

Internet Monitoring Action Project

iMAP Thailand 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>.

About Thai Netizen Network

Thai Netizen Network (TNN) is a non-profit organisation in Thailand that advocates for digital rights and civil liberties. TNN started its operations in December 2008 and officially registered as the “Foundation for Internet and Civic Culture” in May 2014. TNN was established by a group of netizens who had concerns about the limited internet freedom during post-coup military governments, particularly the Computer Crime Bill. TNN's primary activities are policy monitoring, making policy recommendations, digital security training for human rights defenders and journalists, and public awareness campaigns on personal digital security and privacy.

TNN's activities are based on five themes: 1) access to information, 2) freedom of opinion and expression, 3) privacy, 4) participatory internet governance, and 5) rights over information resources.

How to Use This Report

This report provides an overview of the state of internet censorship in Thailand. 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 Thailand 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 Thailand.
- 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

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Key Findings

- Even though no new significant censorship was found, two major blockings continued to be blocked on certain networks in Thailand: No112.org, a campaign website to call for the abolition of the law which criminalises the act of offending the Thai monarchy, and Change.org, which is a general petition website.
- A few websites of the Thailand Ministry of Public Health had been found inaccessible outside of Thailand, which can cause difficulty to residents abroad.
- Content restriction appeared to have increased on Meta so it may be concluded that online censorship still persists.

Background

Population	71.8 million ¹
Internet penetration (% of population using the internet)	88% ²
Mobile subscriptions (per 100 inhabitants)	176 ³
Freedom on the Net ranking (2024)	39/100; Not free ⁴
Religion (%)	Buddhism: 92.5%, Islam: 5.4%, Christianity: 1.2%; Others: <0.9% ⁵
ICCPR Ratification	Yes.

Thailand, officially known as the Kingdom of Thailand, is located at the centre of Mainland Southeast Asia with a population of more than 71 million. It is bordered to the north by Myanmar and Laos, to the east by Laos and Cambodia, to the south by the Gulf of Thailand and Malaysia, and to the west by the Andaman Sea. The official language is Thai, with over 90% of the population using the language daily.⁶ Census data approximated that 93% of the population practises Buddhism, whereas a significant 5% are Muslim, and the rest are Christian (1%) and others (<1%). Additionally, 54% of the population lives in urban areas.⁷

Thailand is a [constitutional monarchy, where the King serves as the head of state and wields significant influence over Thai politics and the military](#).⁸ The country's prime minister is chosen through a joint majority vote between the two legislative chambers: the 500-member House of Representatives, which is elected, and the 250-member Senate. [Experts agree that the Senate consequently holds significant influence in the electoral](#)

¹ World Bank (2023) <https://data.worldbank.org/indicator/SP.POPTOTL?locations=TH>
² World Bank (2022) <https://data.worldbank.org/indicator/IT.NET.USER.ZS?locations=TH>
³ World Bank (2022) <https://data.worldbank.org/indicator/IT.CEL.SETS.P2?locations=TH>
⁴ Freedom House (2023) <https://freedomhouse.org/country/thailand/freedom-net/2023>
⁵ Statista Research Department (2023). *Share of Thai population in 2021, by religion*. [Infographic]. Statista. <https://www.statista.com/statistics/1256547/thailand-population-by-religion/>
⁶ World Population Review. (2024). *Thailand Population 2020 (Demographics, Maps, Graphs)*. Worldpopulationreview.com. <https://worldpopulationreview.com/countries/thailand-population>
⁷ World Bank. (2023). <https://data.worldbank.org/indicator/SP.URB.TOTL.IN.ZS?locations=TH>
⁸ Freedom House. (2024). *Thailand: Freedom on the Net 2024 Country Report*. <https://freedomhouse.org/country/thailand/freedom-net/2024>

[process](#).⁹ Following the May 2023 elections, this political arrangement allowed unelected politicians to block the winning party and form a coalition.

On 14 May 2023, the Thailand General Elections were held to elect the 500 members of the House of Representatives. The left-wing populist and progressive party Move Forward won the largest number of seats with 151 seats or 36.2% of the vote in the House of Representatives. However, it was not enough for a majority. Pita, the leader of the Move Forward party formed a coalition in the Parliament to be elected as Prime Minister, but fell short of the votes during the first round of parliamentary voting on 13 July 2023. Later on 19 July, [he was suspended from being an MP](#) by the Constitutional Court as he held shares in a media company. [His second nomination as Prime Minister was also blocked](#) because of his policy to amend laws that penalise insults to the monarchy. In August 2023, [Pheu Thai, which came in second in the elections, formed a new coalition to include pro-junta parties despite wide criticism as it broke their election promise](#). Currently, this party contains the most MPs. On 22 August 2023, [the Parliament voted for a new Prime Minister](#): Srettha Thavisin from the Pheu Thai Party.

In January 2024, Thailand's Constitutional Court mandated that the Move Forward party cease all actions, including speeches, publications, and advertisements, intended to repeal or modify Article 112 of the Criminal Code since it amounted to an attempt to “overthrow” the constitutional monarchy.¹⁰

On 3 April 2024, Thailand's Constitutional Court accepted a case from the Election Commission to dissolve the Move Forward Party, the largest party in parliament, over its campaign to reform the lèse-majesté law, which forbids the insult of the monarchy.¹¹ The party is facing disbandment and a lifetime political ban of its leaders.¹² A verdict is expected in the upcoming months.

In May 2024, 40 senators petitioned the Constitutional Court to dismiss Prime Minister Srettha Thavisin over a controversial cabinet appointment of Pichit Chuenban, a lawyer

⁹ Freedom House. (2024). *Thailand: Freedom in the World 2024 Country Report*. <https://freedomhouse.org/country/thailand/freedom-world/2024>

¹⁰ Phaicharoen, N. (2024, January 31). Thai court orders election-winning Move Forward to halt royal insult law reform. *Benar News*. <https://www.benarnews.org/english/news/thai/thai-court-orders-move-forward-end-royal-insult-reform-01312024041832.html>

¹¹ Phaicharoen, N. (2024, April 3). Thai court accepts case seeking to disband Move Forward Party. *Benar News*. <https://www.benarnews.org/english/news/thai/thai-court-accepts-case-dissolve-mfp-04032024050034.html>

¹² Regalado, F. (2024, June 10). Thailand's Move Forward Party lays out defense against dissolution. *Nikkei Asia*. <https://asia.nikkei.com/Politics/Thailand-s-Move-Forward-Party-lays-out-defense-against-dissolution>

previously jailed for contempt of court.¹³ On 23 May 2024, the Thai Court accepted the complaint but rejected the application to suspend Srettha pending further investigation, with a verdict expected by September.¹⁴

On 27 June 2024, Thailand wrapped up its three-round senate election since a military coup a decade ago.¹⁵ Next, 200 members of 20 different fields were chosen in a complex process that was criticised for potentially limiting progressive voices. The election results have been delayed after complaints concerning qualifications and alleged ineligibility of some members.¹⁶

The country's military has an extensive history of [coups and involvement in Thai politics](#).¹⁷ Furthermore, [minority groups, notably ethnic minorities and stateless residents, often face significant barriers in participating in politics to advocate for their interests](#).¹⁸ The United Nations estimated Thailand's stateless population to be over 500,000.

¹³ Reuters. (2024, May 17). Forty Thai senators seek PM's dismissal over cabinet appointment. *Reuters*. <https://www.reuters.com/world/asia-pacific/forty-thai-senators-seek-pms-dismissal-over-cabinet-appointment-2024-05-17/>

¹⁴ Thepgumpanat, P., & Setboonsarng, C. (2024, May 23). Thai court accepts complaint seeking PM's removal over minister's appointment. *Reuters*. <https://www.reuters.com/world/asia-pacific/thai-court-accepts-complaint-seeking-pms-removal-over-cabinet-appointment-2024-05-23/>

¹⁵ TheStar. (2024, June 27). Thailand wraps up first senate election in a decade. *TheStar*. <https://www.thestar.com.my/aseanplus/aseanplus-news/2024/06/27/thailand-wraps-up-first-senate-election-in-a-decade>

¹⁶ Post Reporters. (2024, July 2). Senate election results delayed. *Bangkok Post*. <https://www.bangkokpost.com/thailand/politics/2821813/senate-election-results-delayed>

¹⁷ Freedom House. (2024). *Thailand: Freedom in the World 2024 Country Report*. <https://freedomhouse.org/country/thailand/freedom-world/2024>

¹⁸ Freedom House. (2024). *Thailand: Freedom in the World 2024 Country Report*. <https://freedomhouse.org/country/thailand/freedom-world/2024>

Legal Environment

[The current administration has upheld numerous legislations implemented during the military junta from 2014 to 2019](#),¹⁹ which curb freedom and independence in the media. These include laws on criminal defamation and the Computer Crime Act (CCA). This law grants significant power to political authorities to control online expression, enforce censorship, conduct surveillance, and apply [lèse-majesté provisions in the digital domain](#).²⁰

In September 2023, [democracy activist Arnon Nampa was sentenced to four years in prison](#) for a speech that advocated for a reform of the country's monarchy regime.²¹ Another activist, Mongkhon Thirakot, [was sentenced to 28 years of imprisonment](#) for publications he released on Facebook that allegedly defamed the monarchy.²² Similar cases are pending against other activists and members of the MFP party.

[In the country's constitution, judicial independence is guaranteed. However, in practice, courts are highly politicised and intervene in political affairs](#). Furthermore, the Constitutional Court has considerable power: the ability to dissolve parties, overthrow elected officials, and block legislation. In 2018, a law that criminalises criticism of the Constitutional Court was established, further protecting the body from accountability.²³

In the aftermath of the 2023 elections, the MFP faced multiple rulings from the Constitutional Court. Among these were the removal of the party's prime ministerial candidate from the parliament and the denial of a constitutional review of a July parliamentary vote that barred him from seeking reelection.²⁴

¹⁹ Freedom House. (2024). *Thailand: Freedom in the World 2024 Country Report*. <https://freedomhouse.org/country/thailand/freedom-world/2024>

²⁰ Reuters Institute for the Study of Journalism. (June 17th 2024). Digital news report 2024 Thailand. <https://reutersinstitute.politics.ox.ac.uk/digital-news-report/2024/thailand>

²¹ Freedom House. (2024). *Thailand: Freedom in the World 2024 Country Report*. <https://freedomhouse.org/country/thailand/freedom-world/2024>

²² Freedom House. (2024). *Thailand: Freedom in the World 2024 Country Report*. <https://freedomhouse.org/country/thailand/freedom-world/2024>

²³ Freedom House. (2024). *Thailand: Freedom in the World 2024 Country Report*. <https://freedomhouse.org/country/thailand/freedom-world/2024>

²⁴ Freedom House. (2024). *Thailand: Freedom in the World 2024 Country Report*. <https://freedomhouse.org/country/thailand/freedom-world/2024>

In general, these are the legislations related to internet censorship in Thailand:

- Thailand Penal Code, Section 112 (Lèse-majesté)
- Computer Crime Act
- Internal Security Act 2008
- Press freedom
- NCPO Order 97/2014 10
- Article 5 of the Head NCPO Order 3/2015
- Regulation 29: Regulation Issued under Section 9 of the Emergency Decree on Public Administration in Emergency Situations B.E. 2548 (2005) (No. 29) 10
- 2017 Computer Crime Act, Article 20
- 2017 Computer Crime Act, Article 18

Since the release of the 2023 report, which covered the first half of 2023, Thailand has had several developments in the area of data protection, while the other legislations have remained the same.

Privacy

Personal Data Protection Act B.E. 2562 (PDPA 2019) [became fully enforceable on 1 June 2022](#). The Act is substantially based on the European Union's General Data Protection Regulation (GDPR) and is considered to have the potential, at least from its text, to be one of the strongest data privacy laws in Asia.²⁵ However, Article 4 Paragraph 2 gives the power to the Personal Data Protection Committee (PDPC) to grant exemptions to specific activities or organisations, and this was made into a Royal Decree on 15 August 2023.²⁶ The Decree, which will come into force on 13 January 2024, focuses on state agencies and activities, including exemptions for anti-corruption purpose, tax purpose, and activities under the

²⁵ Greenleaf, Graham and Suriyawongkul, Arthit, Thailand – Asia's Strong New Data Protection Law (September 24, 2019). 160 Privacy Laws and Business International Report 1, 3-6, 2019, Available at SSRN: <https://ssrn.com/abstract=3502671> or <http://dx.doi.org/10.2139/ssrn.3502671>

²⁶ พระราชกฤษฎีกากำหนดลักษณะ กิจการ หรือหน่วยงาน ที่ได้รับการยกเว้นไม่ให้นำพระราชบัญญัติคุ้มครองข้อมูลส่วนบุคคล พ.ศ. 2562 บางส่วนมาใช้บังคับ พ.ศ. 2566
https://www.mdes.go.th/uploads/tiny_mce/source/%E0%B8%9E%E0%B8%A3%E0%B8%8E-%E0%B8%81%E0%B8%B3%E0%B8%AB%E0%B8%99%E0%B8%94%E0%B8%A5%E0%B8%B1%E0%B8%81%E0%B8%A9%E0%B8%93%E0%B8%B0%E0%B8%81%E0%B8%B4%E0%B8%88%E0%B8%81%E0%B8%B2%E0%B8%A3%20%E0%B8%A2%E0%B8%81%E0%B9%80%E0%B8%A7%E0%B9%89%E0%B8%99%20PDPA%20%E0%B8%A1%E0%B8%B2%E0%B8%9A%E0%B8%B1%E0%B8%87%E0%B8%84%E0%B8%B1%E0%B8%9A.pdf

power of the Monarch. There is also an exception for small and medium enterprises²⁷ to not have to make a record of processing activities (ROPA). These exemptions and exceptions weaken the protection of PDPA from what it was anticipated.

In December 2023, Thailand's Personal Data Protection Committee (PDPC) released two subordinate regulations under the Personal Data Protection Act B.E. 2562 (PDPA 2019), which came into force on 24 March 2024.²⁸ These two regulations are the Whitelist Notification and the Binding Corporate Rules (BCRs) and Appropriate Safeguards Notification. The Whitelist Notification "sets out the criteria for the PDPC to consider whether a destination country or international organisation has adequate personal data protection standards". Whereas, the second regulation focuses on BCRs and appropriate safeguards between Thai and foreign governmental agencies.

The National Broadcasting and Telecommunications Commission (NBTC) also updated its announcement on privacy protection for telecommunication consumers on 4 September 2023. An announcement was made in line with the protections provided by PDPA, making it a requirement for the telecom service provider to publish their privacy policy in Thai language and every other language that they made an offer on the market.²⁹

²⁷ From the legal definition, for enterprises in the manufacturing sector, has under 200 workers or has income under 500 million baht; for service sector, has under 100 workers or has income under 300 million baht. See ประกาศคณะกรรมการคุ้มครองข้อมูลส่วนบุคคล เรื่อง การยกเว้นการบันทึกรายการของผู้ควบคุมข้อมูลส่วนบุคคลซึ่งเป็นกิจการขนาดเล็ก พ.ศ. 2565

<https://www.mdes.go.th/uploads/tinyMCE/source/%E0%B8%AA%E0%B8%84%E0%B8%AA/%E0%B8%9B%E0%B8%A3%E0%B8%B0%E0%B8%81%E0%B8%B2%E0%B8%A8%E0%B8%AF%20%E0%B8%81%E0%B8%B2%E0%B8%A3%E0%B8%A2%E0%B8%81%E0%B9%80%E0%B8%A7%E0%B9%89%E0%B8%99%E0%B8%81%E0%B8%B2%E0%B8%A3%E0%B8%9A%E0%B8%B1%E0%B8%99%E0%B8%97%E0%B8%B6%E0%B8%81%E0%B8%A3%E0%B8%B2%E0%B8%A2%E0%B8%81%E0%B8%B2%E0%B8%A3%E0%B8%82%E0%B8%AD%E0%B8%87%E0%B8%9C%E0%B8%B9%E0%B9%89%E0%B8%84%E0%B8%A7%E0%B8%9A%E0%B8%84%E0%B8%B8%E0%B8%A1%20%E0%B8%8B%E0%B8%B6%E0%B9%88%E0%B8%87%E0%B9%80%E0%B8%9B%E0%B9%87%E0%B8%99%E0%B8%81%E0%B8%B4%E0%B8%88%E0%B8%81%E0%B8%B2%E0%B8%A3%E0%B8%82%E0%B8%99%E0%B8%B2%E0%B8%94%E0%B9%80%E0%B8%A5%E0%B9%87%E0%B8%81%202565.pdf>

²⁸ Paiboon, P., Buranatrevedhya, K., Horayangura, N., Santirongyuth, A., & Yingamphol, P. (2024, February 29). Thailand: New cross-border data transfer rules officially published as law. *Global Compliance News*. https://www.globalcompliance.com/2024/02/29/https-insightplus-bakermckenzie-com-bm-investigations-compliance-ethics-thailand-new-cross-border-data-transfer-rules-officially-published-as-law_02092024/

²⁹ <https://ratchakittha.soc.go.th/documents/140D215S0000000002700.pdf>

How the Government Implements Internet Censorship

Thailand's Article 112, known as the *lèse-majesté* law, imposes severe prison terms for criticising the monarchy. Recently, in July 2024, human rights lawyer and activist Arnon Nampa received a four-year prison sentence for publicly criticising the crown.

Since the emergence of pro-democracy and anti-monarchy movements, Thai dissidents have increasingly come under legal scrutiny. Numerous individuals have been prosecuted, often for online criticism and for publishing material that contravenes Thai laws. These legal measures have worsened digital rights conditions in Thailand, fostering an environment where media outlets may opt for self-censorship.³⁰

During the reporting period, there were almost no new reported cases of websites blocking. Based on the block pages that are still affected, such as no112.org and change.org, the blockings are usually implemented by the Ministry of Digital Economy and Society.



³⁰ Walker, T. (2023, December 11). *Digital Rights in Thailand in “Free Fall” Analysts Say*. Voice of America. <https://www.voanews.com/a/7393303.html>

2020/2021 Protests

In early 2020, demonstrations began against the government of Prime Minister Prayut Chan-o-cha. They later expanded to include the unprecedented demands for reform of the Thai monarchy. The protests were initially triggered by the dissolution of the Future Forward Party (FFP) in late February 2020 which was critical of Prayut, the changes to the Thai constitution in 2017, and the country's political landscape that it gave rise to.³¹

In October 2020, Thai authorities blocked access to the online petition site Change.org, after it hosted a petition calling for King Maha Vajiralongkorn to be declared “persona non grata” in Germany, which is where he usually spends his vacation. [The petition attracted 130,000 signatures before the website was blocked by major service providers, including AIS, DTAC, and True during the height of pro-democracy protests.](#)

The website redirected to a blockpage traced to the Ministry of Digital Economy and Society claiming that the content is illegal in Thailand based on the Computer Crime Act. Following this, the Change.org team appeared in court, and the website was accessible again after 6 months.

During the protests, media outlets were also censored including BBC, Al Jazeera, CNN, as well as four Thai online news platforms: Voice TV, The Standard, the Reporters, and Prachatai in October 2020. According to the same ministry, the news outlet’s coverage of pro-democracy protests in Bangkok violated the Emergency Decree on Public Administration in Emergency Situations and the Computer-Related Crime Act.

Additionally, in 2021, a game of clicking a cat became globally popular: [Popcat.click](#). Players of the game gain points by clicking or tapping to make the cat’s mouth open with a popping sound.³² Subsequently, a group of Thai programmers launched a knock-off version of the game featuring the Thai Prime Minister Prayut Chan-o-cha (prayut.click). The Ministry then blocked this website because it allegedly violated the Computer Crime Act, and the website is now taken down.

³¹ Wikipedia Contributors. *2020-2021 Thai protests*. Wikipedia; Wikimedia Foundation. (2021, October 29). https://en.wikipedia.org/wiki/2020%E2%80%932021_Thai_protests

³² <https://www.thaipbsworld.com/popcat-fever-offers-thailand-respite-from-worries-of-covid-crisis/>



Figure 1: Screenshot of the game website featuring the Thai Prime Minister (prayut.click)

Further proving the censorship during the protests, [a leaked document](#) outlining the government’s plan to order internet providers to block Telegram, a platform widely used by activists to organise protests and mobilise supporters in October 2020. The document, which was apparently produced by Thailand’s digital economy ministry, had the power to censor the internet, and it was sent to the National Broadcasting and Telecommunications Commission.

The document reads, “The Ministry of Digital Economy and Society is seeking your cooperation to inform the Internet Service Providers and all mobile network operators to suspend the use of the Telegram app.”³³

³³ Chen, C. (2020, October 20). Thailand orders ISPs to block Telegram amid ongoing protests. PIA VPN Blog. <https://www.privateinternetaccess.com/blog/thailand-orders-isps-to-block-telegram-amid-ongoing-protests/>



Figure 2: Letter from the Ministry of Digital Economy to the National Broadcasting and Telecommunications Commission on the suspension of use of Telegram app

However, those on the ground in Thailand had noted that Telegram was still working during the period. It may be possible that some of the countermeasures set up by Telegram have been effective in keeping Telegram working in the country.

Reported Cases of Internet Censorship

During the study period, there were no newly reported cases of internet censorship in the media.

Network Landscape

Thailand obtained internet access in 1996, the third country in Southeast Asia to do so. Currently, 5G internet is available in the country.³⁴ As of January 2024, Thailand is among the top 15 countries with the fastest broadband internet speeds.³⁵

In terms of internet access,³⁶ 90% of households have internet access at home, and 98% of the population is covered by at least a 4G mobile network. There is little gap in internet access between urban and rural areas, with 94% of urban households and 87% of rural households having access.

The National Telecommunications Council grants licences to operate to internet service providers in Thailand. There is a mix of state-owned companies and private operators, where the state-owned providers are CAT Telecom and TOT and the three major mobile carriers are Advance Info Service (AIS), Total Access Communication (DTAC), and TrueMove.

Previously in the 2017 report, it was highlighted that the Thai government has held expansive control over the internet, facilitated by its relationships with the internet providers and telecommunication companies. Former politicians, military officers, and members of their families also hold key positions in these companies.

In July 2022, it was reported that Thailand's biggest mobile phone operator [AIS would acquire 99.87% of shares in the internet provider 3BB](#). This was done ahead of a huge merger planned by their rivals True Corp. and DTAC. However as of August 2023, [the AIS acquisition was still being scrutinised by the National Broadcasting and Telecommunications Commission \(NBTC\)](#).

In November 2023, Thailand's National Broadcasting and Telecommunications Commission (NBTC) approved the merger of Thailand's biggest mobile operators, AIS and 3BB. The NBTC board imposed [three conditions to AIS post-merger](#): adherence to service fee regulations (price-cap), supporting fair market competition, and submitting biannual business operation reports for at least 5 years³⁷.

³⁴ *Internet in Thailand*. (2022, August 23). Wikipedia. https://en.wikipedia.org/wiki/Internet_in_Thailand

³⁵ Taylor, P. (2024). *Countries with the fastest average fixed broadband internet speeds worldwide as of January 2024*. [Infographic]. Statista.

<https://www.statista.com/statistics/896772/countries-fastest-average-fixed-broadband-internet-speeds/>

³⁶ *Digital Development*. (n.d.). ITU.

<https://datahub.itu.int/dashboards/umc/?e=THA&i=>

³⁷ Pattaya Mail. (2023, November 13). NBTC approves merger of internet service provider 3BB with Advanced Wireless Network - a subsidiary of AIS. *Pattaya Mail*.

<https://www.pattayamail.com/thailandnews/nbtc-approves-merger-of-internet-service-provider-3bb-with-advanced-wireless-network-a-subsiidiary-of-a-is-445254>

On the other hand, the [merger between True Corp and DTAC, which was Thailand's second and third biggest internet providers, was completed in March 2023](#). This merger resulted in the largest telco in Southeast Asia by combined enterprise value.

Findings of Internet Censorship in Thailand

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

Blocking of Websites

Throughout the period, 3.7 million measurements for 2,350 websites were tested with OONI Probe using the current test list. At time of writing (30 June 2024), the test list contains 906 websites in the Global Test List and 504 websites in the Thailand Test List.

	Jul-Sep 2023	Oct-Dec 2023	Jan-Mar 2024	Apr-Jun 2024	Total
Measured	1,279,619	827,908	770,853	849,545	3,727,925
Domain	2,108	2,149	2,150	2,208	2,350
ASNs	29	24	24	27	43

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

These measurements were analysed using the heuristics mentioned in Annex IV. It was found that there were **80 confirmed blocked websites** and **20 likely blocked or inaccessible websites**. A full list of these websites is included in Annex I.

Category	Number websites tested	Number of blocked websites	Percentage of blocked websites	Number likely blocked or inaccessible websites	Percentage of likely blocked or inaccessible websites
ALDR	38		0.00%		0.00%
ANON	124	6	4.84%	1	0.81%
COMM	54	2	3.70%		0.00%
COMT	131		0.00%	1	0.76%
CTRL	23		0.00%		0.00%

Category	Number of websites tested	Number of blocked websites	Percentage of blocked websites	Number of likely blocked or inaccessible websites	Percentage of blocked or inaccessible websites
CULTR	106	3	2.83%	3	2.83%
DATE	22	1	4.55%		0.00%
ECON	42	2	4.76%		0.00%
ENV	51		0.00%		0.00%
FILE	76		0.00%		0.00%
GAME	32		0.00%		0.00%
GMB	49	16	32.65%	1	2.04%
GOVT	88		0.00%	1	1.14%
GRP	94	4	4.26%		0.00%
HACK	47		0.00%	1	2.13%
HATE	7		0.00%		0.00%
HOST	143		0.00%	2	1.40%
HUMR	207	5	2.42%		0.00%
IGO	19		0.00%	1	5.26%
LGBT	103	2	1.94%	1	0.97%
MILX	3		0.00%		0.00%
MISC	9		0.00%		0.00%
MMED	53	1	1.89%	1	1.89%
NEWS	221	9	4.07%	1	0.45%
POLR	82	7	8.54%	1	1.22%
PORN	35	20	57.14%	1	2.86%
PROV	16		0.00%	1	6.25%
PUBH	62		0.00%		0.00%
REL	75	1	1.33%	1	1.33%
SRCH	45		0.00%	1	2.22%
XED	41		0.00%	1	2.44%
Uncategorized	251	1	0.40%		0.00%

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

No112.org and Change.org

In the previous reports, the blockings of No112.org and Change.org were highlighted. No112.org is a campaign to call for the abolition of the law which criminalises the act of offending the Thai monarchy, whereas Change.org is a general petition website, [which was blocked since 2020 when there was a petition against the King](#).

In this report, it was also found that these 2 websites continued to be blocked until July 2024 on certain networks, although they are accessible on some other networks. In particular, change.org seems to be blocked only on corporation networks and accessible on mobile networks, whereas no112.org continues to be blocked on most major networks.

Domain	Networks where found blocked
no112.org	<ul style="list-style-type: none">• True Corp (AS7470)• True Move Company Limited (AS132618)• True Internet Corporation (AS17552)• DTAC (AS24378)• Triple T Broadband Public Company Limited (AS45758)• Royal Thai Armed Force Headquarters (AS23969)• Dragon Hispeed Co.,Ltd. (AS63940)
change.org	<ul style="list-style-type: none">• True Corp (AS7470)• Dragon Hispeed Co.,Ltd. (AS63940)• Symphony Communication Public Company Limited for TC (AS132280)• CAT Telecom Public Company Limited (AS131090)

Table 3: Networks blocking no112.org and change.org during the period of study.

LGBT websites

Three older LGBT websites were detected as blocked during this reporting period:

Domain	Status during coverage period	OONI Explorer Link
gayzeed.com	Likely blocked	Link
gboysiam.com	Blocked	Link

Domain	Status during coverage period	OONI Explorer Link
gthai.net	Blocked	Link

Table 4: LGBT websites found blocked or likely blocked in Thailand during period of coverage

These sites appear outdated and inactive, suggesting their continued blocking may reflect legacy censorship practices rather than recent enforcement actions. While no new LGBT-specific blocks were identified, these findings underscore the persistence of internet censorship mechanisms affecting LGBT content, likely stemming from historical restrictions rather than current policy changes.

Ministry of Public Health Websites

According to Thai Netizens Network, a few websites of the Thailand Ministry of Public Health are inaccessible outside of Thailand, and this can cause difficulty to residents abroad.

From May to June 2024, these websites were tested on OONI. It was found that 3 domains were confirmed to be geoblocked in the UK, Ireland, and Malaysia, while they remained accessible in Thailand during the same period. However, a few other domains appeared to be accessible anywhere.

Domain	Accessible outside of Thailand	OONI Explorer Link
covid19.moph.go.th	No	Link
anamai.moph.go.th	No	Link
covid19.anamai.moph.go.th	No	Link
fda.moph.go.th	Yes	Link
moph.go.th	Yes	Link
ddc.moph.go.th	Yes	Link

Methods of Blocking of Websites

Thailand has a [known block page](#) as shown below, thus Confirmed Blockings in this report were based on this fingerprint. There weren't any known blocked websites that showed ambiguous anomalies in OONI data such as unknown. In the 2023 report, there was an unofficial election website (<https://ectreport.com/>) that was inaccessible for a short period of time, and it was shown as an unknown error on OONI. However, it could have been a false positive. Therefore for this report, we have marked the domains with a high weighted anomaly as Likely Blocked or Inaccessible, but it is possible that these are false positives.



Based on OONI data, DNS tampering is the primary method of blocking. However, there is also HTTP tampering on websites, which is noticeable on older websites that still use the HTTP protocol.

Findings on Takedown Requests

In comparison with the lack of or decrease in websites blocking, there were higher instances of takedown requests and content restrictions on social media platforms.

Based on [data by Meta](#), Thailand restricted over 4,600 items of content due to the Consumer Policy by the Food and Drug Administration and Department of Internal Trade (DIT), Ministry of Commerce. Over 820 items were restricted access in response to reports from the Ministry of Digital Economy and Society for allegedly violating the *lèse-majesté* law. The remaining items were restricted for alleged violations of other local laws.

This amount of content restriction is a definite increase from previous years.

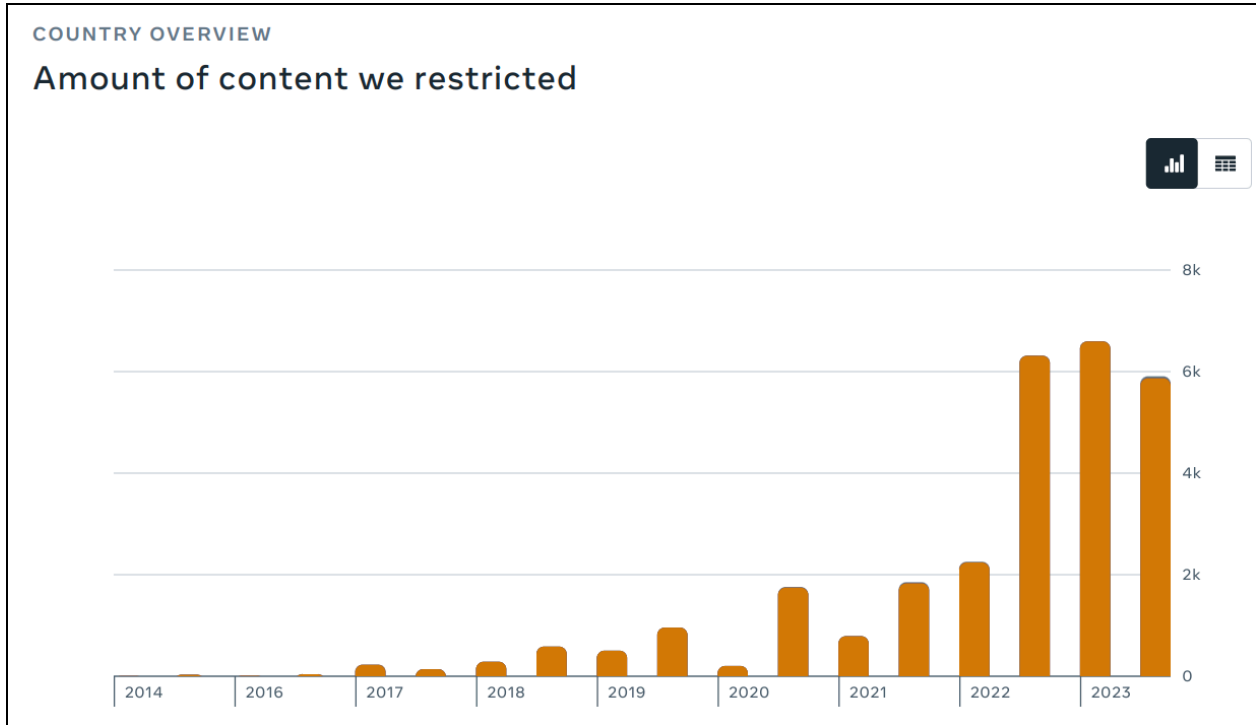


Chart 2: Content restrictions on Meta platforms in Thailand from 2014 to 2023.

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 various vantage points in Thailand, [OONI Probe](#) tests were not run consistently on each network, nor on all networks in each 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 OONI 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 analysing 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 the 2023 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 categorised 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 a block page is 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 to be confirmed blocked, it may be blocked only on specific networks and 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 the section on 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 categorised 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

There were no newly reported blocked websites during the period of coverage. However, the websites that were blocked since the major 2020/2021 protests, such as no112.org and change.org, remained inaccessible on certain networks. There is also an increase of content restrictions on platforms like Meta. To sum up, we can conclude that despite not having any newly reported blocked websites, online censorship still persists in Thailand.

Contribute to the Study

There are various ways one may contribute to the OONI measurements:

- Testing: You may test 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: You can 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's Slack channel](#)
- Follow Thai Netizen Network's social media channels on [X](#) and [Facebook](#)

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Annex I: List of Confirmed and Likely Blockings

Confirmed Blockings

Blocked Websites	Categories	ASN	Details
125.26.170.3	Uncategorized	AS131445	Link
alliance4democracy.blogspot.com	POLR	AS131090	Link
altthainews.blogspot.com	POLR	AS131090	Link
anonymizer.secuser.com	ANON	AS132280	Link
anonymouse.org	ANON	AS132280	Link
asiafriendfinder.com	DATE	AS17552	Link
badoo.com	GRP	AS132280	Link
beeg.com	PORN	AS17552, AS23969, AS24378	Link
bet365.com	GMB	AS55423, AS17552, AS45629, AS24378, AS45758, AS23969	Link
change.org	HUMR	AS4750, AS131090, AS63940, AS132280	Link
dashjr.org	COMM		Link
dooball66.com	CULTR	AS132618, AS17552, AS24378, AS45758, AS23969	Link
en.wikipedia.org	CULTR		Link
fb.watch	POLR	AS24378	Link
freedomforthai.carrd.co	POLR	AS132280	Link
guardster.com	ANON	AS17552, AS132280	Link
hola.org	ANON	AS132280	Link
ibcbet.com	GMB	AS131090, AS133481, AS55423, AS136393, AS17552, AS4762, AS24378, AS23969	Link

Blocked Websites	Categories	ASN	Details
lucabet168.com	GMB	AS17552, AS45629, AS24378, AS45758, AS23969	Link
midnightuniv.org	NEWS		Link
multiproxy.org	ANON	AS132280	Link
nhentai.net	PORN		Link
no112.org	HUMR	AS7470, AS132618, AS17552, AS24378, AS45758, AS23969	Link
nypost.com	NEWS	AS132280	Link
pokerinvader.com	GMB	AS17552, AS45629, AS24378, AS45758, AS23969	Link
pornhub.com	PORN	AS133481, AS17552, AS45629, AS24378, AS45758, AS23969	Link
progressivemovement.in.th	POLR	AS24378	Link
proxy.org	ANON		Link
taknai.com	PORN	AS17552, AS23969	Link
th.wikipedia.org	NEWS	AS24378	Link
thaienews.blogspot.com	NEWS	AS132280, AS24378	Link
upload.prachataalk.com	ECON	AS131090, AS131445, AS133481, AS132618, AS4618, AS136393, AS45430, AS17552, AS4762, AS45629, AS56309, AS24378, AS132280, AS136538, AS45758, AS23969, AS132061	Link
weareallhuman2.info	GRP	AS45758	Link
www.10bet.com	GMB	AS55423, AS17552, AS45629, AS24378, AS45758, AS23969	Link

Blocked Websites	Categories	ASN	Details
www.188bet.com	GMB	AS23969, AS24378	Link
www.888casino.com	GMB	AS45629, AS23969, AS24378	Link
www.89.com	PORN	AS17552	Link
www.av-th.net	PORN	AS17552, AS23969	Link
www.bahai.org	REL	AS23969	Link
www.bbc.com	NEWS	AS24378	Link
www.betfair.com	GMB		Link
www.bravoporn.com	PORN		Link
www.casinotropez.com	GMB		Link
www.dlsite.com	COMM	AS23969, AS24378	Link
www.dw.com	NEWS	AS132280	Link
www.enlightened-jurists.com	HUMR		Link
www.europacasino.com	GMB		Link
www.facebook.com	GRP	AS24378	Link
www.fuckingfreemovies.com	PORN		Link
www.gawker.com	CULTR	AS23969	Link
www.gboysiam.com	LGBT	AS24378	Link
www.gofundme.com	ECON	AS23969	Link
www.gotgayporn.com	PORN	AS45629, AS45758, AS23969	Link
www.gthai.net	LGBT	AS45629, AS4762, AS132280, AS45758	Link
www.huayvips.com	GMB	AS17552, AS23969, AS24378	Link
www.hustler.com	PORN	AS17552, AS23969, AS24378	Link
www.isranews.org	NEWS	AS24378	Link
www.lottovip.com	GMB	AS17552, AS23969, AS24378	Link
www.mediafire.com	MMED	AS17552, AS45758,	Link

Blocked Websites	Categories	ASN	Details
		AS132280, AS55423	
www.midnightuniv.org	NEWS		Link
www.newmandala.org	POLR	AS17552, AS23969	Link
www.no112.org	HUMR	AS131445, AS133481, AS7470, AS55423, AS132618, AS45430, AS17552, AS4750, AS45629, AS24378, AS63940, AS45758, AS45458, AS23969	Link
www.pornhub.com	PORN	AS131445, AS133481, AS55423, AS17552, AS45629, AS56120, AS24378, AS45758, AS23969	Link
www.pornhub.org	PORN	AS131445, AS133481	Link
www.prachataalk.com	GRP	AS131090, AS212238, AS133481, AS55423, AS4618, AS136393, AS45430, AS56309, AS4762, AS24378, AS132280, AS136538, AS45758, AS7616, AS23969	Link
www.riverbelle.com	GMB		Link
www.sex.com	PORN		Link
www.spinpalace.com	GMB		Link
www.sportingbet.com	GMB		Link
www.sportsinteraction.com	GMB		Link
www.terredeshommes.nl	HUMR	AS17552, AS23969	Link
www.thaichix.com	PORN		Link
www.thaigirls100.net	PORN	AS45629, AS45758	Link
www.theguardian.com	NEWS	AS24378	Link
www.wetplace.com	PORN		Link

Blocked Websites	Categories	ASN	Details
www.xvideos.com	PORN	AS17552, AS24378, AS55423	Link
www.youporn.com	PORN	AS17552, AS23969, AS24378	Link
xhamster.com	PORN	AS17552, AS23969	Link
xxxpornzeed.com	PORN		Link
youtu.be	POLR		Link

Likely Blockings

Blocked Websites	Categories	ASN	Details
doh.centraeu.pi-dns.com	HOST		Link
im0-tub-com.yandex.net	SRCH		Link
kickassclassical.com	MMED		Link
lisaguru.com	CULTR		Link
www.becteroradio.com	CULTR		Link
www.dailymail.co.uk	NEWS	AS24378	Link
www.eurogrand.com	GMB		Link
www.gayzeed.com	LGBT		Link
www.getrevue.co	HOST		Link
www.itsyoursexlife.com	XED		Link
www.jsf.mil	GOVT		Link
www.konthaiuk.com	POLR		Link
www.mekonginfo.org	IGO		Link
www.mywebcalls.com	COMT		Link
www.oic-oci.org	REL		Link
www.securityfocus.com	HACK		Link
www.snoopblocker.com	ANON		Link
www.thaicuties.com	PORN		Link
www.trueplookpanya.c	CULTR		Link

Blocked Websites	Categories	ASN	Details
om			
www.venus.com	PROV		Link

Annex II: List of ISPs

ASN	Internet Service Provider	Measurement Count
AS45758	Triple T Broadband Public Company Limited	1,252,888
AS133481	ADVANCED WIRELESS NETWORK COMPANY LIMITED	800,329
AS17552	TRUE INTERNET CORPORATION CO. LTD.	642,651
AS23969	Royal Thai Armed Force Headquarters	489,882
AS45629	JasTel Network	238,071
AS24378	Total Access Communication PLC.	72,629
AS4762	Mahidol University, Thailand	66,066
AS63940	dragonhispeed	20,600
AS131090	CAT Telecom Public Company Limited	19,983
AS55423	JasTel Network	18,534
AS136393	Symphony Communication Public Company Limited for TC	14,816
AS131445	ADVANCED WIRELESS NETWORK COMPANY LIMITED	12,347
AS132618	Realmove Company Limited	11,655
AS45458	MAYBANK Data Center (Co-Location)	10,244
AS56309	Siamdata Communication Co.,ltd.	8,831
AS132280	Symphony Communication Public Company Limited for TC	8,822
AS45430	ADVANCED WIRELESS NETWORK COMPANY LIMITED	7,095
AS7470	TRUE INTERNET CORPORATION CO. LTD.	5,632
AS205676	Data Center Experts LTD	4,827
AS136538	ADVANCED WIRELESS NETWORK COMPANY LIMITED	4,646
AS4750	CS Loxinfo Public Company Limited	4,155
AS4618	Internet Thailand Company Ltd.	3,610
AS132061	Realmove Company Limited	2,708
AS212238	Datacamp Limited	2,582
AS9931	CAT Telecom Public Company Limited	708
AS38794	Renaissance Phuket Resort & Spa	596
AS58955	Bangmod Enterprise Co., Ltd.	468
AS9335	CAT Telecom Public Company Limited	224

ASN	Internet Service Provider	Measurement Count
AS21859	Zenlayer Inc	208
AS7616	Jasmine Internet (Thailand) Company Limited	177
AS56120	TOT Mobile Co LTD	136
AS9546	Office of Info.Tech. Admin. for Educational Development	100
AS134100	Express Data Co.,Ltd	80
AS9486	King Mongkut's Institute of Technology Ladkrabang	36
AS55488	Office of Info.Tech. Admin. for Educational Development	29
AS37992	Thammasat University	20
AS138494	Campana TARO Co., Ltd.	15
AS23884	Proen Corp Public Company Limited	3

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 organisation 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: 10.20.1.1:8080.</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 2024 to 30 June 2024. The countries covered in this round are Cambodia, Hong Kong (China), Indonesia, Malaysia, Myanmar, Philippines, Thailand, India, and Vietnam.

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

No.	Category Description	Code	Description
16	Social Networking	GRP	Social networking tools and platforms.
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.

No.	Category Description	Code	Description
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 ³⁸	CDN ³⁹ / 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 OONI Explorer.

³⁸ 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.

³⁹ In general, websites redirected to popular CDN such as CloudFlare, Amazon, Google, etc. are marked as not blocked.

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%.