

From: Evan Hughes
To: [Assistance Bill Consultation](#)
Subject: Assistance and Access Bill 2018 - Failure to account to open-source
Date: Thursday, 6 September 2018 8:01:49 PM

To The Department of Home Affairs,

After having read the Assistance and Access Bill 2018, I fail to see how this will be anything but an expensive exercise in what will essentially be a futile effort. While I do not agree at all the monitoring or prosecution measures involved, I will put these aside for the time being and focus on something called open source software.

I will use the application 'Signal' (<https://signal.org/>) as an example, which is common across both Android, iOS, Windows, Linux and macOS. This is open source software, meaning that the code is openly available and viewable by all. The code can be edited by anyone and recompiled and installed on their device. So if any of the 3 mentioned requests were to be placed upon the creator of this application, all of which they would certainly not comply with anyway as they are not a money making enterprise present in Australia, the following would happen:

- 1: If the code put in place to allow government access would be viewable by all, remembering it is open-source. So much for covert monitoring... In addition why would citizens of other countries need the Australian government to have access to their communications.
- 2: if an Australian only version was to be made (highly unlikely) it would just push people to download the application directly from the application site. It may be possible to block the site, however that is not really a solution as it is very easy to get around. Having lived in China I can assure you they have more money thrown at this than Australia and most people with a smart phone know how to get around it.
- 4: The owners of this open-source application repository are not in Australia, you can't fine or jail them.
- 5: The software does not make money and it not sold, can't block financial payments from Australians to the developers, even if you could, it wouldn't matter as it is free and open source.
- 6: Good luck getting any security minded developer to put in a code for the Australian government.

This means essentially that the only option would be operating system level monitoring. Leaving Linux aside as it has the same issues as explained above being open source, this would require that the device in question has the latest version of operating system with the Australian monitoring code installed. Issues with this are:

- 1: Android is the most common operating system, it is open source, however vendors often put their own code in and don't make it freely available (this actually violates the license agreement for using Android, but that is another issue). So this would require that the device is up to date, most Android devices are not. Is the Government going to request that Samsung update a 4 year old phone because it wants to put some monitoring code in?
- 2: If this bill passes, criminals could simply do the following:
 - Buy a phone from overseas without the Australian code installed!
 - Use an old phone with open source application
 - Use encrypted SMS (look up <https://silence.im>, fun fact because Signal is open source, this application is based on that code, hopefully you can see the point here...)

This bill is designed to catch people who don't know what they are doing, who aren't really the people you need to be catching. I'm sure it will do that if it passes, however it won't catch serious criminals as it is so easy to get around. In the mean time you get to erode the

civil liberties of Australians, well except the ones that really care about civil liberties who will just do the same as "criminals" and make sure that the government cannot access their device.

In the mean time I will advise all my friends, relatives and work colleagues to use open source applications and software when possible. Funny how something that is free and easy to access pretty much makes this whole expensive process of this bill to mean essentially useless.

Technology makes things difficult for law enforcement, while I do not agree with the government's methods I understand that we both want what is best for Australia. Maybe when drafting such bills, consult with real technical security experts as it may save everyone a lot of time and money.

Thank you for your time.

Evan Hughes
