DEPARTMENT OF THE
PRIME MINISTER AND **CABINET**
TE TARI O TE PIRIMIA ME TE KOMITI MATUA

Briefing

TOOLS AND MEASURES USED IN AUSTRALIA AND SINGAPORE TO MANAGE COVID-19

To: Hon Chris Hipkins
Minister for COVID-19 Response

Date	13/08/2021	Priority	[Low]
Deadline	27/08/2021	Briefing Number	DPMC-2020/21-1286

Purpose

Following a request from your Office, this briefing provides information about:

a) measures and restrictions currently used in Australia to manage COVID-19; and

b) the technology used in Singapore to support the self-isolation of travellers.

Recommendations

1. **Note** the contents of this briefing.

Alice Hume
Policy Manager, Strategy & Policy,
COVID-19 Group, DPMC

13/08/2021

Hon Chris Hipkins
Minister for COVID-19 Response

17/8/2021

Contact for telephone discussion if required:

Name	Position	Telephone		1st contact
Alice Hume	Policy Manager, Strategy & Policy, COVID-19 Group	N/A	s9(2)(a)	✓
Anna Ferguson	Policy Advisor, Strategy & Policy, COVID-19 Group	s9(2)(a)	s9(2)(a)	

Minister's office comments:

☐ Noted
☐ Seen
☐ Approved
☐ Needs change
☐ Withdrawn
☐ Not seen by Minister
☐ Overtaken by events
☐ Referred to

TOOLS AND MEASURES USED IN AUSTRALIA AND SINGAPORE TO MANAGE COVID-19	DPMC-2020/21-1286

TOOLS AND MEASURES USED IN AUSTRALIA AND SINGAPORE TO MANAGE COVID-19

Executive Summary

1. As more transmissible variants of COVID-19 (e.g. Delta) emerge, increasingly consideration is being given to what public health measures and restrictions are appropriate to manage COVID-19 in New Zealand. Following a request from your office, this paper outlines:

    a) some of the public health measures in place in Australia to manage COVID-19; and

    b) information about tracker technology used in Singapore to support self-isolation of travellers.

2. All information provided in this briefing is current as at 10 August 2021, unless otherwise stated.

Overview of Australian public health measures

3. Given the current incidence of COVID-19 within the Australian community, higher restrictions have been implemented in some states and territories, as follows:

    a) Face masks are mandatory in most states, in a wider range of settings than currently required in New Zealand.

        i) In Victoria, masks are required to be worn at all times that a person is outside their home (including when outdoors) while the state is in lockdown. In Queensland masks must be carried at all times by those who are in, or have visited, an 'impacted area'. South Australia has introduced face mask wearing requirements in a number of high risk settings, including high schools.

        ii) Face masks are also commonly required within taxis and ride share services in Australia, which is not aligned with New Zealand's current approach that only requires drivers to wear face coverings[1].

        iii) The current proposals to mandate face coverings in more settings across New Zealand at Alert Level 2 and higher considered the Australian approach, and would bring our approach more in line with that taken by many Australian states and territories. However, there will still be some deviations e.g. face coverings will not be required outdoors, or in education entities where clear communication is essential for learning.

    b) The mandated use of record keeping apps has been widely implemented within Australia. However, where the obligation to ensure record keeping is placed (i.e. with the individual or with the business) differs from state to state. The Australian approach

---

[1] The proposals being considered by Cabinet on 16 Aug will expand the face covering requirements for passengers, requiring them to wear at AL2 and higher.

was considered in the current proposals to mandate record keeping for contact tracing purposes at all Alert Levels in some settings across New Zealand.

c) Disease surveillance measures within Australia are similar to those used within New Zealand. Case reporting, case source investigation, and genomic sequencing play a key role in the Australian National Disease Surveillance Plan for COVID-19.

d) Australia has begun initial thinking about the use of electronic monitoring devices to support possible 'home-based quarantine'. Within Western Australia, devices are currently used for those who have breached quarantine rules during their quarantine period.

4. Travel restrictions that are implemented when community cases and outbreaks occur differ from region to region. For example, police within Canberra use a 'anytime / anywhere' approach to monitoring compliance with border restrictions, as the high number of entry points to the city make the use of border checkpoints (like those used at Alert Level boundaries within New Zealand) difficult.

Singapore electronic monitoring systems

5. Singapore has used two types of electronic monitoring systems since August 2020 to monitor those completing their 14 day 'Stay-Home Notice' outside of a dedicated facility (e.g. within their own home).

a) The wristband option uses the StayHome@SG app and a 'gateway' device to detect if the wearer moves beyond its pre-defined range.

b) The smartwatch device uses GPS and 4G technology to track the wearer location and geo-fence them within their place of residence.

Australian face covering requirements

6. Face masks are required within Australian states and territories, in a number of scenarios, which is further expanded during periods of heightened restrictions. The settings differ from region to region. Attachment A provides a summary of the current settings within the Australian Capital Territory, New South Wales, Victoria, and Western Australia. It is noted that while New Zealand settings allow for the wider definition of 'face coverings' the Australian public facing communications consistently use the terminology 'face masks' when describing the mandated use.

7. The policy rationale behind face mask requirements in Australia seems to broadly align with the rationale underpinning the current proposals to mandate face coverings in expanded settings in New Zealand. That is, that a face covering should be worn in higher risk settings, particularly where it is more difficult to physically distance.

8. However, there are also some key differences between our approaches, especially in situations where New Zealand officials consider use of face coverings impractical e.g. in Education entities where clear communication is important to support learning and where there are typically good record keeping mechanisms in place. As a result, New Zealand's proposed face covering settings (being considered by Cabinet on 16 August 2021) are typically less restrictive than those adopted in many Australian states and territories.

TOOLS AND MEASURES USED IN AUSTRALIA AND SINGAPORE TO MANAGE COVID-19	DPMC-2020/21-1286

Australian contact tracing and Surveillance Measures

Record keeping apps

9. The Australian COVIDSafe app (the federal app) utilises Bluetooth technology to identify exposure between two individuals running the app if one were to test positive for COVID-19. As at March 2021, the app had identified 17 out of approximately 30,000 cases over the course of 11 months. The Victorian state government stopped using the federal app for contact tracing purposes during the June 2020 outbreak as a result, opting to use state level contact tracing tools instead.

10. Most Australian states and territories have now mandated the use of their local check-in apps [DPMC-2020/21-1174 refers] for contact tracing, but have taken varying approaches to where obligations are placed as outlined in Attachment A.

11. The approaches taken across Australia reflect typically broader requirements regarding record keeping, than what was considered by the Cabinet Social Wellbeing Committee on 11 August 2021 [SWC-21-MIN-0120 refers]. For example, in Victoria and ACT employees in controlled workplaces are required to use local check-in apps at their place of work. While the proposed changes to the New Zealand settings only mandate record keeping requirements for visitors to a workplace as there will be existing mechanisms to record staff clock in/off times. The New Zealand settings also allow the use of a wider range of record keeping methods than solely relying on the COVID Tracer App.

Disease surveillance

12. The Australian National Disease Surveillance Plan for COVID-19 provides an overview of the various surveillance measures used within Australia to monitor the overall incidence of COVID-19 within the community. The plan was last published in April 2021, comprising the following key features:

    a) Case based reporting – Case numbers, testing numbers, deaths, number of outbreak and the outcome of contract tracing procedures.

    b) COVID-Net – A national network of epidemiologists within state and territory health departments that investigates outbreaks and clusters.

    c) Testing Framework for COVID-19 in Australia – Outlines the four priority groups for targeted testing. Those with COVID-19 symptoms, those recently exposed to COVID-19 (contacts of cases), and people at higher risk or exposure (e.g. border workers) are tested with or without community transmission having been identified. Those who interact with high-risk settings (e.g. residential aged care) are prioritised for testing when cases are detected locally. Industry-led workplace screening is able to be put on hold if testing demand exceeds laboratory and public health response capacity.

    d) Syndromic and sentinel surveillance – The tracking of reported symptoms of influenza like illness and high-quality data collected by selected health facilities.

    e) Serosurveillance – Research conducted by the Australian National Centre for Immunisation Research and Surveillance to retrospectively determine the incidence of COVID-19 cases within the population. This research uses blood samples collected for the purposes of antenatal screening, blood donation, or general pathology. The blood samples are screened for COVID-19 antibodies and the resulting incidence level is

TOOLS AND MEASURES USED IN AUSTRALIA AND SINGAPORE TO MANAGE COVID-19	DPMC-2020/21-1286

compared with known cases of COVID-19, to determine the level of undetected transmission. A study conducted in NSW from late April to early June 2020 found 1 in 670 Sydney residents were infected during the first wave of COVID-19 outbreak (3.5 times more cases than were identified through symptomatic and case contact testing).

f) Viral genomics – The use of genomic sequencing to identify sources of infection, and link cases where an epidemiological link is unclear.

g) Surveying of personal behaviours – Research conducted to track the public's self-reported adherence to public health measures (e.g. physical distancing) and public sentiment.

13. The Australian National Disease Surveillance Plan for COVID-19 notes that novel surveillance approaches, such as wastewater testing, are currently being refined and will continue to be considered for implementation as part of the strategy as the epidemiological situation changes. Wastewater testing is currently utilised within each of the jurisdictions included in Attachment A.

Electronic Monitoring Devices

14. Legislation has been enacted to enable use of electronic monitoring devices in some Australian States, but their use is unclear from publicly available information. For example, the Western Australian Emergency Management Amendment (COVID-19 Response) Act 2020 includes a powers for the State Emergency Coordinator to direct a person to be subject to an electronic monitoring, if it is deemed necessary to monitor that person's location during a quarantine period. Despite the State continuing to be under a state of emergency (most recently extended on 16 July 2021) the frequency of use of this amendment is not immediately determinable as publicly available information is limited to media coverage of the first two instances it was enacted.

15. Victoria has been considering how electronic monitoring could be used to support self-isolation for incoming travellers since October 2020. A 'home-based model for quarantine of returning travellers' trial was announced on 2 July 2021 [DPMC-202/21-1222 refers].

16. s9(2)(f)(iv)

Australian Interstate Travel Restrictions

17. All Australian states and territories exclude travellers who have been at exposure sites or regions, unless they are exempt as a resident of the state or territory they are entering. Those that are exempt have additional restrictions placed upon them, including the need to isolate upon their return. Attachment A outlines how these are applied within ACT, NSW, VIC and Western Australia.

Singaporean Surveillance Measures

Electronic Monitoring Devices

18. From 10 August 2020, the Singaporean Immigration and Checkpoints Authority (ICA) and the Ministry of Manpower (MOM) began issuing electronic monitoring devices to travellers

TOOLS AND MEASURES USED IN AUSTRALIA AND SINGAPORE TO MANAGE COVID-19	DPMC-2020/21-1286

over 12 years of age, if they are serving their 14 day 'Stay-Home Notice' outside of a dedicated facility (e.g. within their own home).

19. There are two types of wearable technology used to facilitate the electronic monitoring within Singapore:

   a) A wristband device, used by the ICA and Singaporean Ministry of Education, that utilises an app (StayHome@SG) and a 'gateway' device that must be plugged into a power socket at the place of residence. It uses Bluetooth signals and alerts the authorities if the distance between the wristband and gateway at home is beyond a pre-defined range but cannot relay the exact current location of its wearer.

   b) A smartwatch device, used by MOM, that uses GPS and 4G technology to track the wearer's current location, as well as geo-fence them at their residences. It also has other features, including a sensor that will trigger alert should the wearer tampers or removes the smartwatch.

20. These devices are issued at checkpoints, located after immigration clearance at ports. The user is required to activate and register them upon arriving at the location they will undertake the 'Stay-Home Notice'. Authorities follow up if the device is not activated on arrival, and provide technical assistance or take enforcement action (SGD$10,000 and or 6 months imprisonment) depending on the individual situation.

21. Both systems prompt the wearer to take an action in order to determine that the device is still being worn, and the user isn't outside of their designated area.

   a) The StayHome@SG app used as part of the wristband device system will ask for images to be sent of the wristband or the 'gateway' device.

   b) The smartwatch device will send notifications to the wearer that need to be acknowledged in a timely manner.

22. The devices do not store any personal data and do not have any voice/video recording function. Data transmitted from the devices to the authorities' backend system, such as the GPS and 4G or Bluetooth signal data, is protected by end-to-end certificate-based encryption.

Singapore Airlines

23. As part of a suite of public health measures implemented by Singapore Airlines international aircrew operating layover flights are provided devices to track the location of the crew when they are staying at an overnight port, who are required to stay within their hotel rooms for the duration of their stay. There is limited publicly available information regarding the technology used which makes comparison with other electronic monitoring technology difficult.

Next Steps

24. Officials will continue to consider the approach taken to managing COVID-19 by similar jurisdictions, including Australia, as part of the policy development process.

Consultation

25. The Ministry of Foreign Affairs and Trade provided information regarding Australian Interstate Travel Restrictions, s6(a) Australian record keeping measures, and the protection of the information collected through those systems.

Attachments:	
Attachment A:	Summary of Measures Used in Selected Australian Jurisdictions

—

DEPARTMENT OF THE
PRIME MINISTER AND **CABINET**
TE TARI O TE PIRIMIA ME TE KOMITI MATUA

ATTACHMENT A:

Summary of Measures Used in Selected Australian Jurisdictions

Face Coverings				
	ACT	NSW	Victoria	Western Australia
Measure	The use of a face mask is encouraged where physical distancing is not possible. Face masks continue to be mandatory for all domestic air travel and while in the Canberra Airport, as well as for people under stay-at-home requirements while accessing essential goods or services.	Face masks must be worn at indoor no-residential premises in NSW. Face masks must be carried at all times within a number of Local Government Areas within Greater Sydney and regional NSW. Face masks must be worn outside in public area withing 'Local Government Areas of Concern'.	Face masks must be worn indoors and outdoors outside of a one's own home.	Wearing a face mask is mandatory in WA while at an airport, travelling on aircraft, or transporting a person subject to a quarantine direction.
Came into Effect	9 July 2021	25 June 2021	5 August 2021	12 July 2021
Situation	On 27 June in response to the escalating situation in NSW (112 locally acquired cases) ACT mandated face mask use when people are indoors with people they don't usually live or work with, or on public transport. For hospitality venues, employees	Continuing unmitigated spread of the Delta variant within the State.	Victoria entered a seven-day state-wide lockdown after unlinked cases were detected within the community. These restrictions are still in place in Regional Victoria despite lockdown restrictions having	For the six-day period prior to the current settings coming into effect there were 'transitional restrictions' in place as Western Australia moved out of lockdown. These restrictions made masks mandatory in the following places:

	who had contact with patrons, were to wear a mask at all times. Patrons were strongly encouraged to wear a mask while in the venue but could remove the face covering while eating and drinking. This requirement was lifted on 9 July as the 'greatest risk to Canberra had passed' and has not be reimplemented despite the continuing situation in NSW.		been lifted as at 11.59 on 9 August 2021.	- Indoors including in the workplace - Public transport - Outdoor areas where physical distancing is not possible - Regular exemptions in place, including for medical reasons and primary school aged children or younger - Masks are not required when undertaking vigorous exercise indoors or outdoors

Record Keeping

	ACT	NSW	Victoria	Western Australia
Measure	It is mandatory for all individuals and staff over 16 to check in using the Check In CBR app regardless of how long they are on the premises at all "restricted businesses", venues, events and retail (includes department stores, shops, food premises, takeaway, public transport and taxi/ride share, supermarkets, petrol stations). If you cannot check in using the app, someone else can check you in including the business using the app's business profile. Use of the Check In CBR is mandatory for all the above businesses. Paper or personal electronic records are no longer acceptable. Business must use	Dual record keeping obligations are in place. Subject to some exceptions, individuals entering a business are required to provide their contact details (using the NSW check-in app, Service NSW, or directly to the occupier of the premises). Specified business are then required to display QR codes and take reasonable steps to ensure customers are checking in using the app or digital sign-in sheet.	All workplaces, businesses and venue operators are required to use the VIC QR code service (or a 3rd party system that links back to the government's interface). All venues are required to check-in workers and visitors. There are limited exceptions, such as for students at schools. All other workplaces must ensure all workers and visitors check-in. Businesses should proactively encourage customers to check-in. Special rules for retail and food/drink facilities apply requiring staff to request members of the public check-in.	It is mandatory for particular businesses and venues (including food and licensed venues, supermarkets, places of worship, libraries etc) to maintain a contact register by collecting contact details of patrons, staff, contractors and visitors over 16. A contact register can use either one or a mix of: a) WA's SafeWA QR app which is not mandatory, but encouraged; or b) a paper register; or c) an electronic register e.g. a form on a tablet. Businesses have the right to deny entry to anyone who refuses to provide their contact information

			The venue-assisted Victorian Government Kiosk check-in service enables venues to check in customers who are unable to do so for themselves. Individuals and businesses have a dual responsibility to ensure individuals are checking in. If a customer declines to check in the business has the right to refuse entry or service.	
Came into Effect	The requirement to use the record keeping systems are enduring and do not come into, and out of affect, as the risk profile changes.			
Efficacy as advised by MFAT Posts	The Check In CBR app has been downloaded 900,000 times (Canberra's population is around 400,000), with 17,000 venues registered and 30 million check-ins since it became available suggesting a high degree of use. Anecdotally, check-in compliance is not well monitored by staff compared with other states/territories but has improved slightly recently (perhaps since NSW outbreak).	During COVID-19 outbreaks (such as the one that Greater Sydney is currently experiencing) around 1.8 million accounts use the Service NSW COVID-19 check in app each day. (This level of use declines by around 25 percent when there are no outbreaks.) 6(b)(i)	Before making the VIC govt's QR code mandatory in May, the VIC Gov conducted a QR compliance check in April of 4000+ hospitality and retail businesses across VIC. 37% were flagged as non-compliant.	In May this year it was reported that Western Australia saw app usage spike to a 7-day average of around 2.5 million scans a day after the February lock down, which then dropped to a 7-day average of around 1.9 million scans a day after the following lockdown in May 2021.

		6(b)(i)		
Privacy Protections	Business compliance data is recorded through the app and kept by ACT Health. Under the ACT Public Health Act an authorised officer is able to, with reasonable grounds, enter a place and inspect documents and records	6(b)(i)	Victoria's Public Health and Wellbeing Act 2008 enables authorised officers to enter premises at any time without a warrant under certain conditions for the purpose of monitoring compliance and gives authorised officers power to direct persons to produce documents. It is an offence to refuse.	A business must produce a record of the contact information for inspection by an authorised officer on request, for the purpose of checking compliance with the contact register requirements. Since the introduction of record keeping apps in 2020, relevant legislation has been strengthened to ensure that the data is used for no other purpose but contact tracing. In June 2021, Western Australia introduced the Protection of Information (Entry Registration Information Relating to COVID-19 and Other Infectious Diseases) Bill 2021 in order to ensure the protection of data stored within the SafeWA contact tracing app for the purpose of contact racing relating to COVID-19 and other infectious diseases, after Western Australia police were able to legally obtain SafeWA data as part of two police investigations.

Travel Restrictions

	ACT	NSW	Victoria	Western Australia
Measure	ACT requires travellers, who are ordinarily resident in ACT, travelling from NSW to complete an online exemption form within 72 hours of their arrival and enter self-quarantine immediately (at home or within a hotel room) for 14 days. Non-residents are unable to enter ACT unless granted an exemption. Stay at home notices (self-isolation at home with the ability to leave for essential purposes, e.g. essential work, child care, grocery shopping, medical reasons) are in place for those who have entered ACT from specified areas or exposure sites within Victoria, Queensland, and Western Australia)	NSW requires that residents who have been in an 'Affected Area' complete a traveller self-declaration 24 hours prior to entering the state. Those that have been in a 'Area of Concern' are required to travel to their place of residence or a suitable place to reside in and must not leave without a reasonable excuse for 14 days from last exposure.	Victoria uses a 4 phase system (Green, Orange, Red, Extreme Risk) in which Local Government Areas (LGAs) are designated a risk level and travellers from those areas have requirements placed upon them in line with the risk profile. **Extreme Risk Zone** – All travellers, regardless of where they are usually resident, are unable to travel to VIC without an exemption. **Red Zone** – Victorian residents can travel into Victoria with a Red Zone Permit but must self-quarantine for 14 days with a requirement to get tested on within 72 hours of arriving and on day 13 of the quarantine period **Orange Zone** – Travel into Victoria is possible with a permit. Traveller are required to be tested for COVID-19 within 72 hours of arrival and isolate until they receive a negative result. **Green Zone** – Travellers are required to obtain a permit to enter the state.	Western Australia categories other Australian jurisdictions into 1 of 3 risk levels (Very Low, Low, and Medium) **Medium Risk** (also referred to as a 'hard border') – Travellers are unable to enter WA without approval through the G2G PASS system. If granted permission to enter they must self-quarantine for 14 days with a requirement to complete a COVID-19 test within 48 hours of arrival and on day 12 of self-quarantine. **Low Risk** – G2G PASS registration and declaration and complete a health screen on arrival, enter self-quarantine for 14 days with a requirement to complete a COVID-19 test within 48 hours of arrival and on day 12 of self-quarantine. **Very Low Risk** – Travellers must complete a G2G PASS registration and declaration and complete a health screen on arrival.

Came into Effect	NSW - 5 August 2021 VIC – 5 August QLD – 29 July WA – 20 July	**Affected Areas**: VIC – 13 May 2021 QLD – 16 June 2021 Areas of Concern: VIC - 5 August 2021 QLD (Cairns and Yarrabah) – 8 August 2021	**Extreme Risk Zone**: NSW- effective as at 9 July 2021 **Red Zone**: QLD - 11 LGAs effective as at 31 July and Cairns and Yarrabah from 8 August 2021 ACT - effective as at 11 July 2021	**Medium Risk**: NSW – effective as at 23 June 2021 QLD – effective as at 30 June 2021 SA – effective as at 22 July 2021 VIC – effective as at 17 July 2021 **Low Risk**: ACT **Very Low Risk**: NT, TAS, NZ
Situation	Flights arriving from NSW have reduced and those that are still occurring have Australian Federal Police screening the arrivals and directing any travellers that are unable to enter to return to NSW. ACT has over 60 points of entry for across the land border; with Canberra acting as a service hub for many regional NSW towns, with people travelling for work, schooling, and healthcare. To respond to this complexity, Police have adopted a 'anytime / anywhere' approach to monitoring compliance whereby they conduct traffic stops on interstate-register vehicles and set up random checkpoints – stopping around 200 vehicles a day.	Both of the above 'Areas of Concern' were implemented to align with lockdowns being applied to those areas by the relevant state governments.	Victoria shares land borders with NSW and South Australia and as such cross-border communities are not required to obtain permits to move across the border. However, Travellers wanting to cross the border from an Extreme Risk Zone (e.g. NSW) are only able to do so if they meet one of the specified reasons (e.g. to get necessary goods, attend work or education, visiting an intimate partner).	The list of approved travellers from Medium Risk jurisdictions includes: - certain senior Government officials; - certain active military personnel; - a member of the Commonwealth Parliament; - a person carrying out functions under a law of the Commonwealth; - transport, freight and logistics drivers; and - anyone who is given approval by State Emergency Coordinator or an authorised officer. An application process is available for those who wish to travel for compassionate grounds.