuristics (govt block page) Confirmed by OONI (govt block page) Confirmed by news report/ block notice 	High weighted anomaly ratio
India	<ul style="list-style-type: none"> Confirmed by OONI with at least 5 counts Confirmed by heuristics (govt block pages) 	High weighted anomaly ratio
Indonesia	<ul style="list-style-type: none"> Confirmed by OONI with at least 5 counts Confirmed by heuristics (govt block pages) 	High weighted anomaly ratio
Vietnam	<ul style="list-style-type: none"> Confirmed by heuristics (govt block page) Confirmed by news report/ block notice 	<ul style="list-style-type: none"> High weighted anomaly ratio Confirmed by OONI (due to being ISP redirects)
Cambodia	<ul style="list-style-type: none"> Confirmed by news report/ block notice 	<ul style="list-style-type: none"> High weighted anomaly ratio Confirmed by OONI (due to being ISP redirects)
Hong Kong	None	High weighted anomaly ratio

Weighted anomaly ratio: It is calculated by finding the ratio of the Anomaly and Confirmed counts over the total measurements per ASN factoring weights based on number of measurements per domain and per ASN. A high anomaly ratio is when the P90 of the anomaly ratio of a domain exceeds 90%.