

31 July, 2024

The Secretariat  
Senate Standing Committees on Rural, Regional Affairs and Transport  
Parliament House  
Canberra ACT 2600  
Via email: [rrat.sen@aph.gov.au](mailto:rrat.sen@aph.gov.au)

Dear Secretary

## **Senate Committee inquiry into the 3G shutdown**

Thank you for the opportunity to address Questions on Notice from the committee's public hearing. Our responses to Senators' questions can be found in the attached document. These include both the questions taken on notice during the hearing itself and the written questions that were received in writing on 25 July.

Optus understands the public interest in ensuring a smooth transition to 3G closure and mitigating the risks to public safety. Accordingly, we wish to reiterate to the Committee the extensive work we have undertaken in recent months to help to mitigate any adverse customer impacts.

- Millions of messages have been sent directly to customers who will be impacted by the 3G shutdown to get them to act, and the rate of communication and momentum is ramping up as we near the September deadline. This includes interrupting voice calls with a recorded voice announcement alerting customers to the pending shutdown and stronger language on the risk to customers of not acting.
- There has been considerable direct engagement with the 21 business customers that manage more sensitive non-handset devices, such as alarms. All have shared their plans with us, and we are actively monitoring their progress and escalating within their organisations where necessary.
- Significant offers have been put into the market to assist customers with device upgrades, including free basic handsets or to enable customers to acquire other handsets at a discount.
- Tools have been developed to help customers check the status of their devices and we have undertaken extensive media campaigns through national, local and CALD press and radio to reinforce our more direct forms of messaging.
- As the 3G network is shutdown we will continue to provide high-levels of support to our customers through our dedicated teams and keeping device offers open.

Optus would also like to reiterate that the shutdown of 3G is a necessary enabler for Optus to repurpose its 900 MHz lowband spectrum to provide better quality 4G services and to be able to provide board-based 5G coverage in regional areas. There are strong public benefits associated with the shutdown of the 3G network.

Yours sincerely,

**Andrew Sheridan**

Vice President, Government and Regulatory Affairs

## Questions on Notice

- 1. During their appearance at the hearing on 23rd July 2024, the National Farmers Federation (NFF) stated that they had requested from Telstra a fast and dedicated pathway to resolve post-coverage shutdown issues which went above the business-as-usual approach, but were yet to reach a positive response: *'We want to make sure that there is a fast pathway for people affected by this issue specifically to reach that team, rather than potentially being on hold for however long you go on hold for when you call Telstra with an issue. That's not something that they've said they're going to do at this stage...'*  
Are Telstra and Optus open to this request?**

Optus has direct arrangements in place with its enterprise and business customers through their dedicated account managers. However, we are happy to provide a direct point of contact to the National Farmers Federation so that any issues can be raised directly with Optus.

- 2. The NSW Government wrote in its submission:**

***It is understood that some 3G sites could remain temporarily operational beyond the formal network shutdown timetables to ensure there are no critical coverage gaps until 4G/5G coverage is achieved.***

**Can you please outline the plans in place to address these temporary coverage gaps? Where are these sites located, and how do you determine what consists a 'critical coverage gap'?**

As indicated in our submission to the inquiry, Optus has a small number of 3G sites that have not been upgraded to 4G. The 3G service will remain operational on the following sites until the 4G upgrade has been completed.

- i. 35 3G only satellite small cells in regional NT, SA, QLD, TAS & WA – to be upgraded in the medium term**
  - ii. 10 3G only sites in regional QLD, TAS, WA, NSW - to be upgraded in the short term, but potentially after the national shutdown.**
- 3. What post shutdown plans and support measures for affected customers will be in place after the shutdown, and for how long? Will there be a dedicated number that customers can call to seek advice on the issue of the shutdown?**

Optus has put in place a range of support measures to assist people both prior and post shutdown, including:

- Maintaining our dedicated channels for customers to contact us.
- Preparing our frontline staff to assist, including additional training and capacity.
- Ensuring we have adequate stock of compatible devices.
- Maintaining upgrade offers for customers, including free devices.
- Phasing our shutdown, to avoid creating a spike in demand.
- Continuing to monitor foot traffic, calls and handling time as well as any frontline feedback.

We will monitor progress post shutdown and will only withdraw these support measure when we feel the additional support is no longer required.

- 4. If a customer reports to you after the shutdown that the 4G coverage is not equivalent to the 3G coverage they were receiving (regardless of whether or not your coverage map indicates otherwise), do you have a documented process of resolution that will be consistently applied?**

**If through this process the customer is found to be correct, will you offer a discount on alternative connectivity options?**

Optus has existing policies and processes in place that allow customers to raise connectivity issues with us and if it appears that they have acquired a service that does not meet expectations there are a range of options available, including cancelling the contract at no cost.

- 5. Do Telstra and Optus have specific roll-out plans for introducing satellite technology, such as Starlink, to areas of Australia that do not have coverage, and are there estimates on how much additional coverage satellite technology will be able to provide in future?**

Optus has announced that it is trialling a direct to device service with LeoSat provider SpaceX. These trials are ongoing, and we expect to launch the first commercial service, which will be a basic text messaging service by December 2024. A voice and basic data capability is likely to be available over time.

- 6. Satellite technology is more expensive than traditional connectivity options. What investments/measures are being made by Telstra and Optus to ensure the price of satellite technology is accessible for those who may need it?**

SpaceX is investing in the LeoSat technology and under our commercial agreement will charge Optus for connectivity services. Whilst we understand the need to ensure services are affordable, pricing has yet to be finalised.

- 7. What targeted industry outreach to small business, family enterprises, as outlined by both the Australian Chamber of Commerce and Industry and the Australian Small Business and Family Enterprise Ombudsman in their evidence on 24 July 2024 has and will continue to occur to address reported knowledge gaps in equipment reliance on 3G?**

Optus has contacted every wholesale, enterprise and business customer that will be impacted by the 3G shutdown. For each customer, we can determine the number of devices that will be impacted, and we are closely tracking the customer's progress in upgrading these devices.

- 8. Will you undertake a targeted education scheme by using billing of your current 3G business customers to identify areas of vulnerability, particularly for small business where impact as suggested in evidence provided by the Australian Small Business and Family Enterprise Ombudsman has highlighted, to identify as many devices that are vulnerable where possible?**

Refer to question 7 above. Optus is directly communicating with each impacted customer.

- 9. After the shutdown of 3G, will Telstra and Optus conduct reviews on their public awareness programs, and attempt to determine why, as mentioned in multiple submissions, some businesses were still unaware of the shutdown only months out from the deadline?**

As indicated in question 7 above, Optus is in direct contact with every one of our business customers that will be impacted by the 3G shutdown, and all have acknowledged our communication. The vast majority of our customers are not impacted by the 3G shutdown and will not have received direct communication, so it is expected that their awareness is more limited.

It is our practice to undertake post implementation reviews for major programs to help identify areas for future improvement.

**10. Can Optus and Telstra outline what outreach to indigenous media organisations to educate remote communities has occurred; and have the MNO's reached out to all Remote Indigenous Media Organisations that are serviced by 3G routers offering assistance to upgrade their routers?**

Optus' focus has been on direct communications with customers. This has also been augmented by media outreach, with a focus on areas with higher cohorts of impacted customers. This has included regional press and radio and also through CALD media organisations. Impacted vulnerable customers would have been picked up through these activities.

In addition, we have a trained specialist care team to assist customers of all vulnerability types and is the appropriate avenue for any First Nation's Australians who need heightened support. Our interpreter services for First Nations Australians include:

- Yankunytjatjara
- Walpiri
- Yumplatok
- Pitjantjatjara

**11. Did Optus provide a number for the devices impacted to the department or minister's office on 5 October?**

The email of 5 October provided an overall estimate of 296K of devices impacted by the 3G network closure as at the end of August 2023. To be clear, this included a number of different device types and it was specifically noted that our analysis of devices that rely on the 3G network for emergency calling was continuing.

**12. Optus to provide information on the first bullet point that is redacted in the documents obtained under FOI.**

The number in the first bullet in the email obtained under FOI dated 13 July 2023 was "**c.270K**". To be clear, this number was an early estimate and included a number of different device types, specifically: 3G only; 4G non-VoLTE; devices with no LTE 700MHZ support; and, those for which the VoLTE support was unknown.

Optus specifically indicated that further analysis was being undertaken to identify devices that are "VoLTE capable but might rely on 3G for emergency calling". The Optus email did not, therefore, provide an indication of the size of issues relating to this category of devices at this date.

As indicated in the Senate Committee hearing on 24 July, numbers relating to this device type were only provided to the Department in late February 2024. Whilst Optus was aware of the heightened potential risks with this category of devices it took several months to size the potential problem. As indicated in our submission to the Committee these are not devices that Optus has supplied, they are devices that have been imported or purchased overseas. As an example, whilst Optus could be confident that an Iphone 11 purchased in Australia is capable of making emergency calls over 4G, we were unsure whether a Chinese variant of a similar handset could do so. Extensive work was undertaken to identify the number of at risks devices, including clarification with device manufacturers, testing of devices that we were able to source, and

examination of millions of call records to assess whether specific devices had made emergency calls over 4G.

**13. Provide a breakdown of device numbers into Consumer, Business and Wholesale.**

Data on 3G data devices; and impacted handsets (3G only, 4G no VOLTE and 4G VOLTE but no emergency calling) is shown below. Data is of 26 July 2024.

	Consumer	Enterprise	Wholesale	Total
<b>3G Data Device</b>	19,693	72,157	5,934	97,784
<b>Handsets</b>				
<b>3G Only</b>	20,823	3,963	3,780	28,566
4G - no VOLTE	84,610	13,195	19,784	117,589
4G VOLTE - No EC	22,024	1,529	3,634	27,187

**14. Provide the number of Roaming devices on our network.**

We can provide the following data for the period 1 to 7 July 2024 for inbound roamers  
Handsets – 157,080

Please note that the inbound roamers can change the network providers within the same day. The volume of inbound roamers that are disclosed by TPG and Telstra may be duplicated because of the same reason.

**15. In the last 12 months, how many calls to triple 0 were placed over the 3G network, and how many daily.**

Optus is able to provide data for the last 3 month period for which there were c.1.05 million calls to 000 over the 3G network. 82% of these calls are made on 4G network.

However, this figure overestimates the level of 3G calling. Below are some of the reasons that emergency calls might use the 3G network even for the devices that are VoLTE emergency calling capable.

- Triple Zero calls were made while the device was in 3G coverage (noting that some areas were still to be upgraded to 4G).
- Device band selection algorithm: Devices can be capable of VoLTE emergency calling, but the preferred band selection driven by device firmware may be configured to look for 3G network. Post 3G shutdown the device will prioritise 4G.
- Network conditions: Network layering strategy depending on conditions at the time may force a call on certain technology / frequency bands.

It is important to note that all above reasons will not be a factor post the 3G network shutdown and VoLTE emergency calling capable devices will be able to place an emergency call on 4G network.

**16. Provide a breakdown of non-handset devices/IOT on our network.**

See table above in answer to question 12.

**17. Provide a breakdown of medical devices reliant on the 3G network.**

The table below provides a breakdown of the remaining high-risk non-handset devices attached to our network. These are supplied by 21 enterprise/business customers of Optus and Amaysim. Optus and Amaysim have been in direct communications with each of the customers and they all have plans in place to manage the migration of the devices prior to the 3G shutdown.

Likely IOT type	Devices
Personal alarms	1,554
Fire alarms/panels	8,641
Security camera/alarms	15,245
Lifts phones	5,742
Vehicle tracking	1
Payment terminals	9,619
Building monitoring	75
	<b>40,877</b>

**18. Have we asked major device manufacturers to provide backward software capability upgrade.**

Optus conducted comprehensive consult with the OEMs with who have a commercial relationship and/or presence in Australia. All Optus ranged devices that support VoLTE also support VoLTE emergency calling.

Software released by OEM is normally backward compatible for supported hardware devices under active product cycle. These software updates are normally pushed by OEMs if device auto firmware update is enabled and the device has enough available storage and power, otherwise the customer will need to download and update the device firmware manually.

Our communication with the customers at any device check touchpoint i.e. SMS Checker, AMTA IMEI checker strongly recommends customers to ensure their device is upgraded to the latest firmware.

**19. Examples of countries that have switched off their 3G networks.**

Analysis undertaken by the GSMA indicates that 2G and 3G shutdown is well advanced with 177 Mobile operators in 59 countries having completed, planned or are progressing their 2G and 3G shutdowns. As an example, the largest US operators, including AT&T, T-Mobile and Verizon, which account for 99% markets share have closed both of their 2G and 3G networks.

It is important to note that differences in the state of technology adoption across different jurisdictions is to be expected. Australia was an early adopter of 5G technology. As a consequence, it should also be expected to be at the forefront of 3G closure since retiring 3G is critical to enable spectrum to be repurposed to support 5G services nationally. The closure of Optus' 3G network will allow us to reuse 900MHz spectrum to help support better quality 4G and the roll-out of 5G services in regional areas.

**20. Provide a breakdown of new device sales numbers this year compared to last year?**

Optus most recent disclosed revenue related to equipment sales is:

	Second Half		YoY Chge %
	31 Mar		
	2024 A\$m	2023 A\$m	
Equipment	807	839	-3.8