

The Senate

Rural and Regional Affairs and
Transport References Committee

Shutdown of the 3G mobile network

February 2025

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Abbreviations and acronyms

ACCAN	Australian Communications Consumer Action Network
ACCC	Australian Competition and Consumer Commission
ACMA	Australian Communications and Media Authority
ALGA	Australian Local Government Association
ASBFEO	Australian Small Business and Family Enterprise Ombudsman
BIRRR	Better Internet for Rural, Regional and Remote
DITRDCA	Department of Infrastructure, Transport, Regional Development, Communications and the Arts
ICPAA	Isolated Children's Parents' Association of Australia
LEO	Low-earth orbit
MBSP	Mobile Black Spot Program
MNOs	Mobile Network Operators
NFF	National Farmers' Federation
RFDS	Royal Flying Doctor Service of Australia

List of recommendations

Recommendation 1

1.83 The committee recommends that the Australian Government establish a program to help customers that have lost mobile phone coverage since the 3G shutoff. This program should be co-funded between industry and government and be for the purpose of purchasing connectivity equipment for use by residents in rural and remote areas. For example, subsidies could be provided to purchase:

- boosters for buildings and vehicles;
- Starlink or other low-earth orbit satellite equipment, including access to mobile phone by Starlink services; and
- replacements for equipment rendered obsolete by the 3G shutdown.

Recommendation 2

1.84 The committee recommends that the Australian Government and the telecommunications industry do all they can to accelerate the introduction of mobile phone services via the Starlink network.

Recommendation 3

1.85 The committee recommends that the Australian Government increase the scope of the National Audit of Mobile Coverage to include off-road areas (including on private land such as farming and grazing properties). This could be achieved by enabling technology for people to ‘pin’ the location where service is available. Data gathered should be cross-referenced with that of the mobile network operators and published in an easy-to-access format.

Chapter 1

Report

Progress of inquiry to date

- 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.¹ The committee held public hearings in Cooma, New South Wales (NSW) and in Canberra, Australian Capital Territory on 23 and 24 July 2024.
- 1.2 On 1 August 2024, the committee tabled an interim report into the shutdown of the 3G mobile network detailing its work to that point and making three recommendations. The interim reports primary recommendation was that the mobile network operators (MNOs)—specifically, Telstra and Optus—postpone the date of the 3G network shutdown to address issues heard throughout the inquiry. The MNOs subsequently extended the shutdown date to 28 October 2024.
- 1.3 A further two hearings were held in Canberra on 5 and 12 February 2025 to receive updated evidence from MNOs, government departments and agencies, and industry stakeholders. A list of submitters and witnesses is provided at Appendices 1 and 2.

Interim report

- 1.4 On 1 August 2024, the committee tabled its interim report into the shutdown of the 3G mobile network. The interim report relayed the committee’s view that the dangers to public safety, business continuity, and the provision of essential services as a result of a premature shutdown were too great to ignore.
- 1.5 The committee reported its concern regarding the lack of knowledge about the number of affected non-mobile devices. The extent of this issue had only recently become known to the government and the MNOs, and the committee believed that more work was required to better understand the full scope of this problem.²
- 1.6 The committee commended the efforts of MNOs in proactively reaching out to owners of affected devices to advise them of the shutdown. However, evidence was given at a hearing on 24 July 2024 advising that close to one million devices would cease to operate following the shutdown, many of which belonged to vulnerable people including the elderly, remote residents and businesses, and

¹ *Senate Journals No. 107*—26 March 2024, pp. 3215–3216; Information on the inquiry, including terms of reference, can be found on the committee’s webpage [here](#).

² Senate Rural and Regional Affairs and Transport References Committee (RRAT Committee), *Shutdown of the 3G mobile network: Interim report*, August 2024, p. 21.

people living with disability. Given the uncertainty around coverage and the extent to which non-mobile devices would be affected, the committee made three recommendations:

Recommendation 1

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

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

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.³

- 1.7 The committee advised that it would 'have more to say about how the government can work with industry to achieve a better 3G shutdown process' in this final report.⁴

Correspondence to Minister and telecommunications operators

- 1.8 On 31 July 2024, prior to tabling its interim report, the committee wrote to the Hon Michelle Rowland MP, Minister for Communications, and the Chief Executive Officers of both Telstra and Optus. The committee advised the Minister and MNOs of its observations during the inquiry that work remains ongoing to properly prepare the Australian telecommunications sector and the community for the shutdown of the 3G mobile network. The letter advised the

³ RRAT Committee, *Shutdown of the 3G mobile network: Interim report*, August 2024, p. 23.

⁴ RRAT Committee, *Shutdown of the 3G mobile network: Interim report*, August 2024, p. 21.

Minister and telecommunications operators of the committee’s intention to table an interim report with the recommendation to voluntarily delay the shutdown.

- 1.9 The committee stated its particular concern that the number of 3G non-mobile devices was still unknown. The committee believed that it would not be prudent to shut down the network without properly understanding the risks to small business, health and safety.
- 1.10 Telstra and Optus both responded to the correspondence advising of their plans to jointly delay the shutdown until 28 October 2024. Both operators also undertook to conduct a further national public safety awareness campaign through mass advertising, including television, print, social media and radio.⁵
- 1.11 In its response, Telstra told the committee that it appreciated concerns about non-mobile devices but reiterated that not all wireless-enabled devices can be identified on telecommunication networks. Telstra advised that it had been working with manufacturers of affected non-mobile devices to ensure they were aware of the planned shutdown, including multiple contacts with providers of medical alert devices.
- 1.12 On 14 August 2024, the Minister published a media release acknowledging the decision of Telstra and Optus to delay their 3G shutdown. This release was followed by a letter to the committee on 20 August 2024. In the letter, the Minister advised that ‘the Government is monitoring the potential impacts of the 3G shutdown on critical sectors of the economy’ and ‘supporting industry’s efforts to engage customers that may be in vulnerable circumstances’.⁶ The Minister noted that options exist for the Government to consider regulatory intervention and that those options continue to be considered.⁷

Orders for the production of documents

- 1.13 On 14 August 2024, the Senate agreed to a motion that the Minister representing the Minister for Communications in the Senate table the Government’s response to the interim report on the shutdown of the 3G network. The response was ordered to be tabled no later than midday, 19 August 2024.⁸
- 1.14 On the afternoon of 19 August 2024—after the midday deadline ordered by the Senate—the Australian Government provided its response to the

⁵ Ms Vicki Brady, Chief Executive Officer, Telstra, correspondence received 14 August 2024, pp. 1–2; and Mr Michael Venter, Interim Chief Executive Officer, Optus, correspondence received 14 August 2024, pp. 1–2.

⁶ The Hon Michelle Rowland MP, Minister for Communications, correspondence received 20 August 2024.

⁷ The Hon Michelle Rowland MP, Minister for Communications, correspondence received 20 August 2024.

⁸ *Senate Journals No. 122*—14 August 2024, p. 3732.

recommendations made in the interim report. The Government noted all three of the recommendations and reiterated the points made by the Minister in her correspondence to the committee.⁹

- 1.15 On 20 August 2024, a motion moved by Senator Malcolm Roberts was agreed to by the Senate. The motion required Senator the Hon Jenny McAllister, Minister representing the Minister for Communications in the Senate, to provide an explanation on why the Government did not impose any conditions on the shutdown of the 3G mobile network.¹⁰ On 21 August 2024, Senator McAllister explained to the Senate that ‘the recommendations provided in the interim report are under active consideration by the government’ and that ‘any regulatory actions would be subject to consultation and procedural process’.¹¹ Senator McAllister advised that the government continues to closely monitor progress on the identification of impacted individuals to ensure that any public safety risk is appropriately managed.¹²

Minister’s determination

- 1.16 On 5 September 2024, the Minister for Communications directed amendments to the *Australian Communications and Media Authority (Emergency Call Service Determination)*. The direction required the Australian Communications and Media Authority (ACMA) ‘to include requirements for providers to identify mobile phones unable to access triple-0, notify the user, provide assistance if necessary to access an alternative mobile phone, and cease providing service to the affected device’.¹³ Following the direction, MNOs are no longer able to provide service to handsets that do not have emergency calling capabilities, even if the handset is otherwise 4G-enabled.
- 1.17 At a hearing on 12 February 2025, Mr Samuel Grunhard, First Assistant Secretary, Communications Services and Consumer Division, Department of Infrastructure, Transport, Regional Development, Communications and the Arts (DITRDCA/the department), said that the amendments communicated a ‘very strong view that, if the phone was not going to be able to call triple-0, even

⁹ Australian Government response to the *Shutdown of the 3G mobile network: Interim report*, August 2024, pp. 3–4.

¹⁰ *Senate Journals No. 125*—20 August 2024, pp. 3798–3799.

¹¹ Senator the Hon Jenny McAllister, Minister for Emergency Management and Minister for Cities *Proof Hansard*, 21 August 2024, p. 66.

¹² Senator the Hon Jenny McAllister, Minister for Emergency Management and Minister for Cities *Proof Hansard*, 21 August 2024, p. 66.

¹³ [Explanatory Statement](#), *Australian Communications and Media Authority (Emergency Call Service Determination) Direction* 2024.

if it was otherwise working, it was essential that that phone be blocked to force customer action onto a device that would work for triple-0'.¹⁴

- 1.18 Ms Cathy Rainsford, General Manager, Consumer Division, ACMA, noted that there have been longstanding requirements that MNOs carry emergency calls even if they are from another carrier's customer. Ensuring connection of emergency calls is not a new obligation but has been a longstanding one for all MNOs.¹⁵
- 1.19 Representatives from Telstra and Optus advised that they were now complying with the direction and blocking devices that could not be used to reach triple-0.¹⁶ Mr Harvey Wright, Head of New Products, Optus, stated that it was 'a timely and clear direction' and that the clear framework allowed MNOs to 'operate with a high degree of collaboration across the industry and put customer safety first'.¹⁷

Shutdown of the 3G mobile network

- 1.20 On 28 October 2024, Telstra and Optus completed the shutdown of the 3G mobile network. Prior to shutting down, the MNOs had committed to provide 4G and 5G coverage that was equivalent to the previous 3G network. Mr Wright said that Optus prepared for the shutdown by identifying potential blackspots, phasing the network closure over a course of several weeks, and keeping a small number of 3G sites live in areas without 4G coverage. He said that these efforts, as well as the 4G network already covering a larger geographic area than 3G at the time of the shutdown, had Optus confident that 'the closure of 3G has not impacted the mobile geographic coverage for our customers'.¹⁸
- 1.21 This was not a view shared by other stakeholders. Mr Charles Thomas, Acting Chief Executive Officer, National Farmers' Federation (NFF), outlined some of the negative effects reported by the NFF's members as a result of the shutdown, including:
- reduced service availability and quality;
 - calls cutting in and out, or dropping out completely;

¹⁴ Mr Samuel Grunhard, First Assistant Secretary, Communications Services and Consumer Division, Department of Infrastructure, Transport, Regional Development, Communications and the Arts (DITRDCA), *Committee Hansard*, 12 February 2025, p. 7.

¹⁵ Ms Cathy Rainsford, General Manager, Consumer Division, Australian Communications and Media Authority, *Committee Hansard*, 5 February 2025, pp. 24–25.

¹⁶ Ms Justine Rowe, Executive, Sustainability and Policy, Telstra, *Committee Hansard*, 5 February 2025, pp. 13–14; Mr Harvey Wright, Head of New Products, Optus, *Committee Hansard*, 5 February 2025, p. 14.

¹⁷ Mr Wright, *Committee Hansard*, 5 February 2025, pp. 14 and 18.

¹⁸ Mr Wright, *Committee Hansard*, 5 February 2025, p. 9.

- slow download speeds or no ability to access the internet;
- loss of fortuitous coverage; and
- large cost outlays to replace affected equipment.¹⁹

1.22 The committee heard a number of personal stories related to these issue. One livestock and cropping farmer was located in a guaranteed coverage area yet still had to outlay between \$10 000 and \$20 000 to upgrade equipment as a result of the 3G shutdown.²⁰ Another grower in Queensland spent \$5 000 on boosters to improve their coverage only to have to use low-earth orbit (LEO) satellite technology when they still could not get a signal.²¹ Other equipment that was necessary for farmers to operate—including tractors, headers, and digital weather stations—all required costly retroactive upgrades to ensure that they would continue working.²²

1.23 Ms Charlotte Wundersitz, General Manager, Rural Affairs, NFF, said that the quality issues had taken a lot of people by surprise. While the focus prior to the shutdown was mainly on calls and texts, Ms Wundersitz noted that farms are now far more high-tech and require greater connectivity across the operation:

Farms being highly reliant on connectivity and data now has been a real challenge for a lot of people who have been unable to load internet. The capability requirements in rural Australia are far beyond just being able to make and receive a phone call or text message. We now need to be able to access apps, agtech et cetera. That has serious productivity implications for those businesses that are now unable to load data, or they're going back to a more basic level of connectivity over their whole operation.²³

1.24 Mr Sean Cole, Manager, Advocacy and Rural Affairs, GrainGrowers, expressed a similar view and clarified the time sensitive nature of some of these requirements:

Everything is done on an app these days, like selling grain. And you can't wait. Growers are generally out all day and don't come home. They'll be home at night time or maybe for lunch, if they're lucky. Really, you can't wait to sell your grain at six o'clock at night. The market is closed. A bid might have only been out for a few hours till midday, and then the bid is

¹⁹ Mr Charles Thomas, Acting Chief Executive Officer, National Farmers' Federation (NFF), *Committee Hansard*, 5 February 2025, p. 1.

²⁰ Mr Thomas, *Committee Hansard*, 5 February 2025, p. 1.

²¹ Mr Sean Cole, Manager, Advocacy and Rural Affairs, GrainGrowers, *Committee Hansard*, 5 February 2025, p. 4.

²² Mr Thomas, *Committee Hansard*, 5 February 2025, p. 4.

²³ Ms Charlotte Wundersitz, General Manager, Rural Affairs, NFF, *Committee Hansard*, 5 February 2025, pp. 4–5.

filled. There are real issues with timeliness with people that have to go back to the house to do things.²⁴

- 1.25 An issue that has proven hard for MNOs to track is the loss of what they term as 'fortuitous' coverage. Fortuitous coverage is connectivity for those who are outside the advertised coverage maps but, through a quirk of the local topography or boosting equipment, are able to connect to a service. Witnesses highlighted that many people had based operational decisions on what turned out to be fortuitous coverage, including the placement of weather stations, shearing huts, or other areas with a lot of workers.²⁵ Ms Wundersitz relayed that for those who had made investments like these it has 'been incredibly difficult for people to come to terms with, the fact that they may no longer get any service'.²⁶
- 1.26 Ms Justine Rowe, Executive, Sustainability and Policy, Telstra, acknowledged the frustrations expressed by those who have lost fortuitous coverage. She explained that Telstra's coverage maps are 'generally conservative in nature' and that they represent the coverage that could reasonably be expected by a typical user using appropriate equipment. Ms Rowe stated that 'predicting coverage is not a perfect science' and coverage received can be affected by the user's location, mobile device capabilities, and how the device is used.²⁷
- 1.27 Mr Channa Seneviratne, Technology Engagement and Advancement Executive, Telstra, clarified the difference between service and coverage. Mr Seneviratne noted the issues raised by users but made the distinction that calls that dropped out had initially connected to the network, showing that 'it's not that they don't have coverage; it's that they're not having service'. He encouraged any users who are experiencing this to contact Telstra so they could troubleshoot the issue.²⁸

Telecommunications coverage in rural and regional Australia

- 1.28 Adequate telecommunications coverage has long been an issue in regional Australia. Service quality, reliability, and accessibility are important concerns to be addressed. The NFF submitted that these issues are a significant barrier for farm businesses and workers, especially as more economic activity and service delivery moves online. Despite the challenges, digital agriculture also offers opportunities for regional areas as automation, digital intelligence and farm

²⁴ Mr Cole, *Committee Hansard*, 5 February 2025, p. 5.

²⁵ Mr Thomas, *Committee Hansard*, 5 February 2025, p. 3; Ms Wundersitz, *Committee Hansard*, 5 February 2025, p. 3.

²⁶ Ms Wundersitz, *Committee Hansard*, 5 February 2025, p. 3.

²⁷ Ms Rowe, *Committee Hansard*, 5 February 2025, p. 10.

²⁸ Mr Channa Seneviratne, Technology Engagement and Advancement Executive, Telstra, *Committee Hansard*, 5 February 2025, p. 11.

data mature. Reliable connectivity is integral for rural businesses to access these opportunities.²⁹

1.29 There are several programs underway to improve regional telecommunications coverage. The National Audit of Mobile Coverage, which is expected to conclude in June 2027, is integral in mapping the locations of areas that do not currently have access to 4G and 5G coverage. The Mobile Black Spot Program (MBSP), Regional Connectivity program, and state and territory co-investment programs are also vital to ensuring that rural and remote areas have access to quality telecommunication services.³⁰

1.30 Despite these efforts to improve coverage, issues with regional connectivity go beyond simple coverage issues. Dr Amber Marshall described how geographical exclusion is compounded by other forms of disadvantage:

The rural-urban digital divide in Australia has been historically underpinned by unequal access to telecommunications infrastructure. However, recent data from the Australian Digital Inclusion Index, supplemented with other research, shows that intersecting disadvantages are playing a greater role in digital in/exclusion (e.g., intergenerational digital exclusion owing to parents having limited digital skills to pass on to their children).³¹

1.31 Dr Marshall contends that ‘last mile’ approaches—like those deployed by the MBSP and Regional Connectivity programs—are not enough. Such approaches mean that the most digitally and socioeconomically excluded people are generally the last to be reliably and affordably connected.³²

1.32 Examples of this can be found in telehealth and distance education. In areas where in-person health facilities are limited, telehealth access is a vital and lifesaving resource that must be preserved. The Royal Flying Doctor Service of Australia (RFDS) reported that it takes around 80 000 telehealth calls each year, making it one of the largest providers of telehealth services in Australia. These consultations allow RFDS doctors to prescribe medical treatment, identify further care options, provide first aid advice in an emergency, or determine if an aeromedical retrieval is necessary.³³

1.33 RFDS reported that most of its calls come from areas where there is an absence of medical infrastructure, requiring RFDS doctors to resolve concerns and set treatment plans remotely. Over 90 per cent of RFDS consultations are delivered over the phone. Reliability and affordability of telephone services compared to

²⁹ NFF, *Submission 26*, pp. 6–7.

³⁰ Australian Small Business and Family Enterprise Ombudsman (ASBFEO), *Submission 10*, p. 1.

³¹ Dr Amber Marshall, *Submission 35*, p. 3.

³² Dr Amber Marshall, *Submission 35*, p. 3.

³³ Royal Flying Doctor Service of Australia (RFDS), *Submission 12*, p. 2.

other mediums is a key reason why most consultations are taken in this way, particularly in emergency situations.³⁴ The Australian Communications Consumer Action Network (ACCAN) noted that health services are becoming increasingly digitised and that access to services like My Health Record and Medicare may be jeopardised by any reduction in coverage.³⁵ RFDS stressed the importance of affordable and reliable connections being maintained following the 3G shutdown.³⁶

- 1.34 The Isolated Children's Parents' Association of Australia (ICPAA) had similar concerns for students enrolled in distance education. Students who reside in rural and remote Australia rely heavily on reliable telecommunications to access daily lessons, via both telephone and internet. While internet connection is the first-choice avenue for connecting to school, mobile coverage is highly valued as it affords a backup when landlines or other internet sources are out. The ICPAA is concerned that students with fortuitous coverage could lose access to education services when the 3G network is shutdown. Network availability is also necessary for students to complete homework; continue their schoolwork if they are travelling between home and town; and continue schooling if they are away from their main schoolroom for a period, for example, in a stock camp for a few weeks with their family.³⁷

Alternative options to traditional providers

- 1.35 There is a lack of alternative telecommunications infrastructure and support in rural and regional Australia. The closure of the 3G network leaves consumers with little recourse other than to accept and adjust to the change with limited alternative connections and providers available.
- 1.36 The Australian Competition and Consumer Commission (ACCC) found, in its *Regional Mobile Infrastructure Inquiry* final report, that there is a lack of competition in the telecommunications sector in regional areas. According to the ACCC, MNOs will consider whether the cost of providing improved mobile coverage is outweighed by the benefit in doing so. Due to Telstra's market dominance, there is reduced benefit to trying to compete:

The state of competition in the retail mobiles market heavily influences whether benefits outweigh costs. The desire to differentiate on network coverage has historically driven investment in regional areas, particularly by Telstra and Optus. However, Telstra's enduring competitive advantage in regional areas has the potential to undermine other mobile network

³⁴ RFDS, *Submission 12*, p. 2.

³⁵ Australian Communications Consumer Action Network (ACCAN), *Submission 20*, p. 5.

³⁶ RFDS, *Submission 12*, p. 3.

³⁷ Isolated Children's Parents' Association of Australia (ICPAA), *Submission 19*, pp. 4–5.

operator's incentives to continually invest in improving their regional coverage.³⁸

- 1.37 The department submitted that it 'is very aware of the dependence that the community has on functioning mobile telecommunications networks, and the particular challenges in regional and remote locations where markets are thinner and competition harder to sustain'.³⁹ The lack of incentive for alternative suppliers to compete comes from the need for a new mobile tower to generate profits large enough to cover its construction. Due to relatively small populations in regional areas, it is not cost effective to construct new towers to try to compete with an already-dominant competitor.⁴⁰
- 1.38 In offering other connectivity options and possible future technologies, Telstra has touted the opportunities provided by LEO satellite technology as a potential alternative to traditional connections in remote and regional areas. These satellites work by orbiting closer to Earth than conventional geostationary satellites. The low orbit of the satellites reduces latency and provides a reliable option for remote areas.⁴¹ Telstra has been migrating the landline services of some remote customers from Next Gen Wireless Link—which uses the 3G network—to a service powered by Starlink satellites. Telstra reported that such satellites already play a role in supplying fixed broadband services with over 200 000 customers in Australia.⁴²
- 1.39 In February 2024, Telstra announced an agreement with Lynk Global to test direct to handset satellite technology as a way to extend mobile connectivity beyond current levels. Such services would be particularly beneficial for regional areas where traditional satellite options are the only current option and would also provide improved disaster response capabilities in emergency situations.⁴³
- 1.40 In March 2024, Telstra launched its Home Satellite product by establishing an agreement to resell Starlink consumer broadband. It has also announced a plan to establish a direct-to-handset text service using Starlink LEO satellites that 'would allow SMS messaging virtually anywhere with line of sight to the sky'. Trials for this service are underway, and Telstra expects it to launch in 2025.⁴⁴

³⁸ Australian Competition and Consumer Commission (ACCC), *Regional mobile infrastructure final report*, July 2023, p. 2.

³⁹ DITRDCA, *Submission 27*, p. 5.

⁴⁰ ACCC, *Regional mobile infrastructure final report*, July 2023, p. 70.

⁴¹ Starlink, [Technology](#), undated (accessed 19 July 2024).

⁴² Telstra, *Submission 24*, p. 19.

⁴³ Telstra, *Submission 24*, p. 20.

⁴⁴ Telstra, answers to questions on notice, 5 February 2025 (received 14 February 2025).

- 1.41 Telstra advised that direct-to-handset voice capability is still in development, led by Starlink. Telstra estimates that it will not be available until 2027 dependent on global technology development progress.⁴⁵
- 1.42 Mr Cole told the committee that a potential partnership between Telstra and Starlink would be 'great' and that it 'can't come soon enough', particularly for emergency calls. Mr Cole said that GrainGrowers would like to see the direct to handset service expedited so that emergency calls could be confidently made in the worst scenario where a user is outside the range of a station or a tower.⁴⁶
- 1.43 Despite the potential benefits of LEO technology, there are also drawbacks to the service. For some consumers, accessing Starlink satellites is cost prohibitive in comparison to other services. ACCAN told the committee that lower socio-economic areas may find such solutions to be unaffordable, a particular issue when such areas often overlap with remote communities.⁴⁷ Dr Marshall also raised the ethical and practical challenges of outsourcing service provision to a foreign multinational company. Such an arrangement 'puts the rights of remote consumers at risk if for example, Starlink, withdraws services from Australia or ceases to operate'. If this were to occur, 'sovereign infrastructure will be inadequate to meet the essential telecommunications needs of remote residents'.⁴⁸ Dr Marshall raised this as a particular concern in the context of the provision of essential services, such as digital education and health.⁴⁹
- 1.44 Mr Cole also noted that access to Starlink is limited. He advised that some grain growers had reported moving to Starlink, at great cost, out of frustration with the quality of service from MNOs. However, some users in Brisbane and northern NSW have been put on a waiting list for the service as it can only be accessed by a certain number of users at one time. Mr Cole noted that, if Starlink became sold out 'we'd get into a market value situation where you can't have telecommunications at any price'.⁵⁰

Use of boosting equipment

- 1.45 Many residents in rural and regional areas have purchased boosters and smart antennas to better access mobile service that is otherwise unreliable. The ICPAA observed that 'the unique lifestyle and work situations of rural and remote families are often incompatible with the support, maintenance and other

⁴⁵ Telstra, answers to questions on notice, 5 February 2025 (received 14 February 2025), p. 3.

⁴⁶ Mr Cole, *Committee Hansard*, 5 February 2025, p. 7.

⁴⁷ ACCAN, *Submission 20*, p. 6.

⁴⁸ Dr Amber Marshall, *Submission 35*, p. 4.

⁴⁹ Dr Amber Marshall, *Submission 35*, p. 4.

⁵⁰ Mr Cole, *Committee Hansard*, 5 February 2025, p. 4.

services for technology which may be available'.⁵¹ Such customers have instead come to rely on boosting equipment to access services from fringe areas. Fringe areas are those that appear on the edges or just outside of coverage on 3G coverage maps but can access network service through the use of boosting equipment. The ICPAA related the experience of one of its members in trying to access Telstra's 3G network from such a location prior to the shutdown:

The property does not appear on the Telstra 3G coverage map, but the use of an antenna has resulted in receiving fortuitous 3G coverage. A visit from a Telstra technician confirmed that it is very unlikely that they would receive 4G coverage and if they did they would require a really large antenna. The only way to be find out would be to purchase the necessary equipment, install it and then test it. This would be a large expense to only discover it does not work. The family are unable to access mobile coverage, even with a Cel-Fi Go repeater, until approximately 25km from Clermont, that's 95km where they can only rely on UHF radio communication.⁵²

- 1.46 Of concern to those who currently rely on boosting equipment is the cost to upgrade and replace existing hardware that has previously been purchased at considerable expense. Ms Linda Truss submitted that her and her family only have minimal access to service by using a Cel-Fi go signal booster, despite living in an area that is covered by 4G and 5G according to maps supplied by the MNOs. This piece of equipment cost \$1200 to purchase and is now 'useless' following the shutdown of the 3G network.⁵³ Mr Jeffrey Aronson expressed similar concerns with his Cel-Fi booster and signal extending bridge that gave he and his wife their first 3G coverage. They have never been able to access 4G, with or without the booster. Telstra has confirmed to Mr Aronson that, as he lies outside the area on the coverage map, it cannot guarantee 4G access, leaving him with the prospect of losing network connectivity entirely.⁵⁴
- 1.47 Better Internet for Rural, Regional and Remote (BIRRR) submitted that people were unable to prepare for the shutdown because they did not know what changes to their equipment would be required. There was no way to test equipment prior to the shutdown, leaving those in fringe areas in limbo as to what they could expect from their coverage provider post-3G shutdown.⁵⁵
- 1.48 Telstra submitted that a frequent source of confusion for consumers when determining coverage is a reliance on their device's coverage bars. Telstra explained that signal bars differ between technologies and devices and that there are no standards shared across manufacturers. As a result, comparing

⁵¹ ICPAA, *Submission 19*, p. 6.

⁵² ICPAA, *Submission 19*, p. 3.

⁵³ Ms Linda Truss, *Submission 40*, p. 2.

⁵⁴ Mr Jeffrey Aronson, *Submission 33*, p. 6.

⁵⁵ Better Internet for Rural, Regional and Remote Australia (BIRRR), *Submission 25*, p. 12.

coverage bars between differing devices or technologies is not useful. A 3G service showing a four-bar connection is likely to be slower than a 4G service showing a one-bar connection on the same device due to 4G being a superior technology. However, consumers may read the lower bars as being indicative of inferior coverage despite receiving faster download and upload speeds.⁵⁶

- 1.49 Mr Seneviratne advised of the ways Telstra mapped its equivalent coverage, before and after the shutdown:

In terms of how we verified that we had achieved equivalence, apart from our maps and the coverage prediction, we did literally thousands of hours of drive surveys to verify, across our coverage footprint, that we had achieved equivalence. We then hired Accenture, who I believe the government is using, for an independent audit. They also drove literally thousands of hours across the country doing their own independent audit. Across the 11,000 to 12,000 towers, we did an audit of our network performance data before and after—the number of calls made before the shutdown and after—to make sure that we didn't see any areas where performance had fallen off.⁵⁷

- 1.50 Ms Shanyn Sparreboom, Assistant Secretary, Competition and Spectrum Branch, DITRDCA, said that Telstra had reported to the department in August 2024 that 98 per cent of the total network had 4G coverage equivalent to previous 3G coverage.⁵⁸
- 1.51 Ms Lisa La Rance, First Assistant Secretary, Communications Infrastructure Division, DITRDCA, advised that the National Audit of Mobile Coverage to improve mapping of coverage areas is underway. The audit commenced in May 2024 and aims to provide information on coverage and quality of service along major roads and highways. The roads and other locations that are included in the audit were chosen based on feedback from states and territories, as well as concerns raised with the department by people about coverage in particular locations.⁵⁹
- 1.52 Ms La Rance said the project would be ongoing and data is already available to view on the department's website and being fed back to the MNOs to improve mobile service:

The audit proper is starting this year, as is the data that's starting to flow from it. The data is shown on our website, and we're happy to provide links

⁵⁶ Telstra, *Submission 24*, p. 26.

⁵⁷ Mr Seneviratne, *Committee Hansard*, 5 February 2025, p. 16.

⁵⁸ Ms Shanyn Sparreboom, Assistant Secretary, Competition and Spectrum Branch, DITRDCA, *Committee Hansard*, 12 February 2025, p. 4.

⁵⁹ Ms Lisa La Rance, First Assistant Secretary, Communications Infrastructure Division, DITRDCA, *Committee Hansard*, 12 February 2025, p. 2.

or anything else that is useful. You're able to go in and have a look at the coverage maps.

...

As soon as we're getting information that demonstrates that the experience of people is different from the map, we're feeding it back through the mobile network operators. We're also using it to inform the design and prioritisation of the programs that the department's responsible for.⁶⁰

- 1.53 Ms La Rance stressed that the audit's focus is 'the experience in locations, not just whether someone has different coverage to what they had before but whether they have coverage and the quality of that coverage and whether it is intermittent'.⁶¹
- 1.54 However, Mr Cole noted that this approach would not help customers on large properties. He said that mapping highways and main roads would be useful but, without coming behind farm gates or onto properties, the mapping would not be comprehensive.⁶² Ms Wundersitz agreed, and asked that 'the opportunity to independently map mobile coverage across Australia is explored with regard to that project'. Ms Wundersitz believed that a lot of the concern expressed during the 3G shutdown process would have been alleviated if 'consumers had access to an independent source of data that verified their coverage and verified their experience'.⁶³

Quality and effectiveness of advice about shutdowns

- 1.55 Submitters raised concerns about the effectiveness of MNOs' advice regarding the shutdowns. While acknowledging that some efforts have been made, particularly in targeting users with personal mobile devices, submitters observed that there has been little advice given to users of other devices prior to the shutdown.
- 1.56 Telstra announced the closure of its 3G network in October 2019, giving almost five-year's notice for customers to upgrade their devices. Telstra submitted that it invested significant resources towards community engagement and information campaigns associated with the shutdown. This included communicating with customers via media updates, social media, direct mail and SMS in the lead up to the closure date, as well as appearing at field days and shows in regional areas.⁶⁴

⁶⁰ Ms La Rance, *Committee Hansard*, 12 February 2025, p. 2.

⁶¹ Ms La Rance, *Committee Hansard*, 12 February 2025, p. 3.

⁶² Mr Cole, *Committee Hansard*, 5 February 2025, p. 5.

⁶³ Ms Wundersitz, *Committee Hansard*, 5 February 2025, p. 6.

⁶⁴ Telstra, *Submission 24*, p. 8.

- 1.57 Similarly, Optus reportedly ‘focused on building awareness of the shutdown and removing all reasonable impediments for customers who will be impacted by the switch-off to upgrade their devices’.⁶⁵ In addition to SMS, emails, and letters notifying customers of the need to upgrade, Optus reported that all customer service channels, including online, in-store and call centres, were adequately enabled to provide advice regarding the shutdown. As the switch-off date drew near, Optus increased the level of communications to customers with impacted devices. In total, Optus reported sending over 2.6 million messages to customers who were directly impacted. Frequency of these messages increased to weekly or fortnightly closer to shutdown date.⁶⁶
- 1.58 TPG Telecom submitted that it implemented an extensive communications campaign in the 14 months leading up to the closure of its 3G service. Over three million customer communications were made, the majority of which were via e-mail and SMS, with direct calls made to some customers. TPG Telecom also ran media and in-store awareness campaigns. Between June 2023 and shutting off its network in January 2024, reminder communications were sent every 45 days if the customer had not changed to a compatible handset.⁶⁷
- 1.59 In addition to these efforts, Telstra implemented an SMS Device Checker tool which enabled customers of Telstra and its Mobile Virtual Network Operator partners to send a text to ensure their mobile device is compatible after the closure.⁶⁸ Telstra also commenced use of the following recorded message to customers with an affected mobile handset:
- This phone may no longer connect when Telstra's 3G network closes on the 31st of August, potentially including emergency calls to triple-0. Contact us or go in store for more details.⁶⁹
- 1.60 Telstra noted that customers calling triple-0 from a 3G device would not hear this message to avoid adding a delay in reaching an emergency operator.⁷⁰
- 1.61 Despite these efforts by MNOs, the committee heard evidence that some sectors of the community were unaware of the shutdown and its impacts, particularly on non-mobile devices. BIRRR submitted that while the need for updates to devices had been flagged by carriers for some time, essential information about the 3G shutdown was delivered very late by the MNOs. BIRRR contended that the bulk of information and sudden sense of urgency on the 3G shutdown only

⁶⁵ Optus, *Submission 21*, p. 6.

⁶⁶ Optus, *Submission 21*, p. 6.

⁶⁷ TPG Telecom, *Submission 7*, p. 2.

⁶⁸ Telstra, *Submission 24*, p. 8.

⁶⁹ Telstra, *Submission 24*, p. 11.

⁷⁰ Telstra, *Submission 24*, p. 12.

occurred since the beginning of 2024. While BIRRR acknowledged that tools like the 3G SMS tracker supplied by Telstra were useful for mobile devices, they could not help with testing compatibility of other connected devices.⁷¹

- 1.62 The Australian Local Government Association (ALGA) expressed similar sentiments. ALGA encouraged the MNOs to undertake a targeted education campaign aimed at regions where the most affected devices are located. It also conveyed the need for communities to be made aware that, although the 3G shutdown would enable the extension of the 4G and 5G networks, some of their devices and machines that are not 3G or VoLTE-capable would become obsolete.⁷²
- 1.63 To address issues with non-mobile equipment compatibility, the Australian Small Business and Family Enterprise Ombudsman (ASBFEO) recommended that a coordinated education campaign be undertaken by government and MNOs, directed at small businesses to raise awareness of potential issues associated with the 3G shutdown. Such a campaign should focus on services that may be affected and highlight the need to speak with suppliers to organise replacement equipment. The ASBFEO also acknowledged the efforts made by MNOs in reaching out to customers with 3G connected mobiles, however, it felt the same effort should be made for other 3G connected devices.⁷³
- 1.64 Telstra noted that it is not possible to trace individual customers who may be using non-3G devices other than mobiles, because the individual using these devices is not a customer of Telstra. Telstra acknowledged that other devices such as tablets, smartwatches, and personal medical alarms may also need upgrading if they relied on the 3G network to operate, however, it is the responsibility of the supplier to make their customers aware of the change, and of the customer to contact that company to ensure their device will continue to work as intended. Telstra engaged with providers of some of these services to ensure that their customers were notified of the change and provided sufficient time to upgrade.⁷⁴
- 1.65 Following the extension of the shutdown, Telstra and Optus made concerted efforts to reach out to as many customers as possible, particularly those with non-mobile devices. The two MNOs combined to launch a joint 'Check Your Tech' national campaign to raise awareness of the shutdown and both established dedicated hotlines. Ms Rowe described the hypercare program introduced by Telstra immediately prior to the shutdown, saying that, during the hypercare line's eight-week period of operation, Telstra received

⁷¹ BIRRR, *Submission 25*, p. 10.

⁷² Australian Local Government Association (ALGA), *Submission 17*, p. 2.

⁷³ ASBFEO, *Submission 10*, p. 2.

⁷⁴ Telstra, *Submission 24*, p. 9.

approximately 1 700 complaints relating to the shutdown. She advised that this response was not unexpected and reflected 'issues we cannot always predict'.⁷⁵

- 1.66 Mr Gerard Tracey, Group Owner, End to End Service Performance and Resilience, Telstra, pointed out that there were no complaints escalated in that hypercare period where a customer had lost coverage within the coverage map. According to Mr Tracey, all complaints received from customers in a coverage area could be explained by a planned network upgrade or a network fault.⁷⁶

Lessons learnt

- 1.67 As technology continues to improve and evolve it may become necessary to shut down the 4G and 5G networks to allow for the expansion of the next generation of mobile technology. Industry and government entities reflected on the shutdown of the 3G network and advised on lessons learnt and how future network shutdowns can be better managed.
- 1.68 Ms Rowe believed that a longer notification period and a better ramp-up of communications would have been beneficial during the 3G shutdown.⁷⁷ Mr Wright agreed, adding that earlier co-operation between the MNOs and an aligned switch-off date would have aided in general consumer awareness and communication. Mr Wright said that Optus 'probably underestimated' the broad desire for information from the public and that he believed earlier commencement of the broader public awareness campaign would have helped.⁷⁸
- 1.69 Mr James Chisholm, Deputy Secretary, Communications and Media Group, DITRDCA, advised that there was a role for government in linking all of the disparate industries that were affected by the shutdown and ensuring each was aware of the transition:

There's also a very strong role for government in raising awareness and working closely with industry to ensure that consumers are aware of what is happening and what they need to do to ensure that they are ready for that transition. A good example of that is all of the internet-of-things devices we've talked about before. Medical devices, unmonitored medical devices, lift phones, trucking equipment—there's quite a vast array of devices now that are dependent on these technologies.

⁷⁵ Ms Rowe, Executive, Sustainability and Policy, Telstra, *Committee Hansard*, 5 February 2025, p. 10.

⁷⁶ Mr Gerard Tracey, Group Owner, End to End Service Performance and Resilience, Telstra, *Committee Hansard*, 5 February 2025, p. 20.

⁷⁷ Ms Rowe, *Committee Hansard*, 5 February 2025, p. 14.

⁷⁸ Mr Wright, *Committee Hansard*, 5 February 2025, pp. 14–15.

Even within mobile handsets themselves, the sheer volume of handsets and the differences between them suggest that we should have been zeroing in on that issue a lot earlier.⁷⁹

- 1.70 Ms Rowe added that engaging further across industry and broader stakeholder groups might better bring those parties into the planning process. She noted that Telstra did consult with a number of stakeholder groups, but ‘on reflection it might be good to bring them in early to help’.⁸⁰
- 1.71 Ms Rowe also voiced the need for consumers to be able to trial technology as a way for the MNOs to learn and hear from them as the shutdown is planned.⁸¹ Mr Wright said that there has been good collaboration in terms of identifying impacted devices but that more work still needs to be done on centralising the testing and certification of devices.⁸²
- 1.72 Mr Grunhard advised that a mandatory device-testing regime is currently being developed. Mr Grunhard said that the University of Technology Sydney has been contracted to establish a controlled test facility that the MNOs will be required to use to test their devices ‘in a whole range of failure scenarios to make sure that triple-0 calls will be able to be carried no matter what goes wrong on the day’. The facility is expected to be established by 30 April 2025.⁸³
- 1.73 Mr Chisholm summed up the lessons learnt by observing that there is a role for industry and government, but that outreach was the critical factor:
- [T]he key lesson is that we have to have an orderly transition for these sorts of changes. There's a strong role for government; there's a strong role for regulators, and we have built the foundations of that on the back of this switch. The importance of outreach has been critical.⁸⁴

Committee view and recommendations

- 1.74 The shutdown of Australia’s 3G mobile network was announced in 2019, however, it was not until 2023 that the industry and government realised the full impact that the shutdown would bring to bear. The committee is convinced that the shutdown of Australia’s 3G mobile network can, and should, have been managed better.
- 1.75 The committee welcomed the decision of Telstra and Optus to extend the shutdown date following the release of the committee’s interim report.

⁷⁹ Mr James Chisholm, Deputy Secretary, Communications and Media Group, DITRDCA, *Committee Hansard*, 12 February 2025, p. 5.

⁸⁰ Ms Rowe, *Committee Hansard*, 5 February 2025, p. 14.

⁸¹ Ms Rowe, *Committee Hansard*, 5 February 2025, p. 14.

⁸² Mr Wright, *Committee Hansard*, 5 February 2025, pp. 14–15.

⁸³ Mr Grunhard, *Committee Hansard*, 12 February 2025, p. 8.

⁸⁴ Mr Chisholm, *Committee Hansard*, 12 February 2025, p. 5.

However, this extension of time was not long enough to resolve the outstanding issues that the committee had identified in its draft report. The testimony of many rural Australians that have lost mobile phone access, despite the promises that were made, proves this point.

- 1.76 The mobile network operators first announced the shutdown in 2019 and believed that was enough time for consumers to adjust and transition. This argument goes both ways—the mobile network operators had ample time to raise awareness about the impacts on non-mobile devices, but no strong action occurred until 2023. The committee acknowledges the efforts of the providers to increase awareness of this issue in the lead-up to the extended shutdown date but is disappointed that little action was taken earlier.
- 1.77 The committee is sympathetic to the connectivity issues faced by residents of regional, rural, and remote areas. For people living and working on Australia's farms and outlying properties, mobile connectivity is not just a matter of making a phone call and messaging friends—it is a necessity for the livelihoods and safety of many. Access to reliable and consistent telecommunications services to contact triple-0 can mean the difference between life and death in an emergency.
- 1.78 The committee is of the view that assistance should be provided to those who, through no fault of their own, have lost access to or have suffered diminished telecommunications services. Telstra and Optus have both offered free phones to customers facing hardship. However, these cheap devices pale in comparison to the thousands of dollars spent by consumers on boosting and specialised equipment that is now obsolete. The committee believes further support should be provided to these customers.
- 1.79 In hindsight, it would have been better to have not shutoff the 3G network until the mobile to low earth orbit satellite services (via Starlink) could replace it. With this service only months away from activating in Australia it would have been possible to align the transition between 3G and low earth orbit satellite services.
- 1.80 The introduction of mobile phone calls and text via Starlink offers to be a game changer for rural Australia. While it is now too late to turn back on the 3G network, all efforts should be made to accelerate and facilitate the establishment of mobile to Starlink services.
- 1.81 The shutdown of the 3G mobile network has exposed gaps in the coverage maps provided by mobile network operators. A farmer standing in the middle of the paddock is not concerned about the difference between coverage and service—they simply want to make a phone call. Coverage maps should properly reflect the ability to do so. The committee welcomes the Department of Infrastructure, Transport, Regional Development, Communications and the Arts' National Audit of Mobile Coverage to improve coverage information but considers that the audit will need to be expanded off the highway and beyond the farm gate if it is to be a truly representative map.

- 1.82 The shutdown of the 3G mobile network has provided ample lessons for mobile network operators and government to take into future network transitions. The haphazard shutdown of different operators on different dates, lack of consultation with broader industry groups, and lack of certainty over device capability were all raised as major issues during the inquiry. The committee hopes lessons have been learnt by all involved and will be incorporated into any future transition from the 4G and 5G networks.

Recommendation 1

- 1.83 The committee recommends that the Australian Government establish a program to help customers that have lost mobile phone coverage since the 3G shutoff. This program should be co-funded between industry and government and be for the purpose of purchasing connectivity equipment for use by residents in rural and remote areas. For example, subsidies could be provided to purchase:

- boosters for buildings and vehicles;
- Starlink or other low-earth orbit satellite equipment, including access to mobile phone by Starlink services; and
- replacements for equipment rendered obsolete by the 3G shutdown.

Recommendation 2

- 1.84 The committee recommends that the Australian Government and the telecommunications industry do all they can to accelerate the introduction of mobile phone services via the Starlink network.

Recommendation 3

- 1.85 The committee recommends that the Australian Government increase the scope of the National Audit of Mobile Coverage to include off-road areas (including on private land such as farming and grazing properties). This could be achieved by enabling technology for people to 'pin' the location where service is available. Data gathered should be cross-referenced with that of the mobile network operators and published in an easy-to-access format.

Senator the Hon Matthew Canavan
Chair

Appendix 1

Submissions and Additional Documents

- 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
 - 32.1 Supplementary to submission 32
- 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
- 44 National Aboriginal Community Controlled Health Organisation
- 45 Deborah Pergolotti
- 46 The Far West Local Health Cluster Inc

Answers to Questions 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 24 July 2024 (received 1 August 2024).
- 5 Surveyors Australia—Answers to questions taken on notice at a public hearing on 23 July 2024 (received 2 August 2024).
- 6 National Rural Health Alliance—Answers to questions taken on notice at a public hearing on 23 July 2024 (received 1 August 2024).
- 7 Telstra—Answers to questions taken on notice at a public hearing on 24 July 2024 (received 5 August 2024).
- 8 DITRDCA—Answers to questions taken on notice at a public hearing on 24 July 2024 (received 2 August 2024).
- 9 Telstra—Answers to questions taken on notice at a public hearing on 24 July 2024 (received 1 August 2024).
- 10 TPG Telecom—Answers to questions taken on notice at a public hearing on 24 July 2024 (received 7 August 2024).
- 11 National Farmers Federation—Answer to a question on notice taken at a public hearing on 5 February 2025 (received 13 February 2025)
- 12 Australian Competition and Consumer Commission—Answer to question on notice taken at a public hearing on 5 February 2025 (received 13 February 2025)
- 13 Telstra—Answers to question on notice taken at a public hearing on 5 February 2025 (received 17 February 2025)
- 14 Optus—Answers to questions taken on notice at a public hearing on 5 February 2025 (received 19 February 2025)

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- 15 DITRDCA—Answers to questions taken on notice at a public hearing on 12 February 2025 (received 25 February 2025)

Correspondence

- 1 Correspondence from Mr Michael Venter, Interim Chief Executive Officer, Optus, to the committee (received 14 August 2024)
- 2 Correspondence from Ms Vicki Brady, Chief Executive Officer, Telstra, to the committee (received 14 August 2024)
- 3 Correspondence from The Hon Michelle Rowland MP, Minister for Communications, to the committee (received 20 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
- 3 List of stakeholders contacted by the Department of Infrastructure, Transport, Regional Development, Communications and the Arts (DITRDCA), tabled by Mr James Chisholm, Deputy Secretary, Communications and Media Group, DITRDCA, on 24 July 2024.
- 4 ABC Radio Country Hour Transcript, tabled by Senator Malcolm Roberts at a public hearing on 5 February 2025.

Government Response

- 1 Australian Government response to the interim report into the shutdown of the 3G mobile network (received 19 August 2024)

Appendix 2

Public Hearings and Witnesses

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

Wednesday 5 February 2025

Committee Room 2S3

Parliament House

Canberra

National Farmers' Federation

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

GrainGrowers

- Mr Sean Cole, Advocacy and Rural Affairs Manager

Telstra

- Mr Channa Seneviratne, Technology Engagement & Advancement Executive
- Mr Gerard Tracey, Group Owner, End to End Service Performance & Resilience
- Ms Justine Rowe, Executive, Sustainability and Policy
- Ms Lisa McTiernan, Government Relations Manager

Optus

- Mr Harvey Wright, Head of New Products
- Mr Michael Reynolds, Head of Network Products, Programs and Services
- Mr Jon Stewart, Senior Director, Government and Public Affairs

Australian Competition and Consumer Commission

- Ms Nicole Ross, Executive General Manager Infrastructure Division
- Ms Tara Morice, General Manager Mobiles, Transmission and Consumer Branch

- Mr Rami Greiss, Executive General Manager Consumer & Fair Trading

Australian Communications and Media Authority

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

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

- Mr James Chisholm, Deputy Secretary, Deputy Secretary, Communications and Media Group
- Ms Lisa La Rance, First Assistant Secretary, Communications Infrastructure Division
- Mr Samuel Grunhard, First Assistant Secretary, Communications Services & Consumer Division
- Ms Shanyyn Sparreboom, Assistant Secretary, Competition and Spectrum Branch

Wednesday 12 February 2025

Committee Room 2S1 Parliament House
Canberra

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
- Mr Samuel Grunhard, First Assistant Secretary, Communications Services & Consumer Division
- Ms Shanyyn Sparreboom, Assistant Secretary, Competition and Spectrum Branch