



Australian Government

Department of the Prime Minister and Cabinet

**ONE NATIONAL CIRCUIT
BARTON**

Mr Mark Fitt
Committee Secretary
Senate Economics Reference Committee
PO Box 6100
Parliament House
Canberra ACT 2600

Dear Mr Fitt,

Thank you for your invitation dated 2 September 2016 to make a submission to the Inquiry into the 2016 Census by the Senate Economics References Committee. I provide the following statement in relation to my responsibilities as the Special Adviser to the Prime Minister on Cyber Security within the Department of the Prime Minister and Cabinet.

The role of the Special Adviser to the Prime Minister on Cyber Security is to advise the Prime Minister on cyber security matters, set national leadership and advocacy on cyber security and oversight the implementation of Australia's Cyber Security Strategy.

On 10 August, the Prime Minister asked me to review the events surrounding the 2016 eCensus to draw conclusions to improve institutional cyber security culture and practices across Government.

I have formed a team to support me from the Department of the Prime Minister and Cabinet, the Australian Signals Directorate (ASD), the Office of the Australian Information Commissioner, the Department of Finance, the Treasury, the Digital Transformation Office and the Attorney-General's Department. The Australian Bureau of Statistics (ABS) has also provided a liaison officer to reach back into that agency to assist with information and documentation. The ABS has been cooperative in supporting my work.

My review of the events is ongoing and I have not finalised my findings and recommendations at this time. I can however provide the following information to the Committee at this point.

The ABS made a decision to take the Census website offline on the evening of 9 August: the website was neither hacked nor was it shut down by malicious actors. The outages were not caused by Australians filling out the eCensus.

There was a series of events, starting with three denial of service attacks earlier in the day. A fourth denial of service attack commenced around 7.30pm at which point there was a failure in the geoblocking service, which is one of the main defences which can be used against denial of service attacks. This fourth attack rendered the eCensus unavailable to the Australian public.

- It is common for government websites to experience denial of service attacks and these are routinely dealt with. A denial of service attack is designed to frustrate and impede a website, but not to steal data. Therefore it is not a hack, a breach or a compromise where data is exfiltrated, disturbed or stolen.
- A denial of service attack is designed to disrupt or degrade an online service by flooding the system with traffic, consuming and diverting resources needed to support normal operations. I liken it to parking a truck across a driveway to stop vehicles coming in or out. However, while denial of services attacks do not themselves trigger risk of exfiltration, they can be used as a cover to divert attention while exfiltration is attempted.

Simultaneous to the fourth attack, a monitoring system indicated that there was outbound traffic from the eCensus system, and the fear was it was potentially malicious. As a result of the unusual traffic patterns being observed within the network, the ABS asked IBM to enable 'overload' control which prevented any new eCensus forms being started. This was to remove any doubt about the security of Australians' data. The ABS later determined that the unusual traffic patterns were not of security concern – it was a 'false positive' of data leaving the network. Data collected up to that time was secure and the integrity was not compromised.

The ABS kept the website down until around 2.30pm on Thursday 11 August. ASD provided support and advice to the ABS to assist them in taking the decision to re-open access to the eCensus.

Those responsible for the denial of service attacks have not yet been identified.

I would be able to assist the Committee further as required.

Yours sincerely

Alastair MacGibbon
Special Adviser to the Prime Minister on Cyber Security

21 September 2016