



The AMTA submission to:  
Infrastructure Victoria's 30-year strategy update  
Digital Connectivity

2 June 2023



## About AMTA

The Australian Mobile Telecommunications Association (AMTA) is the peak national body representing Australia's mobile telecommunications industry. It aims to promote an environmentally, socially and economically responsible, successful and sustainable mobile telecommunications industry in Australia. Please see [www.amta.org.au](http://www.amta.org.au)



## Introduction

AMTA welcomes the opportunity to provide this submission to Infrastructure Victoria's refresh of its 30-year infrastructure strategy.

Infrastructure Victoria has advised that it would like to hear from stakeholders about four key areas that are crucial to the next strategy. These are outlined below, together with AMTA's response.

**1. Doing more with less** - Victoria needs to respond to increasing workforce, supply chain and financial constraints. We can influence productivity in specific infrastructure sectors, better use infrastructure, and help decision makers choose the right infrastructure to activate productivity growth. How should we do this?

Mobile network infrastructure is a key enabler in activating productivity growth. In 2022, AMTA commissioned Deloitte Access Economics to examine the economic impact of adoption levels of 5G-enabled technologies and innovations, and the policy and regulatory principles required to support accelerated adoption. Deloitte's report ['5G Unleashed: Realising the potential of the next generation of mobile technology'](#), found that 'while Australia has been a world leader in mobile telecommunications for decades and is currently ranked 3rd globally, it is at risk of falling to 9th by 2025 due to lack of business readiness for change and a policy regime that needs to be recharged'.

Deloitte's analysis observed that Australian businesses were found to be slow when it comes to readiness for adoption of 5G despite 62% of businesses leaders across four sectors agreeing 5G will accelerate the growth of their business, with 59% saying they have no strategy to realise 5G and nearly 1 in 3 (30%) having no plans to implement 5G.

The report's economic modelling estimates 5G will increase Australia's GDP by \$67 billion by 2030 based on the current trajectory for adoption, however an additional \$27 billion can be realised by maintaining Australia's global leadership position through accelerated adoption – a 40% uplift in economic benefit over nine years.

The Key points for government in the report are:

- Australia is a global leader in 5G mobile but needs to accelerate uptake and investment to maintain its lead on other countries.
- If Australia can maintain its current position amongst global leaders, this creates an extra \$27 billion in economic benefits to GDP by 2030 by lifting business productivity.
- Key 5G policy priorities include driving adoption and facilitating private sector investment through spectrum and infrastructure policy, especially for regional areas.

Specifically in relation to Infrastructure deployment, the report identifies that there is a need to:

- Coordinate clear and consistent policy across all communications-related issues at Federal, State and Territory level.

- Facilitate reform opportunities outlined in [AMTA's 5G Infrastructure Readiness Assessment report at the state & territory level](#). Specifically, AMTA notes the findings in the **Victorian Chapter** of the Readiness Assessment.
- Government to consider incentives to encourage private investment in 5G services such as new funding arrangements or tax incentives to support greater 5G coverage into regional and remote areas.
- Government should consult with industry on the need for further de-regulation with a view to removing out of date and inefficient regulatory requirements across the sector and seek to enable greater co-regulation<sup>1</sup>

**2. Navigating change and disruption** - Victoria's infrastructure planning must adapt to emerging changes and disruptions in technology, population, community preferences and ways of working. What ideas do you have about how Victoria can better plan and use infrastructure in conditions of uncertainty?

AMTA has long advocated for improved planning for provision of mobile network telecommunications infrastructure in Victoria.

Primarily, this relates to the recognition of mobile network infrastructure as essential infrastructure alongside other utilities in Victoria's growth areas around Melbourne and in Regional Centres, as well as ensuring that network operators and infrastructure providers can access Crown Land subject to meeting planning requirements.

AMTA has been advocating for these improvements for several years, having made representations to the Telecommunications Policy and Projects unit within the Victorian Department of Jobs Precincts and Regions (DJPR), which has now been transferred to the new Department of Governments Services (DOGS).

This advocacy has included the need for inclusion of mobile telecommunications infrastructure in the State's growth area planning processes including structure planning, because at present the lack of acknowledgement of mobile infrastructure has contributed to delays in provision of mobile connectivity in new suburbs and peri-urban areas. In addition, the carriers and mobile infrastructure providers have found it increasingly difficult to access Crown land in a timely way on non-discriminatory terms.

In August 2022, the Victorian Government released its ['Telecommunications Infrastructure Provisions review'](#) as part of the Victorian Government's Better Approvals for Business program.

The review contained several recommendations that would contribute to better planning and use of infrastructure in Victoria. These included:

*'Develop and publish a checklist and guidance to create more transparency around processes for Crown Land leases. Develop a checklist to support telecommunication providers to assess leasing requirements for different types of Crown Land sites. This will include guidance material about how to assess items in the checklist', and,*

---

<sup>1</sup> 5G Unleashed: Realising the potential of the next generation of mobile technology, Deloitte Access Economics, Australian Mobile Telecommunications Association 2022

*‘Strengthen the Victorian Government’s advocacy for better telecommunications outcomes for business and the broader community, including as part of planning for new growth areas. Advocate for better digital telecommunications outcomes for the Victorian community, including support for earlier consideration of the locations for mobile connections in new suburbs.*

AMTA encourages Infrastructure Victoria to highlight the need for these initiatives to be expedited and implemented.

**3. Improving social equity through access** - Victoria should be a great place for everyone who lives here, no matter where that is. What improvements or changes should be made to make access to infrastructure fairer?

AMTA acknowledges the role of the Victorian Government as a funder of strategic investments in telecommunications infrastructure and services in regional, rural, and remote areas, and more recently in peri-urban areas. This has included the Victorian Government’s \$550 million Connecting Victoria program where government has partnered with AMTA’s members.

AMTA encourages Infrastructure Victoria to highlight that mobile telecommunications is an enabling technology, as evidenced in AMTA’s ‘5G Unleashed: Realising the potential of the next generation of mobile technology’ report prepared by Deloitte, but also quantified in the Better Approvals for Business Program - Telecommunications Infrastructure Provisions Review Action Statement, which found that: “Digital technologies could provide a potential \$1 billion in value add to the Regional and Rural Victorian economy in the next 5 years (to 2026).

- Health care - \$160 Million
- Mining - \$120 Million
- Public Admin and Safety - \$120 Million
- Financial services - \$70 Million
- Education - \$70 Million
- Construction - \$60 Million
- Manufacturing - \$60 Million
- Agriculture - \$50 Million
- Other industries - \$270 Million

AMTA encourages Infrastructure Victoria to highlight the benefits of Government co-investment in mobile connectivity (including ‘black spots’ and ‘grey spots’) to make access to infrastructure fairer, so the benefits outlined above can be realised.

**4. Mitigating and adapting to our changing climate** – Victoria must prioritise adapting infrastructure to climate change and reducing infrastructure-related emissions. How should we do this?

For several years Australia’s telecommunications industry has progressively been working to reduce energy use.

In 2013 the AMTA’s Mobile Carriers Forum (MCF) finalised training modules centred around energy efficiency in mobile networks – an award-winning program that garnered international interest.

Since then, Australia's mobile network carriers have continued to innovate, developing the means to minimise energy consumption in their mobile networks through improvements in energy efficiency of the components themselves (such as air conditioning of shelters), as well as including energy efficiency in the decision-making process when planning the network deployment.

Globally, mobile carriers are focusing on energy efficiency in their Radio Access Network (RAN) Base Stations as a primary way to reduce industry emissions. Base Station sites account for 60-80% of the total electricity consumption of mobile networks, with the remaining consumption being attributable to controllers, core and support services.

While adding new technologies to existing networks brings with it a rise in energy consumption, the 5G Standard has been developed with energy efficiency and a reduction in energy use as a core element.

According to the GSMA's '5G Guide – A Reference for Operators':

- The mobile telecommunications industry currently consumes between 2 – 3% of global energy.
- Established international industry standards including 3GPP's 5G specification calls for a 90% reduction in energy use.
- A growing number of network operators have taken a leading role in sustainability and the use of renewables to meet or exceed these decarbonisation goals and this will expand in the 5G era.
- The many solutions to enhance network energy efficiency fall into two major groups: increasing the use of alternative energy sources to reduce dependence on the main power grid & network load optimisation to reduce energy consumption.

5G's most important contribution to energy efficiency will come from enabling users and especially the 5G-driven Internet of Things, and this is forecast to contribute to energy efficiency and ultimately a net-reduction in carbon emissions.

Smart wirelessly connected appliances, factories, council buildings, cities and transportation grids will be able to optimize and reduce their power consumption, just like networks and data centres do at present. As a technology that enables smart cities and smart places, 5G can make a meaningful contribution to local and global efforts to reduce Greenhouse Gas emissions and mitigate climate change.