Metrics report:

Average number of users connected to the Tor Network directly, via Bridges or Pluggable Transports (measured daily).

Number of civil society actors trained in circumvention or digital safety techniques:

Number of USG-supported online tools developed or improved to maintain an open Internet:

Number of connections gained during Internet censorship events:

USG-assisted campaigns and programs to enhance public understanding, NGO support and media coverage of digital threats and promotion of an open Internet:

Censorship cases in 2016:

- Brazil
- Africa
- Uganda
- Congo
- Chad
- Burundi
- Zimbabwe
- Ethiopia

Top 10 countries by censorship event - first 6 months of 2016

Average number of users connected to the Tor Network directly, via Bridges or Pluggable Transports (measured daily).

Since the beginning of 2016 we noticed a small but continued decline of daily users directly connected to the Tor Network, shown in the graph below:\(^1\):

\(^1\)https://metrics.torproject.org/userstats-relay-country.html?start=2015-10-01&end=2016-06-30&country=all&events=off
Although for the past quarter this number has stabilized:

That decline could be botnets zombies that died or couldn’t keep up with outdated Tor versions, not necessarily users being blocked or leaving the network.

One curious thing: the average number of users connected daily to Tor via Bridges\(^2\) has actually increased during the same period in which directly connected users has declined:

\(^2\)https://metrics.torproject.org/userstats-bridge-country.html?start=2015-10-01&end=2016-06-30&country=all
This could mean that some users changed to connect to Tor network using a custom bridge. But all this correlation is mostly speculation as we can’t really prove one way or another due to how we collect our metrics, since we avoid being too specific to not jeopardize our users or our network security.

As for **users connecting to Tor via Pluggable Transports**, obfs4 continues to increase as we have been watching since the previous quarter. The drop on meek is probably due to meek-google being suspended by Google³; there was a botnet using it which caused the suspension.

³ [link](https://lists.torproject.org/pipermail/tor-talk/2016-June/041699.html)
Number of civil society actors trained in circumvention or digital safety techniques:

**Result:** 694 civil society actors trained in circumvention or digital safety techniques:

<table>
<thead>
<tr>
<th>Actors trained</th>
<th>Country</th>
<th>Event and/or partner organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>Germany</td>
<td>CryptoParty Erlangen</td>
</tr>
<tr>
<td>25</td>
<td>Germany</td>
<td>CryptoParty Erlangen</td>
</tr>
<tr>
<td>75</td>
<td>USA</td>
<td>Digital Commonwealth</td>
</tr>
<tr>
<td>40</td>
<td>USA</td>
<td>Multnomah County Libraries, Portland, Oregon</td>
</tr>
<tr>
<td>50</td>
<td>USA</td>
<td>Oregon Library Association</td>
</tr>
<tr>
<td>35</td>
<td>USA</td>
<td>Oregon Library Association</td>
</tr>
<tr>
<td>30</td>
<td>USA</td>
<td>Hendrick Hudson Free Library</td>
</tr>
<tr>
<td>40</td>
<td>USA</td>
<td>Iowa Library Association, Des Moines, Iowa</td>
</tr>
<tr>
<td>6</td>
<td>USA</td>
<td>Hands Up United, St Louis MO</td>
</tr>
<tr>
<td>20</td>
<td>USA</td>
<td>Ferguson Library</td>
</tr>
<tr>
<td>100</td>
<td>Canada</td>
<td>British Columbia Library Association, Vancouver</td>
</tr>
<tr>
<td>50</td>
<td>USA</td>
<td>Massachusetts Library Association Conference</td>
</tr>
<tr>
<td>30</td>
<td>USA</td>
<td>Mohawk Valley Library Association, Schenectady, NY</td>
</tr>
<tr>
<td>70</td>
<td>Canada</td>
<td>Digital Odyssey Conference, Hamilton Ontario</td>
</tr>
</tbody>
</table>
Number of USG-supported online tools developed or improved to maintain an open Internet:

**Results:**

- Basket2 - Pluggable Transport
- Core Tor - various testing improvements and bug fixes related to Pluggable Transports and Bridges
- Tor Browser - bug fixes related to Pluggable Transports

Number of connections gained during Internet censorship events:

**Result:** The numbers below are an estimation based on the data we saw at our metrics.torproject.org website while censorship events were happening in their respective countries. Since we can’t really tell if they were individuals or organizations, we are calling them ‘connections’, an estimation of the number of connections to the Tor network that we saw during these events. You can read more about these events at the end of this document.

<table>
<thead>
<tr>
<th>Estimation of total connections</th>
<th>Country</th>
<th>Censorship events</th>
</tr>
</thead>
<tbody>
<tr>
<td>~10k</td>
<td>Brazil</td>
<td>Block of Whatsapp</td>
</tr>
<tr>
<td>~3k</td>
<td>Uganda</td>
<td>Internet censorship during elections</td>
</tr>
<tr>
<td>~200</td>
<td>Chad</td>
<td>Censorship actions done by the government</td>
</tr>
<tr>
<td>~150</td>
<td>Ethiopia</td>
<td>Censorship actions done by the government</td>
</tr>
</tbody>
</table>

USG-assisted campaigns and programs to enhance public understanding, NGO support and media coverage of digital threats and promotion of an open Internet:

- [Rapid Response Campaign] Social media campaign during censorship events in Uganda - teaching people to use Tor to circumvent censorship.
● [Rapid Response Campaign] Social media campaign during censorship events in Brazil - teaching people to use Tor to circumvent censorship.
● Blog post Q&A on Selfrando (new security feature being tested) with Tor Browser tech lead & social media campaign to get more users testing it.
● Blog post and social media participation with EFF campaign on Rule 41
● Social media campaign explaining how to download Tor in cases where our website is censored
● Outreach video for people to join the Tor network for social media campaign

Censorship cases in 2016:

Brazil

On May 2, 2016, a Brazilian judge ordered cell phone carriers to block access to the messaging service WhatsApp for 72 hours.

We published a blog post documenting the impact of this censorship event in the Tor network⁴. Below is a graph showing the sudden increase of users from Brazil directly connecting to the Tor network (~10k new users) during the days of the block.

![Directly connecting users from Brazil](https://metrics.torproject.org/)

We also saw a similar increase of downloads for Orbot in Brazil, a 20% to 30% increase in the rate of downloading on those days.

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⁴ [https://blog.torproject.org/blog/tracking-impact-whatsapp-blockage-tor](https://blog.torproject.org/blog/tracking-impact-whatsapp-blockage-tor)
Africa

The article below calls attention to a very dangerous trend happening on the African continent. In the past 6 months many countries have applied censorship of messaging and social media services alleging different reasons, from ‘security during election times’ to ‘not let students be distracted during exams’.

The article also alerts for other countries that have already announced their intent of censoring the internet on the continent.

Banning Social Media Is Quickly Becoming A Trend In Africa. So Who’s Next?

By Kevin Mwanza
Published: July 13, 2016, 8:50 am

A number of African governments have resorted to blocking access to social media sites in their countries for all sort of reasons.

We took a look at the countries listed in the articles and compared some metrics to try to identify any correlated event. As you can see below there were indeed correlated events noted at the Tor network related to the censorship events reported.

Uganda

This graph shows two censorship events in the first 6 months in Uganda. Those moments took place during election events in that country. Many reports were published in the media and social media networks about the government actions to block people from using internet services to communicate.

Directly connecting users from Uganda

Social Media Blocked in Uganda Ahead of President Museveni’s Inauguration

When such events happen⁷, we also see a spike in users accessing the network, and in this case we saw both direct connected users and users using bridges/Pluggable Transports to connect to Tor.

Congo

Our system only detected one censorship event for Congo in the first 6 months of 2016:

Directly connecting users from Congo

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Unlike Uganda, we didn’t see a matching spike of users connected to the Tor network -- either directly or via bridges or PTs. On our graph for directly connected users from Congo we see the drop identified as a censorship event which can mean they blocked access to Tor for a very short time.

![Directly connecting users from Congo](https://metrics.torproject.org/userstats-relay-country.html?start=2016-01-01&end=2016-06-30&country=cg&events=off)

Chad

When looking at censorship events for Chad in the first 6 months of 2016, we can see they were especially busy at the end of April and all through May.
There were many events in that period we could relate to this censorship actions, there was an election, a conviction of an ex-president accused of crimes against humanity in Chad during the 80’s and exposition of the terrible conditions of Chad’s prisons during the Cannes film festival. All this could be correlated to the actions of censorship.

As in other events, we saw spikes of users connecting from Chad on Tor’s network, you can see an increase on the graphs below:

The interesting thing with the graph above is the fact that we didn’t lose the users gained after the censorship events. The line of daily directly connected users stayed in the 350 throughout June, after the last censorship event registered by our metrics website.

Burundi

Our site didn’t detected censorship events for Burundi, even though the article lists Burundi as one of the countries who had it in the first 6 months of 2016. We are still waiting to hear back from OONI to see if they have data that shows anything.

17 https://metrics.torproject.org/userstats-relay-country.html?start=2016-01-01&end=2016-06-30&country=bi&events=on
Zimbabwe

Same thing with Zimbabwe. Our metrics website didn’t capture any censorship events. We will see if OONI has any data that can shows censorship events for Zimbabwe for the first 6 months of 2016.

![Directly connecting users from Zimbabwe](https://metrics.torproject.org/userstats-relay-country.html?start=2016-01-01&end=2016-06-30&country=zw&events=on)

Ethiopia

Now for Ethiopia we did detect a few censorship incidents during the first 6 months of 2016.
The quote below is from another report published about censorship in Africa:20

“Ethiopian journalists have to choose between self-censorship, prison, or exile.”

- Foreign Policy in Focus

In early April, Twitter & WhatsApp were blocked in Ethiopia for over a month while the region experienced protests. Facebook messaging was blocked by the state-owned monopoly Ethio Telecom and mobile data connections were also targeted.

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Recipient Organization: Tor Project Inc.
DUNS Number: 809211100
EIN: 1208096820A1
Period covered by report: FYQ3 2016

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Bridge users by transport from Ethiopia

Top-3 transports

Mar-2016 Jun-2016

Directly connecting users from Ethiopia

Mar-2016 Jun-2016

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Top 10 countries by censorship event - first 6 months of 2016

Our metrics site has a rank of countries by censorship events. We looked at the rank for the time period of the first 6 months of 2016 and we can see that Uganda and Chad made to the top ten list:

Start date (yyyy-mm-dd): 2016-01-01
End date (yyyy-mm-dd): 2016-06-30

<table>
<thead>
<tr>
<th>Country</th>
<th>Downturns</th>
<th>Upturns</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>26</td>
<td>25</td>
</tr>
<tr>
<td>Kazakhstan</td>
<td>26</td>
<td>24</td>
</tr>
<tr>
<td>Kiribati</td>
<td>24</td>
<td>0</td>
</tr>
<tr>
<td>Christmas Island</td>
<td>23</td>
<td>1</td>
</tr>
<tr>
<td>British Indian Ocean Territory</td>
<td>23</td>
<td>0</td>
</tr>
<tr>
<td>Netherlands Antilles</td>
<td>18</td>
<td>0</td>
</tr>
<tr>
<td>Norfolk Island</td>
<td>13</td>
<td>0</td>
</tr>
<tr>
<td>Chad</td>
<td>12</td>
<td>25</td>
</tr>
<tr>
<td>Tuvalu</td>
<td>12</td>
<td>0</td>
</tr>
<tr>
<td>Uganda</td>
<td>11</td>
<td>14</td>
</tr>
</tbody>
</table>