# OONI Report for Azerbaijan Internet Watch April 2021 Update

This report provides an update based on the analysis of <u>OONI measurements collected from Azerbaijan</u> between **January 2021 to April 2021**.

Blocked websites
News media
Circumvention

Accessible platforms

App reachability

Conclusion

# **Blocked websites**

#### News media

We continue to observe the blocking of media websites in Azerbaijan, as illustrated through the following chart.

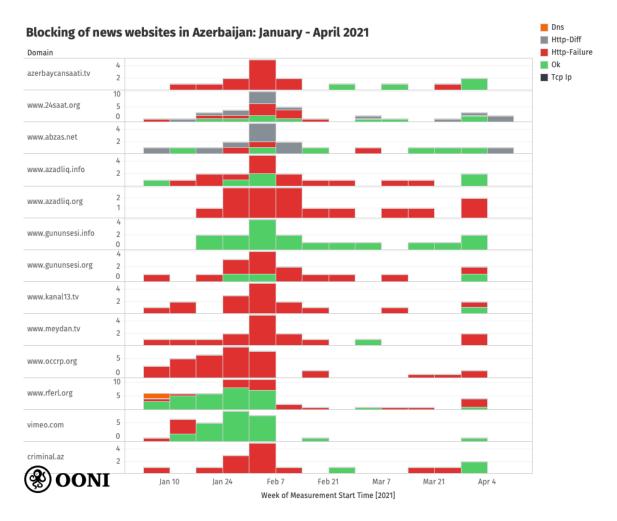


Chart: Blocking of media websites in Azerbaijan between January 2021 to April 2021.

The above chart aggregates measurement findings (per URL) from many different networks in Azerbaijan. The reason why we see different measurement results ("OK" and "HTTP failure") for the same URL on the same dates is because those results were collected from different networks. As such, this demonstrates that media website blocking varies from network to network in Azerbaijan.

Overall, it is evident from the above chart that when the testing of media websites in Azerbaijan presented <u>anomalies</u>, those anomalies were almost always HTTP failures. This means that <u>OONI Probe</u> was able to successfully resolve via DNS the IP addresses of these domains and successfully establish TCP connections to the resolved IP addresses, but when it attempted to retrieve the website content, the connection failed. In most cases, we see that these media websites appear to be blocked because the HTTP requests time out. This consistency (in terms of HTTP failures) provides a strong signal that specific censorship techniques are adopted to block access to these specific media websites.

While we observe a spike in measurement coverage between mid-January 2021 to early February 2021, the relevant measurement coverage is reduced and more sparse in the months thereafter (limiting our ability to further examine the blocking of media websites). It is noteworthy though that many of these media websites were accessible on some networks in early April 2021. Other sites though (such as <a href="www.azadliq.org">www.azadliq.org</a> and <a href="www.meydan.tv">www.meydan.tv</a>) continue to present strong signs of blocking (according to more recent measurements).

Previously, vimeo.com presented signs of <u>blocking</u> in Azerbaijan (between 1st December 2020 to 11th January 2021), but the site has not presented signs of blocking since, and remains <u>accessible</u>.

#### Circumvention

Several circumvention tool websites continued to present signs of blocking in Azerbaijan during the testing period, as illustrated below.

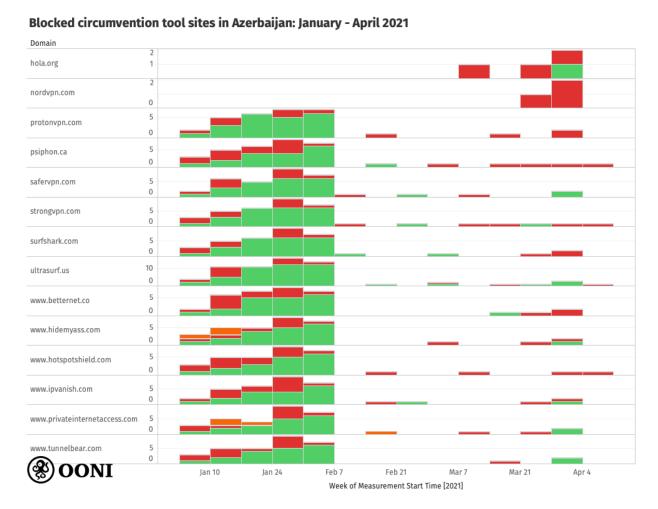


Chart: Blocking of circumvention tool websites in Azerbaijan between January 2021 to April 2021.

Similarly to the previous chart on the blocking of media websites, the above chart aggregates measurement results (per URL) from many different networks in Azerbaijan. We can therefore see that the blocking of circumvention tool websites varies across networks in Azerbaijan, and that almost all anomalous measurements present HTTP failures (similarly to the testing of media websites).

It is evident that in recent measurements (collected in early April 2021), nordvpn.com presented HTTP failures every time it was tested -- providing a stronger signal of potential blocking. Similarly, other circumvention tool websites (such as protonvpn.com, psiphon.ca, and strongvpn.com) presented signs of blocking in recent measurements.

# Accessible platforms

While a number of news media and circumvention tool websites continued to present signs of blocking in Azerbaijan, the tested instant messaging and circumvention apps were mostly found accessible.

### App reachability

Apart from the <u>testing of websites</u>, OONI Probe also includes tests designed to measure the blocking of the following apps:

- WhatsApp;
- <u>Facebook Messenger</u>;
- <u>Telegram</u>;
- Tor;
- Psiphon.

We analyzed OONI measurements from these tests and found that these apps were mostly reachable (from several networks) in Azerbaijan between January 2021 to April 2021, as illustrated through the following chart. In other words, WhatsApp, Facebook Messenger, Telegram, and Psiphon seemed to work in Azerbaijan during the testing period.

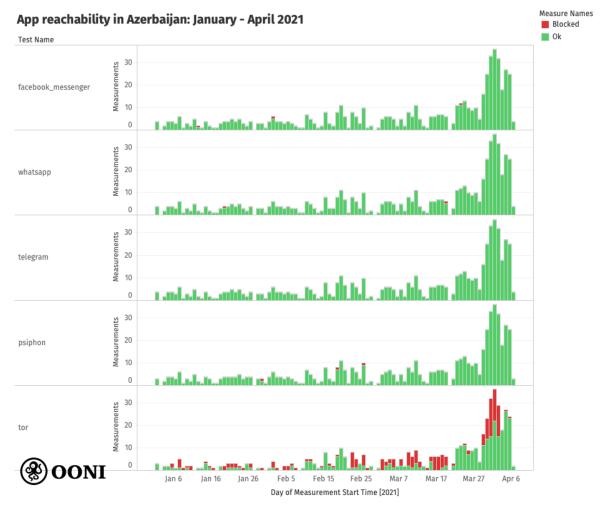


Chart: OONI Probe testing of apps in Azerbaijan between January 2021 to April 2021.

The only tool which presented signs of potential blocking was <u>Tor</u>, which presented a significantly <u>larger volume of anomalies</u> (in comparison to the other tests). In Tor anomalous measurements, we see that on some networks, attempted connections to Tor directory authorities failed. However, we also see that many connections to both Tor directory authorities and <u>Tor bridges</u> were <u>successful</u> (on many networks), indicating that it may have been possible to use Tor in Azerbaijan.

While the measurements of the other apps (WhatsApp, Facebook Messenger, Psiphon) presented a few anomalies, those anomalies are most likely <u>false positives</u> (particularly since the vast majority of measurements were successful). Interestingly, while the testing of the Psiphon website (psiphon.ca) presented <u>signs of blocking</u>, the testing of the Psiphon app suggests that it <u>works</u> in Azerbaijan.

# Conclusion

Similarly to our previous analyses, we observe the **ongoing blocking of media websites and circumvention tool websites** in Azerbaijan.

While the testing of social media websites previously presented signs of blocking in 2020, they remain accessible in recent months. The recent testing of WhatsApp, Facebook Messenger, Telegram, and Psiphon also shows that these apps are accessible in Azerbaijan.

Overall, we observe that both news media and circumvention tool websites present the exact same anomalies (HTTP failures), where the connection fails when OONI Probe tries to retrieve the content of the tested website. In most cases, we see that these websites appear to be blocked because the HTTP requests time out.

We also observe that these websites (media and circumvention) do not display signs of blocking across all networks, suggesting that their blocking varies from ISP to ISP in Azerbaijan.

While website testing coverage in Azerbaijan increased between mid-January 2021 to early February 2021, it reduced thereafter. We therefore recommend further local testing to continue to examine the blocking of media and circumvention tool websites in Azerbaijan.

To **test blocked media websites** further, one easy way to do so (limiting the testing to those specific sites) is through the following steps:

1. Open the following OONI Run link with your OONI Probe mobile app:

https://run.ooni.io/nettest?tn=web\_connectivity&ta=%7B%22urls%22%3A%5B%22https%3A%2F%2Fwww.azerbaycansaati.tv%2F%22%2C%22https%3A%2F%2Fwww.az24saat.org%2F%22%2C%22https%3A%2F%2Fwww.azadliq.info%2F%22%2C%22https%3A%2F%2Fwww.azadliq.info%2F%22%2C%22https%3A%2F%2Fwww.azadliq.org%2F%22%2C%22https%3A%2F%2Fwww.gununsesi.info%2F%22%2C%22https%3A%2F%2Fwww.gununsesi.org%2F%22%2C%22https%3A%2F%2Fwww.kanal13.tv%2F%22%2C%22https%3A%2F%2Fwww.meydan.tv%2Faz%2F%22%2C%22https%3A%2F%2Fwww.occrp.org%2F%22%5D%7D&mv=1.2.0

2. Tap "Run" (to test the media websites with OONI Probe)

To **run all OONI Probe tests automatically** on a daily basis, you have the following options:

- 1. Install the OONI Probe Desktop App (for Windows and macOS).
  - a. Enable the **Run tests automatically** option in the app settings (see the <u>user guide</u> for step-by-step instructions).

2.	Install the OONI Probe Command Line Interface (for power users on Debian/Linux and macOS). It will run automatically upon installation.