

Inquiry into the Victorian Government's COVID-19 Contact Tracing System and Testing Regime

Dr Vanessa Teague

Organisation Name:
Your position or role:

YOUR SUBMISSION

Submission:

Dear Legal and Social Issues Committee,

I am a cryptographer with a longstanding interest in security and privacy issues associated with public-interest technology such as elections and government data. I have closely followed the Australian government's development of the COVIDSafe app and collated a series of blog posts and technical problems here: <https://github.com/vteague/contactTracing>

Although I realise the state Parliament has little influence over the commonwealth's choice of app, a very similar set of privacy and security issues arise over the newly-proposed 'Venue check-in' apps, which are very much within Victorian control.

New Zealand and the UK use QR-code-reading apps as an 'automated diary', which simply records privately, on the user's own phone, which venues the person has visited and at what time. When a venue is identified as a possible site of Covid infection, the app automatically downloads this information, compares it with the person's local diary, and issues an alert to the person if needed.

The alternative model of requiring every person to upload their whereabouts to either a private company or a government database, just in case this information turns out to be needed later by contact tracers, is a vast invasion of privacy completely unnecessary for the core task of exposure notification. This model is in use in New South Wales and some other states, and has already seen documented cases of abuse for marketing: <https://www.theadvocate.com.au/story/6989550/covid-19-contact-tracing-concern/>

There are numerous opportunities for abuse, and serious consequences of accidental leakage, of compulsorily-acquired databases of people's venue check-ins. These could range from banal privacy invasions such as unsolicited marketing, to much more serious violations such as stalking or espionage.

There is no reason for Victoria to implement a solution that needlessly invades citizens' privacy and puts us at risk. The automated-diary style apps already being used in New Zealand and the UK could be immediately, and very easily, adopted here.

If the involvement of human contact tracers is considered essential, the automated diary apps could even be enhanced with an automatic notification to a central health authority. I would strongly recommend this happen only on an opt-in basis. The crucial difference with the NSW model would then be that people's movements would be input to a centralised database _only if they were potentially exposed to covid19_, rather than constantly, just in case they were exposed. The difference in privacy would be huge, even if everyone opted in to that central notification on a needs basis.

Like any other piece of public infrastructure, opening the source code of both the server and the app would be critically important for fixing bugs and earning public trust.

I would be happy to discuss these issues with the committee.

Kind regards,

Vanessa.

A/Prof Vanessa Teague
CEO, Thinking Cybersecurity Pty Ltd
A/Prof (Adj.) Research School of Computer Science, the Australian National University.

FILE ATTACHMENTS

File1:

File2:

File3:

Confidentiality:

Signature:

V Teague