

The Senate

Rural and Regional Affairs and
Transport References Committee

Shutdown of the 3G mobile network:
Interim report

August 2024

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List of recommendations

Recommendation 1

1.90 The committee recommends that the Minister for Communications (minister) urgently meet with Telstra and Optus to seek their agreement to extend the shutdown of the 3G network until the minister is satisfied that the following conditions are met:

- the 4G network provides coverage equivalent to or better than the coverage provided by the licensee's 3G network; and
- that best endeavours have been made by government and industry to audit the number and type of devices that will be affected and to take reasonable efforts to contact affected consumers of those devices.

Recommendation 2

1.91 In the event that Telstra and/or Optus are not willing to agree to extend their 3G network shutdown, subject to the conditions listed in Recommendation 1, the committee recommends that, prior to 30 August 2024, the Minister for Communications places conditions on the relevant carrier by making a declaration similar to the *Carrier Licence Conditions (Telstra Corporation Limited) Declaration 1997*. As a minimum, the declaration should specify the conditions outlined in Recommendation 1.

Recommendation 3

1.92 The Australian Government should lead a best endeavours process, with industry cooperation, to audit the number and type of non-telephone devices that could be impacted by the 3G shutdown and help consumers who are impacted by the shutdown to mitigate any impact on them. This audit should be targeted towards devices that are likely to have a significant impact on public health, safety, and business operations.

Chapter 1

Interim report

Referral and conduct of the inquiry

- 1.1 On 26 March 2024, the Senate referred an inquiry into the shutdown of the 3G mobile network to the Rural and Regional Affairs and Transport References Committee (the committee), with a reporting date of 30 November 2024.¹
- 1.2 The inquiry was established to look into the shutdown of the 3G mobile network and telecommunications services accessibility, with particular reference to:
 - (a) the impact on access to triple zero emergency calls;
 - (b) the number of devices and customers affected by the shutdown;
 - (c) the absence of 4G services in rural and regional areas previously covered by 3G;
 - (d) the impact on elderly and health-compromised Australians who use medical alert devices on the 3G network;
 - (e) the impact on industries that use 3G devices;
 - (f) the impact of a lack of telecommunications services on the economic and social circumstances of those who live in regional Australia;
 - (g) service provisions and coverage;
 - (h) efficacy and capability in disaster situations;
 - (i) adherence to, adequacy of, and opportunity to improve service obligations; and
 - (j) any other related matters.
- 1.3 The committee called for submissions by advertising the inquiry on its website and writing to a range of stakeholders to invite submissions. Submissions closed on 31 May 2024 with 43 submissions being accepted which are available on the [committee's website](#).
- 1.4 The committee held public hearings in Cooma, New South Wales (NSW) on 23 July 2024, and Canberra, Australian Capital Territory (ACT) on 24 July 2024. A list of submitters and witnesses is provided at Appendix 1.

Purpose of this interim report

- 1.5 The committee has received and heard evidence that Australia is inadequately prepared for the shutdown of the 3G mobile network. There are still an unknown number of non-mobile devices that will be affected by the shutdown. These devices can be found in industries including health, surveying, agriculture, and emergency services, as well as everyday devices such as EFTPOS terminals and elevators. In addition, there may well be other devices

¹ *Senate Journals No. 107—26 March 2024*, pp. 3215–3216.

impacted given there seems to have only been belated attempts to properly identify all that could be impacted. The committee believes the dangers to public safety, business continuity, and the provision of essential services as a result of the shutdown are too great to ignore and that the shutdown must be delayed until these concerns are sufficiently addressed.

- 1.6 The committee also believes that there has not been sufficient time provided for consumers to identify if their phone (even in some cases a '4G' phone) could be impacted by the 3G shutdown. While mobile network operators had given many years notice of the shutdown, the full range of phones impacted by the shutdown has only become apparent in the last six months.

Regulatory environment

- 1.7 The federal government primarily oversees and regulates the telecommunications sector through the Australian Communications and Media Authority (ACMA) and the Department of Infrastructure, Transport, Regional Development, Communications and the Arts (DITRDCA) (the department). The department has portfolio oversight of the telecommunications sector and provides advice to the minister.

Australian Communications and Media Authority

- 1.8 ACMA is 'Australia's regulator for telecommunications, broadcasting, some online content and radiocommunications'.²
- 1.9 ACMA's submission outlined the responsibilities of the agency and the role it can play in determining if the 3G shutdown raises any compliance issues. ACMA does not regulate network updates or shutdowns and carriers are not obliged to advise ACMA of plans to close a mobile network.³
- 1.10 ACMA highlighted that its primary concern with the shutdown is the potential effect on consumers who have phone devices that will not work when there is no 3G network in operation, particularly those who have devices without Voice over Long-Term Evolution (VoLTE) capability and therefore will not be able to connect to triple zero services.⁴
- 1.11 According to ACMA, mobile devices are required to comply with the version of the technical standard that is applicable when it is originally supplied to the market. For example, if 5G is the standard technology then all new devices must comply with 5G. If the equipment is subsequently modified after the original

² ACMA, *Submission 2*, p. 1.

³ ACMA, *Submission 2*, p. 1.

⁴ ACMA, *Submission 2*, p. 1.

supply date, it is required to comply with the applicable technical standard at the time of modification.⁵

Emergency Call Service Determination

1.12 ACMA is also responsible for the triple zero emergency call service through the *Telecommunications (Emergency Call Service) Determination 2019* (ECS Determination).⁶ The ECS Determination sets rules that apply to carriers and carriage service providers. ACMA's submission outlined the rules around provision of access to the triple zero service:

The ECS Determination requires carriers and carriage service providers to maintain the proper and effective functioning of their networks and facilities in support of consumer access to the Triple Zero service ... There is, however, no requirement for a carrier to carry a call on a 3G network if that carrier no longer offers a 3G network service.⁷

1.13 ACMA noted that the decision of telecommunications providers to cease operation of their 3G networks would not bring them into non-compliance with the current ECS Determination.⁸ Notwithstanding this:

... the Minister for Communications, the Hon Michelle Rowland MP, has requested the ACMA review the ECS Determination to ensure it has appropriate regulatory settings for network closures. That review will also implement a number of the Government's responses to the report into the Optus network outage that occurred on 8 November 2023. The ACMA has commenced this review and expects to undertake a public consultation phase in the near future.⁹

1.14 The department noted that:

There's a requirement under the rules to ensure that triple 0 calls are able to be made. It doesn't focus on whether it's 3G or 4G; however, our focus is on ensuring that triple 0 calls can be made as part of the transition anyway.¹⁰

1.15 Ms Kathleen Silleri, Assistant Secretary, Consumer Safeguards Branch, Communications Services and Consumer Division, DITRDCA, provided further context by adding that 'ACMA has a certain interpretation of the existing determination, which is why the minister is currently considering a review of the direction to them to make it beyond doubt that calls must be carried to triple

⁵ ACMA, *Submission 2*, p. 2.

⁶ *Telecommunications (Emergency Call Service) Determination 2019*.

⁷ ACMA, *Submission 2*, p. 2.

⁸ ACMA, *Submission 2*, p. 3.

⁹ ACMA, *Submission 2*, p. 3.

¹⁰ Mr James Chisholm, Deputy Secretary, Communications Group, Department of Infrastructure, Transport, Regional Development, Communications and the Arts (DITRDCA), *Proof Hansard*, 24 July 2024, p. 62.

0'.¹¹ It is not clear that this review will take place and/or be completed prior to Telstra and Optus' planned 3G shutdown dates.

- 1.16 The committee heard evidence that the department was first made aware of the issue of some devices being unable to call triple zero in June 2023. Mr Andrew Sheridan, Vice President, Government and Regulatory Affairs, Optus, confirmed that Optus first raised these concerns with the department in July 2023. However, the full extent and size of the issue was not discovered until February 2024.¹² Mr John Hewitt, Manager, Government Relations, Telstra, told the committee that Telstra first advised the department of the issue in December 2023 before realising that the extent of the problem was far greater than first thought:

The first time that we highlighted the issue that you've outlined was in the December 2023 quarterly report, when we gave some generalised information about what the issue was and some very early detail on numbers. It was very much a preliminary figure, and as time went on we came to understand that that figure was significantly greater.¹³

Mobile Industry Working Group

- 1.17 In March 2024, the Mobile Industry Working Group (Working Group) was announced in a media release by The Hon. Michelle Rowland MP, Minister for Communications, to support the planned shutdown of the 3G network. The Working Group is made up of the three major telecommunications providers and the Australian Mobile Telecommunications Association, with the department holding observer status. The primary focus of the group is to identify customers with affected devices, as well as formalising collaboration within the industry, improving the accessibility of information and contact points, and amplifying messages to ensure the community is aware of the switchover. The Working Group provides fortnightly updates to the government on efforts to identify impacted customers and ways for customers to check if their device will be impacted.¹⁴

¹¹ Ms Kathleen Silleri, Assistant Secretary, Consumer Safeguards Branch, Communications Services and Consumer Division, DITRDCA, *Proof Hansard*, 24 July 2024, p. 62.

¹² Mr Andrew Sheridan, Vice President, Government and Regulatory Affairs, Optus, *Proof Hansard*, 24 July 2024, p. 4.

¹³ Mr John Hewitt, Manager, Government Relations, Telstra, *Proof Hansard*, 24 July 2024, p. 6.

¹⁴ The Hon Michelle Rowland MP, Minister for Communications, '[New mobile industry working group to support 3G switchover](#)', *Media release*, 17 March 2024. See also: Ms Lisa La Rance, First Assistant Secretary, Communications Infrastructure Division, DITRDCA, *Proof Hansard*, 24 July 2024, p. 52.

Concerns with the planned shutdown

Equivalent coverage post-3G shutdown

- 1.18 Concerns have been raised that proposed 4G coverage will not match that of the current 3G network, despite claims from the mobile network operators that equivalent coverage will be provided. Submitters have outlined their fears of inconsistent coverage maps, lack of service to areas covered by signal boosting equipment, and inability to test the claim of equivalent coverage stemming from the shutdown.
- 1.19 In announcing the shutdown of the 3G mobile network, the mobile network operators have committed to providing 4G and 5G coverage equivalent to current 3G services. Telstra submitted that it has 'committed publicly to ensuring our 4G coverage is equivalent to our pre-existing 3G coverage before we close 3G'.¹⁵ Delivering 4G equivalence has required the upgrade of previous 3G-only sites, a process that Telstra says is on track to be completed by the time of the 3G network shutdown.¹⁶
- 1.20 Similarly, Optus has claimed that the provision of equal or better 4G coverage is a key outcome of its 3G shutdown. Optus claims that its 4G network currently covers almost 32 000 square kilometres more than its 3G network.¹⁷ Testing conducted throughout its 4G rollout has consistently indicated that its 4G network has equal or better coverage and voice and data performance compared with the existing 3G network. Although there are a small number of sites that will not be upgraded in time for the 3G network shutdown, Optus has committed to maintaining 3G networks in these areas until the 4G upgrade is complete.¹⁸
- 1.21 To ensure equivalent coverage, the mobile network operators have added brand new 4G sites and upgraded existing 3G sites to become 4G-compliant. Telstra submitted that, as at April 2024, only 112 sites out of 11 700 were still to be upgraded from 3G to 4G,¹⁹ while Optus has identified 110 sites that will need to be upgraded, in addition to a small number of satellite small cells in remote Australia which utilise 3G.²⁰

¹⁵ Telstra, *Submission 24*, p. 16.

¹⁶ Telstra, *Submission 24*, p. 17.

¹⁷ Optus, *Submission 21*, p. 5.

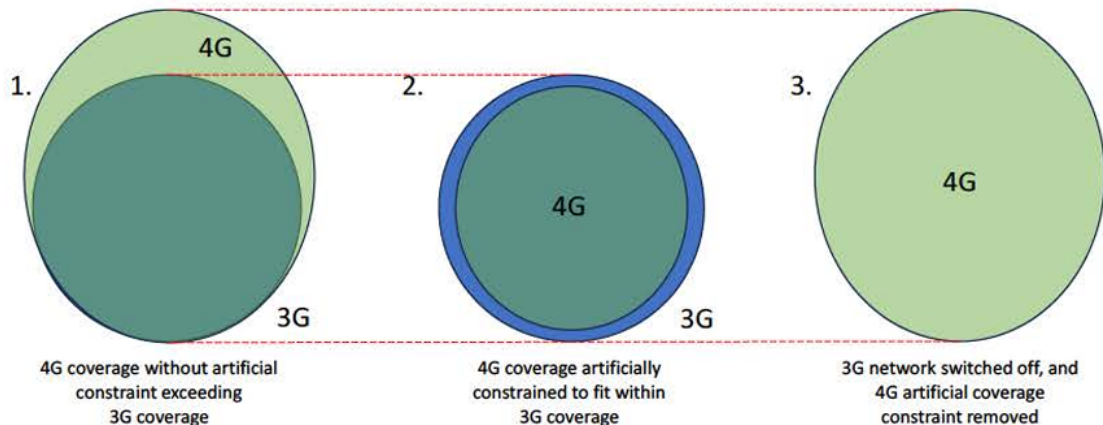
¹⁸ Optus, *Submission 21*, p. 5.

¹⁹ Telstra, *Submission 24*, p. 17.

²⁰ Optus, *Submission 21*, p. 5.

- 1.22 In some locations, the network has had the potential to deliver 4G coverage for years but has been restrained to match that of the 3G network. Telstra provided the figure below to illustrate the point:

Figure 1.1 Reducing 4G Coverage to fit inside 3G Coverage



Source: Telstra, *Submission 24*, p. 25.

- 1.23 In the first set of circles, the 4G coverage extends outside the 3G coverage, and customers with non-VoLTE devices in the area may have had connection issues. To keep customers connected, Telstra artificially constrained the 4G to limit its reach and allow all devices, regardless of age, to make a voice call anywhere inside the stated coverage footprint. As such, the 4G coverage fits inside the 3G coverage—as shown in the second set of circles—and allows coverage for all. Telstra argued, with the 3G shutdown imminent and customers upgrading devices, the constraint to fit within the existing 3G coverage is no longer necessary, meaning that the 4G can instead extend out to its full potential as shown in the third set of circles.²¹
- 1.24 Despite these assurances, submitters are wary of the claims of equivalent coverage made by the telecommunications companies. The Isolated Children's Parents' Association of Australia (ICPAA) questioned how Telstra can guarantee coverage without fully testing it prior to the 3G network closure:

Telstra is promoting with great confidence that the 4G service will be equivalent to or an improvement on the current 3G experience, but that sentiment is not supported, not the current experience, within the wider community. There is a general feeling of great uncertainty and anxiety as to the coverage that will be available when 3G is shutdown. The consistent reports of loss of service as customers transition between 3G and 4G coverage and the diminishing access to the existing 3G service raises concerns of the coverage area and access to 4G.²²

²¹ Telstra, *Submission 24*, p. 25.

²² Isolated Children's Parents' Association of Australia (ICPAA), *Submission 19*, p. 3.

- 1.25 Better Internet for Rural, Regional and Remote (BIRRR) echoed these concerns and stated that customers should be cautious of claims of equivalent coverage until the actual switchover to 4G occurs. BIRRR lamented that there is currently little information about how the operators will support customers who suffer from lost or degraded coverage after the 3G shutdown, and said that ‘mobile coverage maps lack accuracy and transparency and don’t clearly state if 4G coverage will be the same across all layers of the map i.e. indoors, with an antenna etc’.²³
- 1.26 Reliance on coverage maps to determine quality of coverage is a significant concern for those who receive ‘fortuitous’ coverage, or are in fringe areas. These are consumers in areas that are not currently mapped as receiving coverage but nevertheless are still able to access 3G handheld coverage due to the use of boosters, smart antennas, or geographical features. Customers in these areas have come to expect coverage but are now worried that they may be cutoff, and left with no recourse, given they are outside of the advertised maps.²⁴ Members of ICPAA have been advised that, if they are not on the Telstra coverage map, there is no guarantee that they will have access to the 4G network in the same way as they had with 3G.²⁵
- 1.27 The Australian Competition and Consumer Commission (ACCC) urged caution when relying on coverage maps and expressed disappointment at a lack of comparability and transparency. Ms Tara Morice, General Manager, Mobiles, Transmission and Consumer Branch, said the ACCC has ‘consistently highlighted that those coverage maps are based on predicted coverage and therefore don’t necessarily reflect the on-the-ground experience’.²⁶ Each of the mobile network operators use a different methodology and have different input assumptions, meaning that maps are not directly comparable by consumers. Such issues hinder the ability of consumers to make an informed choice about their mobile supplier and can undermine competition in the sector.²⁷
- 1.28 In response to this issue, in 2021 the ACCC began releasing an annual *Mobile Infrastructure Report*. The report aims to improve publicly available information on mobile infrastructure assets and coverage and includes analysis on changes in the mobile network operators’ coverage, including an analysis and comparison of the mobile network operators’ 3G and 4G coverage. The ACCC says this process has been challenging due to the lack of consistency in

²³ Better Internet for Rural, Regional and Remote (BIRRR), *Submission 25*, p. 12.

²⁴ BIRRR, *Submission 25*, p. 12.

²⁵ ICPAA, *Submission 19*, p. 3.

²⁶ Ms Tara Morice, General Manager, Mobiles, Transmission and Consumer Branch, Australian Competition and Consumer Commission (ACCC), *Proof Hansard*, 24 July 2024, p. 41.

²⁷ Ms Morice, ACCC, *Proof Hansard*, 24 July 2024, p. 41.

modelling parameters used by the mobile network operators. Ms Morice suggested that such inconsistencies make it ‘very difficult for [ACCC] to actually verify whether changes in coverage are due to changes in the methodology and the input parameters, as opposed to actual coverage’.²⁸

- 1.29 For consumers on the edges of the coverage map, which includes many residents of rural and regional areas, boosting equipment may be necessary to gain fortuitous coverage. Such equipment, including boosters and antennas, may be incompatible with the 4G network, necessitating a costly upgrade for those that currently rely on them. Without a guarantee of 4G coverage, customers are reluctant to purchase new equipment only to later find out they do not in fact have coverage and the equipment is rendered useless. In other cases, they may upgrade only to find that they now get sufficient 4G coverage without the use of boosters and did not need to purchase additional equipment at all. ICPAA reports that some of its members have cancelled their landline services due to issues with reliability and maintenance and were instead relying on their 3G mobile coverage. These members are now realising that their 3G coverage was only fortuitous, and that when the 3G shutdown occurs they may no longer have any service.²⁹

- 1.30 Mr Ryan Klose, Executive General Manager, Royal Flying Doctor Service of Australia (RFDS), highlighted current issues with coverage by pointing out that ‘in 2003, 3G was launched in Australia. Many Australians in the regional and remote areas are still eagerly waiting to be connected’.³⁰ This sentiment was echoed by Mr Chris Hanna, Mayor, Snowy Monaro Regional Council, who informed the committee about current coverage issues in his council area:

I cannot make a phone call today between Cooma and Bombala or between Cooma and Delegate. It's an hour and a half drive for me. I lose, potentially, three hours on the road. As senators or as mayors—as politicians—we all do a lot of our communications, including our phone use, in the car. I've never, ever been able to make a phone call from Cooma to Bombala.³¹

- 1.31 Mr Hanna conveyed his concern over the safety of property owners in the region due to a lack of connectivity, saying that mapping indicates some areas will be without 4G coverage, but that the ‘information provided by Telstra does not easily allow comparison of where the services will be lost’.³²

²⁸ Ms Morice, ACCC, *Proof Hansard*, 24 July 2024, p. 41.

²⁹ ICPAA, *Submission 19*, p. 3.

³⁰ Mr Ryan Klose, Executive General Manager, Royal Flying Doctor Service of Australia (RFDS), *Proof Hansard*, 24 July 2024, p. 20.

³¹ Mr Chris Hanna, Mayor, Snowy Monaro Regional Council, *Proof Hansard*, 23 July 2024, p. 2.

³² Mr Hanna, Snowy Monaro Regional Council, *Proof Hansard*, 23 July 2024, p. 1.

Associated mobile device issues

- 1.32 All three of the major telecommunications providers have announced that they will, or already have, shutdown their 3G services. Telstra announced in October 2019 that it would be shutting down 3G services in 2024, giving consumers time to adjust and upgrade their devices. On 6 May 2024, the decision was made to extend the shutdown to 31 August 2024 to provide additional time for customers to prepare.³³
- 1.33 TPG announced the closure of its 3G network in September 2022, and completed the shutdown by closing the last sites in NSW and the ACT on 30 January 2024. Optus also announced a plan to switch off its 3G service by September 2024.³⁴
- 1.34 Mr James Chisholm, Deputy Secretary, Communications Group, DITRDCA, explained that, ‘the first formal request for information from government goes back to April 2021’, with a range of regular reporting subsequently put in place.³⁵
- 1.35 The most significant impact of the 3G shutdown is that devices reliant on the network will no longer operate. Of key concern is the possibility that many people who believe they have a compatible device may in fact be unable to call emergency services.
- 1.36 Under 3G technology, calls can be placed as normal over the network. However, under 4G this is not possible, and calls are instead transmitted using VoLTE. By utilising the data network, VoLTE offers sharper and clearer call quality, faster call connection times, and the ability to simultaneously use voice and data services. Unfortunately, some early 4G devices do not have VoLTE capability and instead continue to rely on 3G networks. These 4G-compatible devices will no longer be able to make calls after the shutdown. Of greater concern is the group of devices that support 4G VoLTE, but still rely on 3G circuit switched for emergency calls. These devices will be able to make all calls *except* to the triple zero service. The department has provided the following summary of categories of 4G devices that will be impacted:
 - **4G 'grey import'**. Some handsets brought into Australia from overseas (e.g. purchased online or by international travellers) may not support the radiofrequency bands used to deliver 4G and 5G services in Australia.
 - **4G devices without VoLTE capability**. Some early-generation 4G handsets have 4G data connectivity, but do not have 4G VoLTE capability. This means that they are hardwired to use the 3G network to make calls and will lose the ability to make or receive phone calls following the network closures, including triple zero calls.

³³ Telstra, *Submission 24*, p. 3.

³⁴ TPG Telecom, *Submission 7*, p. 2.

³⁵ Mr Chisholm, DITRDCA, *Proof Hansard*, 24 July 2024, p. 51.

- **4G devices which have VoLTE capability but are unable to make emergency calls.** Some 4G phones support 4G VoLTE but rely on 3G circuit switched for emergency calls. The department understands these devices will continue to make and receive regular calls following the 3G switch offs but will be unable to make emergency calls.³⁶

- 1.37 The third category of 4G devices are of most concern because customers are likely to mistakenly believe that their device is unaffected by the switch-off until they try to call triple zero in an emergency. There is no way to test if your device is one of those that is no longer able to call emergency services. The department predicts that there may be over 300 000 such devices in circulation.³⁷
- 1.38 Telecommunications technology commentator Mr James Parker summarised the issues with some 4G devices. Unlike calling over 2G and 3G networks, there is no single standard or configuration for 4G calling. Carriers can choose different settings to configure their VoLTE calling networks, meaning devices need to have certain firmware support in order to be able to make calls. A device that works with one carrier may not work with another. Mr Parker said this issue is likely to affect Android devices in particular, due to fragmentation of software updates and support. In his view, a majority of Android devices released earlier than 2018 are likely to have either no VoLTE calling support or limited VoLTE support on Australian networks.³⁸
- 1.39 At the hearing in Cooma, Mr Parker told the committee that when 4G devices were first rolled out in 2012 and 2013, 'there was no, and has continued to be no, built-in functionality for any calling, including emergency calling; 4G is data only. For the industry to enable calling, they've relied on adding software to devices to do that'.³⁹ The standardisation of 4G calling is a software issue and is entirely fixable if the mobile network operators agree on a configuration. The Global System for Mobile Communications is the world's largest industry group for the telecom sector and has recommended standards and specifications that providers can use to configure their devices and networks. This specification, known as the 'open market configuration', is designed to be a global, generic configuration that can work on any network. In Australia, Optus and Vodafone have both configured devices using this standard, while Telstra has chosen to use its own configuration and effectively locked devices to its network.⁴⁰

³⁶ Department of Infrastructure, Transport, Regional Development, Communications and the Arts (DITRDCA), *Submission 27*, p. 9.

³⁷ DITRDCA, *Submission 27*, p. 10.

³⁸ Mr James Parker, *Submission 32*, pp. 4–5.

³⁹ Mr James Parker, *Proof Hansard*, 23 July 2024, p. 19.

⁴⁰ Mr James Parker, *Proof Hansard*, 23 July 2024, pp. 19–20.

- 1.40 Mr Parker supports the standardisation of device configuration by the networks and the handset manufacturers, both locally and globally, and believes the shutdown of the 3G network should be paused until this issue is resolved. He believes that Australia should follow the lead of the European Union and other markets globally which have paused their switch-offs while the issue is ongoing.⁴¹

Impacts on non-mobile devices

- 1.41 At the public hearing in Canberra, the mobile network operators explained that there were nearly 900 000 3G devices (both mobile and non-mobile) that are currently active and would be affected by the shutdown of the 3G network. Of these, nearly 380 000 are mobile devices that are either 3G only, or 4G non-VoLTE (that is, use 4G for data, but rely on 3G for voice calls) and 4G VoLTE (that is, rely on the 3G network to make an emergency call).⁴² Furthermore, there are close to half a million non-mobile devices that will not function once the 3G network is shutdown.⁴³ As an example, these include water and electricity meters, farming monitoring and diagnostic equipment, medical devices, emergency phones in elevators, in addition to safety and asset tracking devices. This section explores the serious, and in some cases life threatening, impacts on people and organisations if these devices do not work after the shutdown.
- 1.42 While the mobile network operators have made considerable efforts to ensure that users of mobile devices have been made aware of the shutdown, the committee heard evidence that there have been more limited efforts by the mobile network operators and the government to raise awareness about other devices. Mrs Michelle Blicavs, Chief Executive Officer, Surveyors Australia, told the committee that the mobile network operators were ignorant of the wide-ranging effects of the shutdown and did not do enough to support affected industries:

Whilst we share the concerns raised by the minister about the impact to 000 calls, we do not share her belief that all industries were made aware of the switch-off in time to prepare. We do not believe that there was extensive enough engagement by the telcos or the government to understand the current use of the 3G network for a broad range of services, including surveying.

...

Our concern remains that the government or telcos did not consult broadly enough before announcing the shutdown of the 3G network. They did not consider all the impacted industries, and, when we reached out to the

⁴¹ Mr James Parker, *Proof Hansard*, 23 July 2024, p. 25.

⁴² *Proof Hansard*, 24 July 2024, p. 4.

⁴³ *Proof Hansard*, 24 July 2024, p. 13.

government and the telcos with our concerns, both were surprised and had no knowledge that a profession as important as surveying could be impacted at such a significant cost.⁴⁴

Medical devices and impacts on the elderly

- 1.43 The shutdown of the 3G mobile network poses significant risks for those who rely on medical alarms and personal emergency response systems (PERS). PERS refers to a wide range of devices that are typically worn as a bracelet or necklace that enable the wearer to seek help in an emergency. They usually operate on wireless networks, including wi-fi, or via a mobile connection.⁴⁵
- 1.44 The National Emergency Management Agency reported that, in Australia the sale of personal medical alarms is regulated by ACMA. New alarms must comply with Australian Standard AS 4607, which now mandates 4G capability.⁴⁶ The department told the committee that, although the mobile network operators are aware that users may be compromised following the shutdown, it is impossible to contact them as mobile network operators have no relationship with the end users. While mobile network operators can see that a device is using their 3G network, they cannot always determine if the device is using text, voice or data, making it difficult to identify the number of customers using PERS.⁴⁷
- 1.45 Although the mobile network operators cannot give firm numbers of users, the Australian Communications Consumer Action Network (ACCAN) estimates that approximately 200 000 medical alert devices rely on the 3G mobile network and will need upgrading or replacing. ACCAN submitted that suppliers have been actively informing their customers about replacing their equipment if it will no longer work after the 3G shutdown. However, this evidence raises concerns about the lack of communication from manufacturers and sellers of unregistered devices about how the 3G shutdown may impact their equipment.⁴⁸
- 1.46 The department has reportedly reached out to manufacturers and providers of service alarms including CareAlert, Tunstall Healthcare, and Australian Personal Emergency Response Services Limited. They indicated that even if consumers are made aware of the shutdown it can be difficult to get this

⁴⁴ Mrs Michelle Blicavs, Chief Executive Officer, Surveyors Australia, *Proof Hansard*, 23 July 2024, p. 36.

⁴⁵ DITRDCA, *Submission 27*, p. 12.

⁴⁶ National Emergency Management Agency, *Submission 15*, p. 6.

⁴⁷ DITRDCA, *Submission 27*, p. 13.

⁴⁸ Australian Communications Consumer Action Network, *Submission 20*, pp. 4–5.

vulnerable cohort to act. Lack of affordability is also a key barrier to upgrading for some.⁴⁹

- 1.47 Concerns about affordability of devices was echoed by other submitters. For those customers that have been made aware of the impending change, replacing devices can be onerous and costly. Ms Linda Truss illustrated for the committee how an already vulnerable cohort will face further expenses—assuming they are able to source replacement equipment at all:

Thousands of elderly Australians used their Home Care package funding to buy safety and senior friendly communication devices such as monitored falls alarms, Opel SOS pendants, Zigee docks, Jablophones, Olitech seniors phones and similar tech. Hundreds of thousands of taxpayer dollars will be wasted now as the majority of these devices that were purchased with funding are 3G, 3G/4G or non-VoLTE devices.

...

When 2G was phased out, there were plenty of 3G devices to replace the 2G devices. That's not the case this time. It's not that people are reluctant to give up their old devices—the Telstra and Optus shops don't sell like-for-like 5G devices to replace the 3G devices.⁵⁰

- 1.48 The dangers to healthcare services are not limited to PERS devices. A range of other healthcare devices also rely on 3G and are critical to monitoring the health of residents in rural and regional areas. Mr Klose outlined some of the services the RFDS offers that would be affected by the shutdown:

We monitor personal cardiac alarms; medical alert devices; fall detection devices, which are getting bigger. As you know, people are ageing in outback communities. The younger generations are moving off. They are working longer. There's a danger there. We also monitor pacemakers and insulin pumps. These are all supported today by 3G technology which needs to be replaced and changed.⁵¹

- 1.49 In response to concerns about the operability of medical devices and equipment, the department has reportedly encouraged mobile network operators to communicate the urgency to upgrade equipment to any PERS providers that they work with. The mobile network operators have advised the department that they have been contacting the major PERS providers and publish general advice on their websites about the need to upgrade these devices.⁵²

Other impacted industries

- 1.50 The impact of the shutdown of the 3G network will also be felt in industries beyond healthcare. Industries such as agriculture, surveying, and security will

⁴⁹ DITRDCA, *Submission 27*, p. 13.

⁵⁰ Ms Linda Truss, *Submission 40*, p. 1.

⁵¹ Mr Klose, RFDS, *Proof Hansard*, 24 July 2024, p. 20.

⁵² DITRDCA, *Submission 27*, p. 13.

all be affected, as will machines in everyday use, such as elevators and vending machines. Dr Jodie Trembath, Director, Skills, Employment and Small Business, Australian Chamber of Commerce and Industry, told the committee that 3G often supports essential equipment for retailers and suppliers, including EFTPOS terminals, routers, scanners, and surveying equipment. Water pumping systems, warning systems, and potentially some water and waste infrastructure, also run on the 3G network.⁵³

- 1.51 The Hon. Bruce Billson, Australian Small Business and Family Enterprise Ombudsman, noted that he had communicated the need for mobile network operators to be more proactive in advising the community of the effects the shutdown will have beyond mobile handsets:

We've encouraged the telcos to step up and be more frank about where this technology is embedded. There are a number of websites, but even those websites—the Australian Mobile Telecommunications Association website is a good resource but focuses very much on the handset. It doesn't go very far at all into these embedded 3G applications.⁵⁴

- 1.52 Mr Billson advised the committee that his office had taken it upon themselves to try to raise awareness among small business owners that this was an issue they would have to face:

You might be tracking assets and trucks for a freight company or wander up to a vending machine to pay for a Pepsi Max and nothing happens. A security system might be looking after your premises, and all of a sudden there's no link back to the base station and no remote observation capability. You might think, 'What's going on here?' So what we've tried to do is just raise awareness of this as a possibility that people should turn their minds to.⁵⁵

- 1.53 The primary issue for many of these industries is the lack of knowledge that the shutdown will affect them at all. The National Farmers' Federation pointed out that 'there will undoubtedly be devices that consumers don't realise run on 3G exclusively until after the network is shutdown' and that they have encouraged their members to speak to suppliers to avoid any negative consequences post-shutdown.⁵⁶ Dr Trembath observed that some of these as yet unknown devices could have life-threatening implications if not replaced:

I was particularly disturbed to hear that certain fire alarm systems may also be affected. So if there's a fire in your business's building in the middle of the night—if the building has a fire alarm system that relies on 3G to

⁵³ Dr Jodie Trembath, Director, Skills, Employment and Small Business, Australian Chamber of Commerce and Industry (ACCI), *Proof Hansard*, 24 July 2024, p. 26.

⁵⁴ The Hon. Bruce Billson, Australian Small Business and Family Enterprise Ombudsman (ASBFEO), *Proof Hansard*, 24 July 2024, p. 36.

⁵⁵ The Hon. Bruce Billson, ASBFEO, *Proof Hansard*, 24 July 2024, p. 36.

⁵⁶ National Farmers' Federation, *Submission 26*, p. 12.

automatically contact the fire brigade, that service will no longer work in about a month's time, and those businesses largely don't know that.⁵⁷

- 1.54 Mr Klose supported this further by outlining all the different devices used by the RFDS that may not be 'front of mind' when considering the shutdown:

We're also talking about security alarms, CCTVs that we monitor our remote clinics with because a lot of these places are not safe at night for our clinicians and those people, flight cells on our aircraft and emergency comms channels, road ambulance tracking and emergency comms channels, vehicle tracking for clinicians when they go into the bush so we can keep them safe, fridges—we have cold chain pharmaceuticals sitting out there that need to have alerts done as well—and backup generators because the stability of power is also challenging out there. 3G is across all these devices and providing monitoring and alerts so we can continue to assure those services are there and somebody is listening.⁵⁸

- 1.55 Mrs Debra Charlton, Executive Councillor and Chair, Rural Affairs Committee, NSW Farmers Association, outlined the range of devices that are used by farmers and others in the agriculture sector that may be impacted. Mrs Charlton said that 'farming operations increasingly rely on a range of connectivity applications in equipment that uses monitors, devices and handsets', all of which are supported by 3G connectivity. These devices range from large machinery to small devices such as irrigation and soil moisture sensors, monitors on bores and water tanks, and modems in tractors for digital diagnosis and data capture.⁵⁹

- 1.56 Surveyors Australia reported supply chain issues, and the cost of upgrading critical equipment, would make it difficult for surveyors to replace redundant devices in time for the shutdown. Issues in replacing equipment will result in flow-on effects to other critical industries. Mr Jack Atkinson, Director, Jack Atkinson Surveying, explained that the replacement of controllers used in surveying is necessary because:

... surveying software is quite locked down ... the modem itself is the problem. It's a 3G modem, which means it can't work when 3G gets turned off, and as a result you can't use it to connect to the internet anymore.⁶⁰

- 1.57 Any shortage of surveyors due to the shutdown of the 3G network would have flow-on effects on industries reliant on surveying, including land measurement, housing construction, environmental management and emergency response services. Surveyors Australia reminded the committee that no building or

⁵⁷ Dr Trembath, ACCI, *Proof Hansard*, 24 July 2024, p. 26.

⁵⁸ Mr Klose, RFDS, *Proof Hansard*, 24 July 2024, p. 20.

⁵⁹ Mrs Debra Charlton, Executive Councillor and Chair, Rural Affairs Committee, NSW Farmers Association, *Proof Hansard*, 24 July 2024, p. 30.

⁶⁰ Mr Jack Atkinson, Director, Jack Atkinson Surveying, *Proof Hansard*, 23 July 2024, p. 37.

infrastructure project can start or finish without the involvement of a land surveyor.⁶¹

Affordability

1.58 Lack of affordability of replacement phones and devices has been raised as a major impediment for individuals and businesses to upgrade prior to the shutdown. Being informed of the impact of the 3G network closure is not enough if people cannot afford to replace their phones and devices.

1.59 Surveyors Australia pointed out that controllers for surveying equipment cost around \$15 000 per unit. This is a significant and unexpected expense for an industry in which 70 per cent of operators are small businesses.⁶² At the Cooma hearing, Mrs Blicavs explained that cost was a major barrier to upgrading for many small and mid-size surveying firms:

Some of our firms have had a million-dollar bill. The problem is that's normally in a rolling capital expenditure. They would know that they've got to upgrade their equipment over a period of time, and they would have a 10-year rolling renewal program for their equipment. Unfortunately, now they've had to do that in one year's budget.⁶³

1.60 Surveyors Australia sought information from the mobile network operators about potential support for replacing equipment. When requesting subsidies or support from Telstra, Surveyors Australia said support was denied on the grounds that 'they [Telstra] were unwilling to set a precedent for others that might come forward'.⁶⁴

1.61 If mobile network operators are unwilling to provide support for the replacement of equipment, the burden falls on businesses to absorb the cost of upgrades which have been forced upon them by the network closure. Such a situation has troubled organisations who feel as though they should not be paying for the decision of mobile network operators to shut down the network. Mr Klose argued that funds which would otherwise be used for life-saving health services have now been redirected to upgrading equipment to 4G compatibility:

Large mining companies and large agribusiness companies probably have the resources, the expertise, the dollars and the know-how to replace 3G with 4G or satellite. RFDS has already spent \$150,000 to \$200,000 of our own money in this transition. It seems a little bit ironic that for years we've always paid our bills on time for Telstra or Optus, and now we've been slapped with a fine, in our view, as we now need to change that technology at our cost. I

⁶¹ Surveyors Australia, *Submission 18*, pp. 1–2.

⁶² Surveyors Australia, *Submission 18*, p. 2.

⁶³ Mrs Blicavs, Surveyors Australia, *Proof Hansard*, 23 July 2024, p. 37.

⁶⁴ Mrs Blicavs, Surveyors Australia, *Proof Hansard*, 23 July 2024, p. 40.

understand that it exists and things, but our money could be put to better use out there.⁶⁵

1.62 The cost burden is even greater for individuals needing to replace devices, particularly people on low incomes. Compounding the issue is that it is those on low incomes, older, and digitally marginalised people who are most likely to use the phones and devices impacted by the closure. The South Australian Council of Social Service advised the committee that the cheapest smartphones on the market cost approximately \$300—an amount equivalent to over half of one week's income for a single age pensioner, and nearly 80 per cent of one week's income for a single person on the JobSeeker base rate. For people experiencing homelessness, their mobile is likely their only access to the internet, and this connection may be taken away due to the unaffordability of 4G smartphone options.⁶⁶

1.63 There are also issues with access to newer devices in regional areas when there is often no nearby retail supplier for devices, necessitating online orders or a long trip to a regional centre to upgrade before being cutoff.⁶⁷

1.64 Submitters argued that forcing customers onto new, often more expensive, devices and plans amounts to profiteering behaviour by the mobile network operators. Mr Parker, told the committee that these devices were often unnecessary, and were only to solve a problem created by the telecommunications operators:

It is a certainty that Australians are actively being upsold to new, expensive devices and plans when their existing device may just require an update from the telco or manufacturer ... Over many years, the providers in the industry have been allowed to manufacture the problem, and they now get the opportunity to sell customers a solution with new handsets, all whilst harming competition, increasing profits and cutting costs by shutting down the 3G network.⁶⁸

1.65 Ms Cynthia Gebert, Telecommunications Industry Ombudsman (TIO), confirmed that the TIO had received numerous complaints about 'upselling' unnecessary devices and services:

We have seen some customers coming to us who have approached their telco in order to work out what device they need and have been encouraged to purchase additional devices that may not have been a direct replacement.

...

⁶⁵ Mr Klose, RFDS, *Proof Hansard*, 24 July 2024, p. 20.

⁶⁶ South Australian Council of Social Service, *Submission 11*, p. 2.

⁶⁷ Royal Flying Doctor Service (RFDS), *Submission 12*, p. 2.

⁶⁸ Mr James Parker, *Proof Hansard*, 23 July 2024, p. 18.

it can mean a more expensive plan than maybe what they were on before. But we've also seen instances where there have been additional products put forward by the provider and sold as a broader package.⁶⁹

- 1.66 In response to concerns over unaffordability, the mobile network operators have outlined options available to customers in need. Optus has advertised basic handsets from \$59 with payment plans from \$1 per month and offered free devices on a case-by-case basis for those customers that are unable to pay for a device upgrade due to personal circumstances.⁷⁰ Telstra also advised at the Canberra hearing that it provides low-cost devices and has offered over 12 000 free devices for anyone in vulnerable circumstances or experiencing hardship.⁷¹

Delaying the shutdown

- 1.67 The department made it very clear that both it and the government are closely monitoring the situation as the shutdown date approaches:

... we are focused very much on ensuring that the transition occurs when we can be confident that those issues that we have talked about have been adequately addressed. So our focus is less on the consequences of the transition not going from 3G to 4G but on making sure that the concerns about the impact on vulnerable communities are adequately addressed before that happens. In terms of the technological impact of there not being a transition to 4G in a timely manner...⁷²

- 1.68 Ms Lisa La Rance, First Assistant Secretary, Communications Infrastructure Division, DITRDCA, explained that it was not until February of this year that it became clear that the mobile network operators did not have full visibility of all devices likely to be affected by the shutdown of the 3G network. For instance, 'it became apparent that people might have a device that you think will work but that when you go to call triple 0 following the shutdown it may not'.⁷³
- 1.69 This development led to the establishment of the 3G Shutdown Working Group, as discussed earlier in this chapter.
- 1.70 When asked about concerns raised relating to vending machines and emergency telephones in elevators, the committee was told that neither industry had been consulted:

We have only recently reached out to the Australian elevator industries just to make sure that they're aware. We haven't heard back from them yet, because it's a fairly recent outreach from us, but we are trying to reach out

⁶⁹ Ms Cynthia Gebert, Telecommunications Industry Ombudsman, *Proof Hansard*, 24 July 2024, p. 49.

⁷⁰ Optus, *Submission 21*, p. 7.

⁷¹ Ms Justine Rowe, Executive, Sustainability Policy Engagement, Telstra, *Proof Hansard*, 24 July 2024, pp. 10–11.

⁷² Mr Chisholm, DITRDCA, *Proof Hansard*, 24 July 2024, p. 51.

⁷³ Ms La Rance, DITRDCA, *Proof Hansard*, 24 July 2024, p. 52.

to those industries to understand progress and awareness of the 3G shutdown and what the implications are

...

[We reached out] just this week with the elevator group, so that's fairly recent.⁷⁴

1.71 The department acknowledged that 'it's fair to say that we are learning new things as we reach out to different stakeholders'.⁷⁵

1.72 Mr Chisholm further articulated the importance of getting it right rather than simply meeting an arbitrary deadline:

As I mentioned earlier, the government is fundamentally very focused on ensuring public safety associated with this transition, and that will very much form part of the advice that we provide back to government before the transition is scheduled to occur.⁷⁶

1.73 The committee is not aware of any technical or engineering reasons that would impede a delay to the shutdown of the 3G network.

Regulatory options available to the government

1.74 After acknowledging many of the concerns raised by senators, Mr Chisholm told the committee that 'options do exist for the minister to consider regulatory intervention including the possibility of delays, subject to required consultation and procedural processes'.⁷⁷

1.75 In March of this year, the Minister for Communications issued a media release which noted that regulatory options, including a delayed shutdown of the 3G network, are available to the government:

If warranted in the public interest, options exist under law for the Government to consider regulatory intervention—including proposals for delays to planned switchovers, subject to required consultation and procedural processes. The Government will continue to monitor this issue closely and consider options under law if warranted in the public interest.⁷⁸

1.76 The department's submission explained in more detail how this type of intervention could work:

There are no specific powers available to the Minister to intervene in network transitions, nor is there a legislative requirement for the Minister to approve these decisions, which are commercial decisions by the network

⁷⁴ Ms Shanyn Sparreboom, Assistant Secretary, Competition and Spectrum Branch, DITRDCA, *Proof Hansard*, 24 July 2024, p. 53.

⁷⁵ Ms Sparreboom, DITRDCA, *Proof Hansard*, 24 July 2024, p. 54.

⁷⁶ Mr Chisholm, DITRDCA, *Proof Hansard*, 24 July 2024, p. 56.

⁷⁷ Mr Chisholm, DITRDCA, *Proof Hansard*, 24 July 2024, p. 57.

⁷⁸ The Hon Michelle Rowland MP, Minister for Communications, '[New mobile industry working group to support 3G switchover](#)', *Media release*, 17 March 2024.

operators. The Minister does, however, have broad powers for regulating the communications market in Australia. This includes the ability to impose conditions on carrier licences. Compliance with licence conditions is mandatory and enforced by the Australian Communications and Media Authority (ACMA). Carriers in breach of a carrier licence condition and persons otherwise involved in a breach of a carrier licence condition are subject to penalties detailed in Part 31 of the Telecommunications Act 1997, which can be up to \$10 million per offence. The ACMA may issue formal warnings regarding the breach of a licence condition or remedial directions requiring action to ensure further breaches do not occur. Carriers must not contravene a direction issued by the ACMA.⁷⁹

- 1.77 It is not unusual for government to implement these types of interventions. In fact, the then Minister for Communications intervened to place conditions on Telstra during the transition from 1G (also known as AMPS or Advanced Mobile Phone System) in 1997:

Carrier licence conditions have been imposed relating to network switch offs in the past. In advance of the closure of the AMPS network, the then Minister imposed carrier licence conditions requiring Telstra to transfer customers from AMPS to the digital network on the basis that customers would receive reasonably equivalent services in terms of coverage, functions, charges or any other matter considered relevant by the Minister. Carrier licence conditions imposed in 2007 required Telstra to maintain its CDMA network until the then Minister for Communications was satisfied that the replacement network provided coverage and retail services that were equivalent to that already provided before it was permitted to shut down the network.⁸⁰

- 1.78 In 2007, the then minister placed conditions on carriers during the transition from 2G (also known as CDMA or code-division multiple access) to 3G:

The Carrier Licence Conditions {Telstra Corporation Limited} Declaration 1997 (Amendment No. 1 of 2007) required that:

- (1) the licensee must continue to maintain the operation of its entire CDMA network until the Minister for Communications notifies the licensee that they are satisfied that:
 - (a) the Alternative Network provides coverage equivalent to or better than the coverage provided by the licensee's CDMA network that was in place as at 1 June 2007; and
 - (b) the Alternative Network provides retail services equivalent to or better than those provided on or in connection with the licensee's CDMA network as at 1 June 2007.

⁷⁹ DITRDCA, *Submission 27*, p. 17.

⁸⁰ DITRDCA, *Submission 27*, p. 17.

- 1.79 The then minister delayed the shutdown of the 2G network when, ‘on advice from the ACMA, [the government] was not satisfied that Telstra had met its requirements’. Furthermore:

When the then-Minister was satisfied that these conditions were met, Telstra was given approval to close the CDMA network after 28 April 2008. At the time of closure of the 2G network, the then Minister did not impose carrier licence conditions on Telstra because the mobile market in Australia was considered mature and commercial imperatives were viewed as providing sufficient incentive for the company to deliver reasonable equivalence of service.⁸¹

Committee view

- 1.80 The committee is not convinced that Australia is adequately prepared for the shutdown of the 3G mobile network. Despite efforts made by the government and mobile network operators to advise consumers of the need to upgrade or replace affected devices, the committee believes the dangers to public safety of a premature shutdown are too great to ignore.
- 1.81 The committee is greatly concerned about the effect of the shutdown on non-mobile devices. It is not entirely known exactly which, or how many devices will be affected by the shutdown. The extent of this issue has only recently become known to the government and the mobile network operators. More work is required to better understand the full extent of this problem and what can be done to mitigate any issues with a shutdown. Proceeding to shut down the network to meet an arbitrary deadline without accounting for the risks to small business, health, and safety would not be prudent.
- 1.82 To date, the government has taken the approach that the shutdown of the 3G network is largely a commercial matter for the mobile network operators to manage. However, given the size and scope of the devices potentially impacted by the shutdown (including many non-phone devices), there should be a much greater shared effort between government and industry to identify the full range of devices impacted, and to help consumers respond to any issues. Ultimately, the spectrum that is used to broadcast 3G is a government owned asset, and the government should be involved in ensuring that Australians are not unduly impacted by the management of this asset.
- 1.83 The committee will have more to say about how the government can work with industry to achieve a better 3G shutdown process in its final report. This interim report simply seeks an extension of the shutdown date so a more cooperative and rigorous process can be put in place.
- 1.84 The committee commends the efforts of mobile network operators in proactively reaching out to owners of affected devices to advise them of the impending

⁸¹ DITRDCA, *Submission 27*, p. 18.

shutdown. The committee also acknowledges the work of the department and the minister in monitoring and responding as the scheduled shutdown dates have approached and notes that the majority of mobile users will be unaffected.

- 1.85 However, it remains the case that the full extent of the number of phones impacted by the 3G shutdown only became apparent earlier this year. This has given Australians just months to become aware and respond to the risk that their phones may not work, or may not fully work, within months. The mobile network operators gave evidence to this committee that there were close to a million active devices that will cease to function once the 3G network is closed. This is only five weeks from the scheduled closure of the Telstra network. A large proportion of people with these devices are vulnerable including the elderly, residents and businesses in remote locations, and people living with disability.
- 1.86 Given that there is still some uncertainty around coverage and the extent to which non-mobile devices will be affected—and noting there may be potential risks to public health and local economies—the committee recommends that the shutdown of the 3G mobile network be postponed until such time as greater assurances can be made.
- 1.87 The effect of the shutdown on critical industries could be significant, so consideration should also be given to conducting an audit targeting devices that have an impact on public health, safety, and business operations, noting that many device providers already have arrangements in place and have been in contact with device users about replacement services.
- 1.88 In recommending this, the committee is mindful that such an audit would be a significant undertaking and would be difficult to arrange, as it would involve individual businesses and industries. The telecommunications companies that provide these services do not necessarily have line of sight on what their service is used for and what replacement option individual businesses and industries are in the process of adopting.
- 1.89 In the first instance, the committee encourages the mobile network operators to work voluntarily with the department to effect this delay. In the event that either Telstra or Optus are unwilling to voluntarily delay the shutdown, the committee recommends that the Minister for Communications mandates a delay through a regulatory intervention.

Recommendation 1

1.90 The committee recommends that the Minister for Communications (minister) urgently meet with Telstra and Optus to seek their agreement to extend the shutdown of the 3G network until the minister is satisfied that the following conditions are met:

- the 4G network provides coverage equivalent to or better than the coverage provided by the licensee's 3G network; and
- that best endeavours have been made by government and industry to audit the number and type of devices that will be affected and to take reasonable efforts to contact affected consumers of those devices.

Recommendation 2

1.91 In the event that Telstra and/or Optus are not willing to agree to extend their 3G network shutdown, subject to the conditions listed in Recommendation 1, the committee recommends that, prior to 30 August 2024, the Minister for Communications places conditions on the relevant carrier by making a declaration similar to the *Carrier Licence Conditions (Telstra Corporation Limited) Declaration 1997*. As a minimum, the declaration should specify the conditions outlined in Recommendation 1.

Recommendation 3

1.92 The Australian Government should lead a best endeavours process, with industry cooperation, to audit the number and type of non-telephone devices that could be impacted by the 3G shutdown and help consumers who are impacted by the shutdown to mitigate any impact on them. This audit should be targeted towards devices that are likely to have a significant impact on public health, safety, and business operations.

Correspondence to the Minister for Communications, Telstra and Optus

1.93 Consistent with the evidence, findings, and recommendations made in this report, yesterday, the committee wrote to the Hon Michelle Rowland MP, Minister for Communications, and the Chief Executives of Telstra and Optus to call on them to work together to delay the scheduled shutdown. The committee called on the minister to use her ministerial powers to effect this outcome if necessary. Copies of this correspondence can be found in Appendices 3, 4 and 5 of this report.

Senator the Hon Matthew Canavan
Chair

Appendix 1

Submissions and Additional Information

Submissions

- 1 NSW Government
- 2 Australian Communications and Media Authority
- 3 Department of Defence
- 4 Costa Group
- 5 National Rural Health Alliance
- 6 Australian Chamber of Commerce and Industry
- 7 TPG Telecom
- 8 Australian Veterinary Association
- 9 South Australian Metropolitan Fire Service
- 10 Australian Small Business and Family Enterprise Ombudsman
- 11 South Australian Council of Social Service
- 12 Royal Flying Doctor Service of Australia
- 13 First Nations Digital Inclusion Advisory Group
 - Attachment 1
- 14 National Retail Association, Shopping Centre Council of Australia and Australian Association of Convenience Stores
- 15 National Emergency Management Agency
- 16 Department of Fire and Emergency Services
- 17 Australian Local Government Association
- 18 Surveyors Australia
- 19 The Isolated Children's Parents' Association of Australia
- 20 Australian Communications Consumer Action Network
- 21 Optus
- 22 Telecommunication Industry Ombudsman
- 23 Australian Mobile Telecommunications Association
- 24 Telstra
- 25 Better Internet for Rural, Regional and Remote
- 26 National Farmers' Federation
- 27 Department of Infrastructure, Transport, Regional Development, Communications and the Arts
- 28 Rural Regional and Remote Communication Coalition
- 29 Name Withheld
- 30 Mr Colin Boyce MP
- 31 Mr Jeremy Rockliff MP
- 32 Mr James Parker
- 33 Mr Jeffrey Aronson
- 34 Mr Gary Duncan

- 35 Dr Amber Marshall
- 36 Mr Guy Robson
- 37 Mr Steve Daw
- 38 Mr John Shaw
- 39 Name Withheld
- 40 Ms Linda Truss
- 41 Mr Robert Heron
- 42 Mr Peter Payne
- 43 Mr Gavin Mullens

Answer to Question on Notice

- 1 Telecommunication Industry Ombudsman - Answers to questions taken on notice at a public hearing on 24 July 2024 (received 28 July 2024).
- 2 NSW Telco Authority - Answers to questions taken on notice at a public hearing on 23 July 2024 (received 31 July 2024).
- 3 NSW Farmers - Answers to questions taken on notice at a public hearing on 23 July 2024 (received 1 August 2024).
- 4 Optus - Answers to questions taken on notice at a public hearing on 23 July 2024 (received 1 August 2024).

Tabled Documents

- 1 Report provided by Telstra to the Minister for Communications, obtained under Freedom of Information, titled *3G to 4G Transition: Q1 FY23 Update to Minister Rowland*, tabled by Senator Gerard Rennick on 24 July 2024
- 2 Report provided by Telstra to the Minister for Communications, obtained under Freedom of Information, titled *3G to 4G Transition: Q3 FY23 Update to Minister Rowland*, tabled by Senator Gerard Rennick on 24 July 2024

Answers to questions on notice

- 1 Telecommunications Industry Ombudsman - Answers to questions taken on notice at a public hearing on 24 July 2024 (received 28 July 2024).
- 2 NSW Telco Authority - Answers to questions taken on notice at a public hearing on 23 July 2024 (received 31 July 2024).
- 3 NSW Farmers - Answers to questions taken on notice at a public hearing on 23 July 2024 (received 1 August 2024).
- 4 Optus - Answers to questions taken on notice taken at a public hearing on 23 July 2024 (received 1 August 2024).

Appendix 2

Public Hearings

Tuesday, 23 July 2024

Cooma Ex-Services Club

106 Vale St

Cooma

Snowy Monaro Regional Council

- Mr Chris Hanna, Mayor

Lake Eucumbene Community Association

- Mr Robert Lawton, Secretary
- Mrs Susan Lawton, Member

National Rural Health Alliance

- Ms Susanne Tegen, Chief Executive
- Ms Gigi O'Sullivan, Strategic Projects Manager

Mr James Parker, Private capacity

National Farmers Federation

- Ms Charlotte Wundersitz, General Manager, Rural Affairs
- Mr Charles Thomas, Deputy Chief Executive Officer

NSW Farmers

- Ms Kathy Rankin, Head of Policy and Advocacy
- Ms Debra Charlton, Executive Councillor and Chair
- Mrs Sarah Thompson, Executive Councillor and Deputy Chair

Surveyors Australia

- Mrs Michelle Blicavs, Chief Executive Officer
- Ms Melanie Gibbons, Head of Advocacy and Stakeholder Engagement

Jack Atkinson Surveying

- Mr Jack Atkinson, Director

NSW Telco Authority

- Mr James Pickens, Acting Managing Director

Wednesday, 24 July 2024

Committee Room 2S3

Parliament House

Canberra

Telstra

- Mr John Hewitt, Manager, Government Relations
- Ms Justine Rowe, Executive, Sustainability Policy Engagement
- Mr Gerard Tracey, Principal Engineer, Network Connectivity Service, Global Networks and Technology

Optus

- Mr Andrew Sheridan, Vice President, Government and Regulatory Affairs
- Mr Harvey Wright, Head, New Products
- Mr Michael Reynolds, Head, Network Products, Programs and Services

TPG Telecom

- Mr Ross Mitchell, Head, Government Relations
- Mr Gary Chant, Head, Wireless Engineering
- Mr Paul Tierney, General Manager, Customer Lifecycle Management and Felix

Royal Flying Doctor Service of Australia

- Mr Ryan Klose, Executive General Manager
- Ms Lauren Gale, Director, Policy, Advocacy and Strategy

Australian Chamber of Commerce and Industry

- Dr Jodie Trembath, Director, Skills, Employment and Small Business
- Ms Samantha McKenna, Policy Adviser

Australian Communications and Media Authority

- Mr Michael Brealey, General Manager, Communications Infrastructure Division
- Ms Cathy Rainsford, General Manager, Consumer Division
- Mr Paul Nicholas, Manager, National Interests Section
- Mr Allan Major, Executive Manager, Licensing and Infrastructure Safeguards Branch

Australian Small Business and Family Enterprise Ombudsman

- The Hon. Bruce Billson, Ombudsman
- Ms Donna Boulton, Director, Policy & Advocacy

Australian Competition and Consumer Commission

- Ms Sarah Proudfoot, Executive General Manager, Infrastructure Division

- Ms Tara Morice, General Manager, Mobiles, Transmission and Consumer Branch

Telecommunication Industry Ombudsman

- Ms Cynthia Gebert, Ombudsman

Department of Infrastructure, Transport, Regional Development, Communications and the Arts

- Mr James Chisholm, Deputy Secretary, Communications and Media Group
- Ms Lisa La Rance, First Assistant Secretary, Communications Infrastructure Division
- Dr Jason Ashurst, Assistant Secretary, Digital Inclusion and Deployment Branch
- Ms Shanyyn Sparreboom, Assistant Secretary, Competition and Spectrum Branch
- Ms Kathleen Silleri, Assistant Secretary, Consumer Safeguards Branch, Communications Services and Consumer Division

First Nations Digital Inclusion Advisory Group

- Ms Dot West OAM, Co-Chair
- Associate Professor Lyndon Ormond-Parker, Co-Chair

Appendix 3

Correspondence from the Committee Chair to the Minister for Communications



AUSTRALIAN SENATE RURAL AND REGIONAL AFFAIRS AND TRANSPORT REFERENCES COMMITTEE

31 July 2024

The Hon. Michelle Rowland MP
Minister for Communications

Dear Minister

INQUIRY INTO THE SHUTDOWN OF THE 3G MOBILE NETWORK

As you may be aware, on 26 March 2024, the Australian Senate referred an inquiry into the [shutdown of the 3G mobile network](#) to the Senate Rural and Regional Affairs and Transport References Committee (the committee) for inquiry and report by **30 November 2024**. On behalf of the committee, I am writing to urge that the shutdown of the 3G mobile network be postponed.

At a recent hearing in Cooma, the committee heard that there are nearly one million active devices that will cease to function once the 3G network is closed (including close to 380 000 mobile devices). The committee is alarmed that many consumers are not aware that they may not be able to contact emergency services once the network closes.

The committee has heard that work remains ongoing to properly prepare the Australian telecommunications sector and the community for the shutdown of the 3G mobile network. There is still much work to complete in the limited time left.

The committee is particularly concerned that the number of 3G non-mobile devices remains unknown. These devices span industries including health, security, surveying,

agriculture, personal medical alerts, and safety and asset tracking equipment. It would not be prudent to shut down the network without properly understanding the risks to small business, health and safety. The committee is also concerned about the large number of devices in use that will no longer connect to triple zero services once the network closes.

The committee acknowledges and commends the efforts of mobile network operators in proactively reaching out to owners of affected devices to advise them of the impending shutdown. The committee also acknowledges the work that you (and your predecessor) and the department have undertaken since 2019 to monitor and respond to issues in the lead-up to the scheduled shutdown and notes that the majority of mobile users will be unaffected.

However, the full extent of non-mobile devices that could be impacted is not yet clear. For example, the department had only contacted the elevator industry to check if the emergency phones in elevators would continue to work in the week of our Senate hearing. While this is just one example, these issues raise the question of what other devices that we do not know about which could be impacted.

We acknowledge that there have been significant recent efforts to alert mobile phone users on whether they could be impacted. However, the full extent of the mobile phones impacted by the shutdown only became apparent six months ago. We do not believe this is a reasonable amount of time for consumers to become aware that their phone may not work and to take steps to replace it.

The committee has also written to both Telstra and Optus, urging them to voluntarily extend the scheduled shutdown dates so that the concerns raised by the committee and community can be properly addressed.

However, should Telstra and Optus not voluntarily postpone the shutdown, the committee notes that it is within your power as the Minister to place conditions on the carriers by making a declaration specifying conditions for the shutdown of the 3G network similar to the *Carrier Licence Conditions (Telstra Corporation Limited) Declaration 1997*. There are precedents for such an intervention to be made. For example, in 1997, the Minister for Communications intervened to place conditions on Telstra during the transition from 1G to 2G, and again in 2007 during the transition from 2G to 3G.

The committee intends to table an interim report for the inquiry into the shutdown of the 3G mobile network tomorrow (Thursday, 1 August 2024) recommending that the shutdown be postponed until you are satisfied that conditions that address the concerns of the committee and the community have been met. The priority must be to make every reasonable effort to contact affected consumers, to identify the number and type of devices likely to be impacted, and to assist consumers with the migration and upgrade of these devices rather than meet an arbitrary deadline. In our view, this is a situation in which it is better to be safe than sorry.

The committee appreciates your urgent consideration of this matter.

Yours sincerely,

Senator the Hon Matt Canavan
Chair

Appendix 4

Correspondence from the Committee Chair to Telstra



AUSTRALIAN SENATE

RURAL AND REGIONAL AFFAIRS AND TRANSPORT

REFERENCES COMMITTEE

31 July 2024

Ms Vicki Brady
Chief Executive Officer and Managing Director
Telstra

Dear Ms Brady,

INQUIRY INTO THE SHUTDOWN OF THE 3G MOBILE NETWORK

As you are aware, on 26 March 2024, the Australian Senate referred an inquiry into the [shutdown of the 3G mobile network](#) to the Senate Rural and Regional Affairs and Transport References Committee (the committee) for inquiry and report by **30 November 2024**. On behalf of the committee, I am writing to urge that the shutdown of the 3G mobile network be postponed.

At a recent hearing in Cooma, the committee heard that there are nearly one million active devices that will cease to function once the 3G network is closed (including close to 380 000 mobile devices). The committee is alarmed that many consumers are not aware that they may not be able to contact emergency services once the network closes.

The committee has heard that work remains ongoing to properly prepare the Australian telecommunications sector and the community for the shutdown of the 3G mobile network. There is still much work to complete in the limited time left. The committee is particularly concerned that the number of 3G non-mobile devices remains unknown. These devices span industries including health, security, surveying,

agriculture, personal medical alerts, and safety and asset tracking equipment. It would not be prudent to shut down the network without properly understanding the risks to small business, health and safety. The committee is also concerned about the large number of devices in use that will no longer connect to triple zero services once the network closes.

The committee acknowledges and commends the efforts of mobile network operators in proactively reaching out to owners of affected devices in the lead-up to the scheduled shutdown and notes that the majority of mobile users will be unaffected.

However, the full extent of non-mobile devices that could be impacted is not yet clear. It is of great concern that Telstra are only now starting to identify some types of devices that are likely to be impacted, such as emergency phones in elevators.

We acknowledge that there have been significant recent efforts to alert mobile phone users on whether they could be impacted. However, the full extent of the mobile phones impacted by the shutdown only became apparent six months ago. We do not believe this is a reasonable amount of time for consumers to become aware that their phone may not work and to take steps to replace it. The committee urges that Telstra voluntarily agree to extend the 3G network shutdown to further account for these issues. The postponement should last until every reasonable effort has been made to contact affected consumers, to identify the number and type of devices likely to be impacted, and to assist consumers with the migration and upgrade of these devices. It is particularly critical that such measures are taken for customers whose devices will no longer connect to triple zero services and those whose non-mobile devices will no longer operate following the shutdown.

The committee has written in similar terms to Optus.

The committee has also written to the Hon Michelle Rowland MP, Minister for Communications urging her to work with Telstra and Optus to delay the shutdown of the network so that the concerns raised by the committee and the community can be properly addressed.

Yours sincerely,

Senator the Hon Matt Canavan
Chair

Appendix 5

Correspondence from the Committee Chair to Optus



AUSTRALIAN SENATE

RURAL AND REGIONAL AFFAIRS AND TRANSPORT

REFERENCES COMMITTEE

31 July 2024

Mr Michael Venter
Interim Chief Executive Officer and Chief Financial Officer
Optus

Dear Mr Venter,

INQUIRY INTO THE SHUTDOWN OF THE 3G MOBILE NETWORK

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The committee has heard that work remains ongoing to properly prepare the Australian telecommunications sector and the community for the shutdown of the 3G mobile network. There is still much work to complete in the limited time left. The committee is particularly concerned that the number of 3G non-mobile devices remains unknown. These devices span industries including health, security, surveying,

agriculture, personal medical alerts, and safety and asset tracking equipment. It would not be prudent to shut down the network without properly understanding the risks to small business, health and safety. The committee is also concerned about the large number of devices in use that will no longer connect to triple zero services once the network closes.

The committee acknowledges and commends the efforts of mobile network operators in proactively reaching out to owners of affected devices in the lead-up to the scheduled shutdown and notes that the majority of mobile users will be unaffected.

However, the full extent of non-mobile devices that could be impacted is not yet clear. It is of great concern that Optus are only now starting to identify some types of devices that are likely to be impacted, such as emergency phones in elevators.

We acknowledge that there have been significant recent efforts to alert mobile phone users on whether they could be impacted. However, the full extent of the mobile phones impacted by the shutdown only became apparent six months ago. We do not believe this is a reasonable amount of time for consumers to become aware that their phone may not work and to take steps to replace it.

The committee urges that Optus voluntarily agree to extend the 3G network shutdown to further account for these issues. The postponement should last until every reasonable effort has been made to contact affected consumers, to identify the number and type of devices likely to be impacted, and to assist consumers with the migration and upgrade of these devices. It is particularly critical that such measures are taken for customers whose devices will no longer connect to triple zero services and those whose non-mobile devices will no longer operate following the shutdown.

The committee has written in similar terms to Telstra.

The committee has also written to the Hon Michelle Rowland MP, Minister for Communications urging her to work with Telstra and Optus to delay the shutdown of the network so that the concerns raised by the committee and the community can be properly addressed.

Yours sincerely,

Senator the Hon Matt Canavan

Chair