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:
- Belarus
- China
- Egypt
- Ethiopia
- Iran
- Turkey
- Yemen

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):

Following up from our last report our graphs (image below) were showing some regain of growth

¹: 

¹https://metrics.torproject.org/userstats-relay-country.html?start=2016-01-01&end=2016-11-11&country=all&events=points
That gain continue throughout Q4\(^2\) till early December where we saw big drops, those could be botnet zombies that died or couldn’t keep up with outdated Tor versions. Or it could be indeed a big drop of user due to a censorship event. We can’t really verify either by direct cause as we don’t collect enough information to do so in order to protect our users.

Although, we can also see a spike of growth on early 2017. The same way we can’t tell that we lost users in December and that could might as well be a drop of botnets. We can’t really tell that this growth are indeed more people joining the network.

\(^2\)https://metrics.torproject.org/userstats-relay-country.html?start=2016-01-01&end=2017-01-28&country=all&events=off
Users connected daily to Tor via Bridges

Here is a graph of users connected to Tor via bridges. We continue to see growth throughout the quarter after our Bridge Authority update in the previous quarter, which is great news as it seems that our uses are indeed updating their clients and using the new Bridge Authority⁴.

![Bridge users graph](https://metrics.torproject.org/userstats-bridge-country.html?start=2016-10-01&end=2016-11-30&country=all

Users connecting to Tor via Pluggable Transports⁴

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

**Result:** 605 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>200</td>
<td>Chile</td>
<td>Multiple trainings</td>
</tr>
<tr>
<td>20</td>
<td>USA</td>
<td>Cambridge Libray</td>
</tr>
<tr>
<td>30</td>
<td>USA</td>
<td>NELA</td>
</tr>
<tr>
<td>20</td>
<td>USA</td>
<td>Stowe Library</td>
</tr>
<tr>
<td>15</td>
<td>USA</td>
<td>Medford Library</td>
</tr>
<tr>
<td>100</td>
<td>USA</td>
<td>NYLA</td>
</tr>
<tr>
<td>100</td>
<td>Canada</td>
<td>Toronto Public Library</td>
</tr>
<tr>
<td>20</td>
<td>USA</td>
<td></td>
</tr>
<tr>
<td>60</td>
<td>USA</td>
<td></td>
</tr>
<tr>
<td>40</td>
<td>USA</td>
<td></td>
</tr>
</tbody>
</table>

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

- **Core Tor** - various testing improvements and bug fixes
- **Stem** - new release with bug fixes and new features
- Tor Browser - bug fixes related to Pluggable Transports

Number of connections gained during Internet censorship events:

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.” 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>~4,760</td>
<td>Belarus</td>
<td>Censorship actions done by the government</td>
</tr>
<tr>
<td>~3,880</td>
<td>Egypt</td>
<td>Censorship actions done by the government</td>
</tr>
<tr>
<td>~1,900</td>
<td>China</td>
<td>Censorship actions done by the government</td>
</tr>
<tr>
<td>~2,750</td>
<td>Iran</td>
<td>Censorship actions done by the government</td>
</tr>
<tr>
<td>~2,400</td>
<td>Ethiopia</td>
<td>Censorship actions done by the government</td>
</tr>
<tr>
<td>~600</td>
<td>Yemen</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:

- Workshops, talks in Chile as well as interviews with local media (in Spanish) - all activities focus on enhance public understanding of Tor and how it protects you from digital threats.
- Blog and Social media campaign about Tor Browser new release with zero day security fix
- Multiple media articles talking about mobile security and in-depth reporting on our prototype for a more secure Android experience ‘Mission Improbable’.

Censorship cases:

Belarus

OONI published a blog post about Tor being blocked in Belarus as of December 2016⁵.


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Award identification number: S-LMAQM-14-GR-1095
Recipient Organization: Tor Project Inc.
DUNS Number: 809211100
EIN: 1208096820A1
Period covered by report: FYQ1 2017
"We have recently heard of network anomalies in Belarus. Tor has been finally blocked in December 2016, although it had been explicitly declared that Tor should be blocked since February 2015."

This report only covers till November 30th, which is the end date of our grant. But our graphs below shows a reaction to the censorship placed against Tor. You can see a spike rising for the usage of Pluggable Transports and Bridges in general at the end of November, right when the blockage against Tor started.

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6https://metrics.torproject.org/userstats-bridge-combined.html?start=2016-10-01&end=2016-11-30&country=by

7https://metrics.torproject.org/userstats-bridge-country.html?start=2016-10-01&end=2016-11-30&country=by
China

China continues to be a challenging country for us while trying to fight censorship in order to provide secure internet access for people in that country. The graph below\(^8\) shows censorship events during the remaining time of this grant.

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\(^8\)[https://metrics.torproject.org/userstats-relay-country.html?start=2016-10-01&end=2016-11-30&country=cn&events=points]
We also saw a strange drop on Meek usage, at first we thought China had managed to censor Meek but we start to gain usage in a few weeks. Till now we haven’t been able to find information to explain such drop⁹.

![Bridge users by transport from China](image)

Egypt

Another blog post by OONI¹⁰ reported network interference in Egypt from analysis of data collected from August till end of October.

“We recently noticed network anomalies in Egypt and performed a study in an attempt to understand the situation.

Our findings indicate that the Tor anonymity network appeared to be interfered with in Egypt, while HTTPS connections to DigitalOcean’s Frankfurt data centre were throttled.”

Our metrics website did identified censorship events¹¹ during the month of October:

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You can also see spikes on usage of Pluggable Transport for the same time period when censorship events happened on Tor network:

[Graph showing spikes in usage]

https://metrics.torproject.org/userstats-bridge-combined.html?start=2016-10-01&end=2016-11-30&country=eg
Ethiopia

OONI publishes a report done with Amnesty International about censorship events they detected during a wave of ongoing protests by ethnic groups in Ethiopia.¹³

“Recently we published a post about what appeared to be a possible internet shutdown in Ethiopia during a wave of ongoing protests by ethnic groups. Today, in collaboration with Amnesty International we are releasing a report that includes evidence of recent censorship events during Ethiopia’s political upheaval.”

The report talks about “an increase in Tor usage from 8th October, when Ethiopia’s state of emergency was declared.” You can see it in the graph below from our metrics website¹⁴:

Same way with Pluggable Transport¹⁵:

³http://ooni.torproject.org/post/ethiopia-report/
⁵https://metrics.torproject.org/userstats-bridge-combined.html?start=2016-10-01&end=2016-11-30&country=et
Iran

Iran was at the top of our top 10 countries rank for censorship events during the period of this report - more information on the next section. Our metrics site shows a great number of censorship events:

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[16]https://docs.google.com/document/d/1n-wNTvIfEfYreFvUtnPw0-7VtpjCQA9sdSuFV7VhsYlc/edit#heading=h.alo3mky1epg3
Around the end of October a report came out saying that the Iran government is seeking even more control over the Internet\(^\text{18}\):  


\[\text{http://www.dailydot.com/layer8/turkey-cuts-kurdistan-internet/}\]

\[\text{http://motherboard.vice.com/read/turkey-doubles-down-on-censorship-with-block-on-vpns-tor}\]

\[\text{http://www.albawaba.com/loop/turkey-censor-social-networks-901164}\]


Turkey

News about Turkey censorship against social media sites came out and sooner after that some VPNs also got blocked.

- Oct 27 - Turkey uses emergency decree to shut down internet on 11 Kurdish cities to ‘prevent protests’\(^\text{19}\)
- Nov 4 - Turkey Doubles Down on Censorship With Block on VPNs, Tor\(^\text{20}\)
- Nov 6 - All quiet on Twitter as Turkey censors social networks\(^\text{21}\)

We also caught that on our metrics website\(^\text{22}\) as you can see on the graph below:
We also saw a big spike at our Pluggable Transport graph:

Yemen
On early October Global Voices reported that WhatsApp and other social media services where blocked in Yemen:

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23 https://metrics.torproject.org/userstats-bridge-combined.html?start=2016-10-01&end=2016-11-30&country=tr
Our metrics website detected a censorship event in late October shown in the graph below:\(^{25}\):

![Graph showing a spike in Pluggable Transport usage](https://metrics.torproject.org/userstats-relay-country.html?start=2016-10-01&end=2016-11-30&country=ye&events=points)

You can see a little spike on Pluggable Transport usage around the same time as well\(^{26}\), unfortunately we haven’t been able to identify any event that could correlate to it.

\(^{26}\)https://metrics.torproject.org/userstats-bridge-combined.html?start=2016-10-01&end=2016-11-30&country=ye
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 remaining time period of this grant (October 1st - November 30th):\(^2\)

<table>
<thead>
<tr>
<th>Country</th>
<th>Downturns</th>
<th>Upturns</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iran</td>
<td>15</td>
<td>16</td>
</tr>
<tr>
<td>Cocos (Keeling) Islands</td>
<td>11</td>
<td>1</td>
</tr>
<tr>
<td>British Indian Ocean Territory</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>Israel</td>
<td>8</td>
<td>13</td>
</tr>
<tr>
<td>Kazakhstan</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>Republic of Moldova</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>Niue</td>
<td>8</td>
<td>3</td>
</tr>
<tr>
<td>Turkmenistan</td>
<td>8</td>
<td>0</td>
</tr>
<tr>
<td>Grenada</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>Bahamas</td>
<td>7</td>
<td>4</td>
</tr>
</tbody>
</table>