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PARLIAMENT OF AUSTRALIA

DEPARTMENT OF PARLIAMENTARY SERVICES

DPS ref: D20/423180

Mr. Ken O'Dowd, MP
Chair
House of Representatives Standing Committee on Petitions
Parliament House

Dear Mr. O'Dowd

Thank you for inviting the Department of Parliamentary Services (DPS) to make a submission to the Petitions Committee's inquiry into aspects of the House of Representatives (HoR) petitioning system relating to security and accessibility.

Background

The e-Petitioning system was developed in 2016 as a collaborative project between the Department of the HoR and DPS in accordance with specifications required by the Committee. In September 2018 the system functionality was enhanced to provide improved usability of the administrative portal for the committee secretariat and to provide performance enhancements to the public website.

In July 2020 a second enhancement project was initiated and is expected to 'go live' in March 2021. This upgrade will include:

- improving the user experience on the website and for mobile device users, including a more intuitive interface, improved search capability and more links to pages

- increasing conformity with international Web Content Accessibility Guidelines (WCAG) to make web content more accessible to people with disabilities (eg. Greater use of symbols, images and plain English text)

- updating technology and the underlying software application to improve site performance, security and maintainability.

The e-Petitioning system consists of the following components:

- public website hosted in the aph.gov.au website for use by members of the public to sign and create petitions

- public application programming interface (API) to support the public website component by retrieving and submitting data

- Administrator Portal used by the Petitions Committee Secretariat to process petitions from initial request to tabling in Parliament

- Internal API to support the Administrator Portal by retrieving and submitting data

- SQL database containing data for the system accessed by both the internal and public API

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Security of the e-petitions system

The system is designed, as far as possible, to be no more prohibitive than creating and signing a paper petition. To sign or create a petition, a user must declare they are an Australian citizen or resident and agree to the terms and conditions. These terms are set by the Petitions Committee and the standing orders on petitions.

To assist with authenticity, the site uses the widely used Google ReCaptcha tool in order to minimise the impact of 'bots' or use of automated processes to sign petitions. The site currently uses ReCaptcha v3 in the first instance, which is invisible to the user, to verify the user is not a bot. If the user doesn't pass the v3 check, the system falls back to ReCaptcha v2 which challenges the user to solve a simple picture matching test.

The system requires a unique email per signature on each petition to prevent users from signing the same petition twice with the same email address. To complete their signature to the petition, the user must validate their signature via return email for it to be finally accepted.

In the 24 hours to Sunday 11 October 2020, the APH website experienced performance issues resulting from an unprecedented spike in use following publicity around e-Petition *EN1938 – Royal Commission to ensure a strong diverse Australian news media.* This issue resulted in intermittent timing-out for prospective petitioners accessing the APH website. Immediate measures were taken to significantly increase the system capacity and petitioners were able to then use the site without undue delay.

Security and accessibility

To ensure the e-Petitioning system is available to all residents or citizens of Australia, the following design considerations were made for its implementation:

- *The system does not require an individual to provide proof of identity to sign a petition in either e-Petitions or the paper-based system*. Providing proof of identity may impact people who cannot easily prove their identity but would otherwise be entitled to sign petitions such as Aboriginal and Torres Strait Islander people who live in remote areas, people who are currently affected by a natural disaster, transgender people, people with limited access to identity documents (such as those who are experiencing or have experienced family and domestic violence, people experiencing homelessness or with an address inconsistent with their identity documents), or people who have come to Australia as refugees.

- *The Standing Orders only require the user to be a resident or citizen of Australia and therefore an Australian citizen residing overseas is still entitled to sign or create a petition*. On this basis, the system does not use geo-blocking to prevent users in other countries from signing petitions. In addition, geo-blocking measures are easily evaded using a VPN, which malicious users of any sophistication would be likely to utilise.

- *The system does not prevent the use of temporary email addresses to sign petitions*. The committee secretariat has articulated that temporary email addresses should be permitted to enable privacy conscious users to sign petitions without concerns about their data being

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misused. Preventing temporary email addresses would be difficult due to the ability for new email domains to be quickly created and used before misuse is identified and blacklisted.

The following design considerations could be incorporated into a future release to address security and accessibility:

- *SMS validation*. This would enable the user to provide a mobile phone number where a validation code would be sent for finalisation of the signature process. This is technically feasible, noting this process is not required when completing a paper petition and these services are provided through a third party and would add a nominal ongoing cost to each signature.

- *Use of official records for verification purposes.* Digital identity makes accessing online government services easier and more secure. The Digital Transformation Agency is managing a whole-of-government program to introduce digital identity. While this remains a personal choice and voluntary system, it is not currently a feasible option for identity verification in the e-Petitioning system.

Thank you for the opportunity to respond and DPS would be happy to assist the Committee on any of these issues.

Yours sincerely

Rob Stefanic

Secretary

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