

AUSTRALIAN TELECOMMUNICATIONS ALLIANCE SUBMISSION

To: The Joint Select Committee

Re: Inquiry into Artificial Intelligence

14 September 2026



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1. AUSTRALIAN TELECOMMUNICATIONS ALLIANCE

The Australian Telecommunications Alliance (ATA) is the peak body of the Australian telecommunications industry. We are the trusted voice at the intersection of industry, government, regulators, and consumers. Through collaboration and leadership, we shape initiatives that grow the Australian telecommunications industry, enhance connectivity for all Australians, and foster the highest standards of business behaviour. For more details, visit www.austelco.org.au.

For questions on this submission, please contact Victoria Robertson, Head of Government Relations and Policy, v.robertson@austelco.org.au.

2. EXECUTIVE SUMMARY

The Australian Telecommunications Alliance (ATA) welcomes the opportunity to provide a submission for consideration by the Joint Select Committee on Artificial Intelligence.

Artificial intelligence (AI) has the potential to transform Australia's economy, strengthen productivity, improve public services, enhance national resilience, and create new opportunities for businesses and communities. However, Australia's success in the AI era will not be determined solely by investment in AI models, data centres, or compute infrastructure. It will depend on how effectively AI capability can be distributed, adopted, and trusted across the economy through the digital infrastructure that connects people, businesses, and services.

The central challenge facing Australia is no longer the creation of AI capability itself. Increasingly, AI capability is being developed globally and made available through cloud platforms, software applications, and AI-enabled devices. The policy challenge is in ensuring Australian businesses, communities, and governments can access, adopt, and trust these capabilities at scale. Achieving this outcome requires continued investment in the telecommunications and digital infrastructure that connects AI capability to the real economy.

Telecommunications infrastructure is not simply an input to the digital economy. It is the foundation that makes this possible.

Australia's AI future depends on telecommunications infrastructure as much as it depends on compute infrastructure. Compute creates AI capability. Connectivity distributes its benefits. AI capability is increasingly created and delivered across compute, cloud, edge, and AI-enabled devices. Telecommunications networks connect these components, transport data, and enable their benefits to be distributed throughout the economy.

The economic importance of telecommunications infrastructure is already well established. Australian Government analysis estimates telecommunications services contributed approximately 14.7 per cent of economy-wide multifactor productivity growth between 2009-10 and 2019-20. Economic modelling commissioned by NBN Co further estimated that improvements in broadband performance contributed approximately \$122 billion in cumulative GDP uplift between 2012 and 2022. Together, these findings demonstrate the broader productivity effects of connectivity across industries and communities.

The Committee's Terms of Reference examine a broad range of issues including productivity, economic growth, regional development, innovation, adoption, sovereignty, security and regulation. While these issues appear distinct, they are united by a common challenge:

How does Australia ensure that AI capability can be accessed, adopted and trusted across the economy?

From the ATA's perspective, the answer lies in recognising mobile and fixed telecommunications networks, supported by fibre, satellite, and international connectivity infrastructure (submarine cables), as foundational AI infrastructure. Telecommunications networks:

- Connect data centres to cloud platforms, businesses, devices, and end users;
- Transport the data required to train, test, and operate AI systems;
- Enable real-time and latency-sensitive applications;
- Support distributed, edge-computing, and on-device AI architectures;
- Extend access to AI-enabled services throughout regional and remote Australia; and
- Provide the resilience and redundancy required for secure and reliable AI services.

The ATA recommends the Committee:

- Recognise telecommunications infrastructure as foundational AI infrastructure;
- Integrate telecommunications connectivity requirements into major AI and data centre planning processes;
- Support regional participation in the AI economy through connectivity and digital infrastructure investment;
- Maintain policy settings that encourage sustainable investment in telecommunications networks;
- Strengthen Australia's trusted and resilience digital infrastructure ecosystem; and
- Establish a Digital Infrastructure Framework to coordinate planning, investment, and regulation across AI, telecommunications, data centres, energy, cyber security, and digital infrastructure.

Put simply:

AI capability creates opportunity.

Productivity depends on adoption. Adoption depends on access.

Access depends on connectivity.

Connectivity depends on continued investment in telecommunications infrastructure.

The Committee's recommendations should therefore consider not only the development of AI capability itself, but also the infrastructure required to ensure those capabilities are accessible, scalable and trusted by businesses, governments, and communities across Australia.

3. AI INFRASTRUCTURE IS A CONNECTED SYSTEM

The Committee's inquiry provides an opportunity to consider AI infrastructure as an integrated ecosystem, a technology stack, rather than a collection of discrete assets. While data centres provide the compute capacity required to develop and operate AI systems, telecommunications networks provide the connectivity through which data is transported, services are delivered, and the benefits of AI are distributed and realised across the economy.

Australia's AI future will depend not only on investment in data centres, but also on the telecommunications infrastructure that connects businesses, government and communities to those capabilities.

3.1 UNDERSTANDING AUSTRALIA'S AI INFRASTRUCTURE ECOSYSTEM

- 3.1.1 Much of today's AI capability relies on centralised cloud and data centre infrastructure, with a growing share of inference, processing, and decision-making moving closer to the point of use through edge computing and AI-enabled devices. Telecommunications networks are critical to enabling this increasingly distributed architecture.
- 3.1.2 Australia's AI infrastructure should be understood as a connected technology stack. Compute, cloud, AI models, devices, telecommunications networks, and supporting energy infrastructure, are interdependent. Limitations in one layer can constrain the performance, availability, and reach of the entire system.

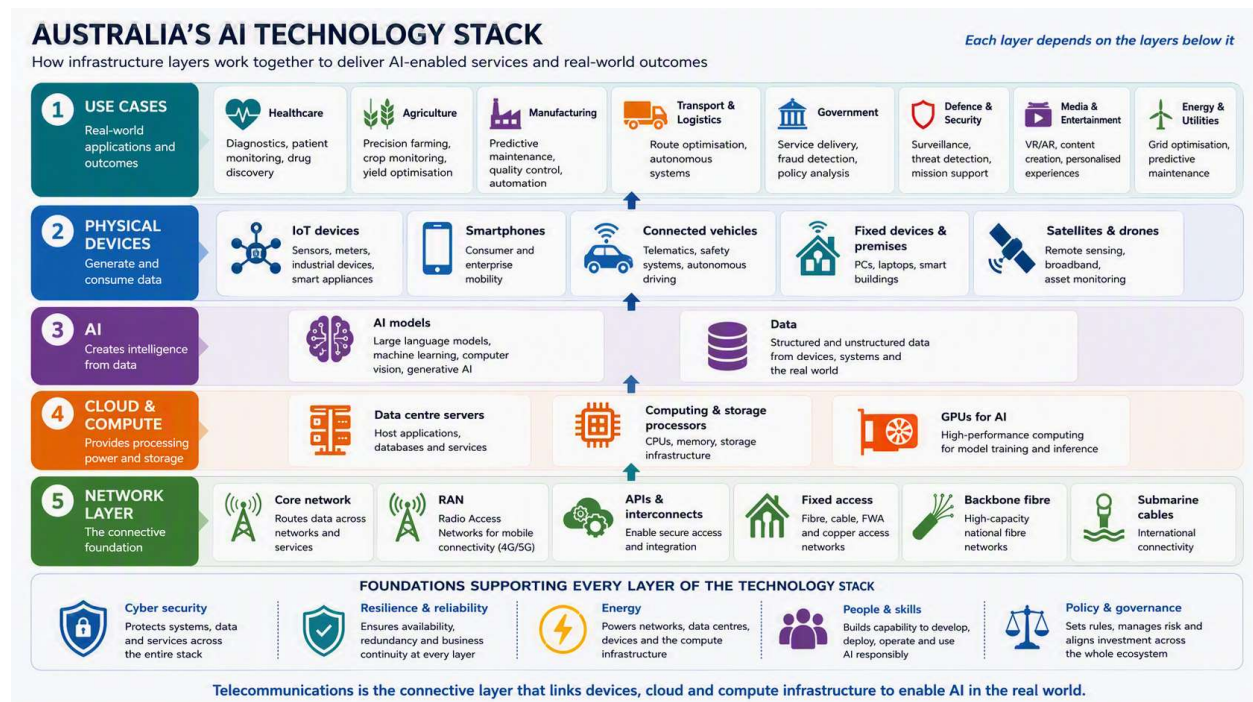


Figure 1: Australia's AI technology stack.

Key Takeaway:

- Data centres create AI capability.
- Telecommunications networks connect that capability to businesses, governments, and communities.
- AI benefits cannot be distributed unless the entire technology stack works together.

- 3.1.3 The technology stack is also supported by a set of cross-cutting foundations. Cyber security, resilience, energy, people and skills, and policy and governance do not form separate technical layers. Each applies across the entire ecosystem, shaping whether telecommunications networks, compute infrastructure, AI capabilities, connected devices, and applications can operate securely, reliably, and effectively.

3.2 TELECOMMUNICATIONS IS THE CONNECTIVE AND DISTRIBUTION LAYER FOR AI

- 3.2.1 While data centres provide the compute capacity required to develop and operate AI systems, telecommunications networks provide the essential connective and distribution layer that enables those systems to deliver value across the economy. Telecommunications networks connect users, devices, cloud platforms, edge-computing facilities, and data centres, allowing data, services and AI-enabled applications to be accessed wherever they are needed.¹
- 3.2.2 AI capability is increasingly delivered through a combination of cloud infrastructure, edge computing, and AI-enabled devices. Telecommunications networks provide the connectivity enabling these components to operate together as an integrated ecosystem. Without telecommunications connectivity, AI capability remains concentrated around individual infrastructure assets rather than being accessible to businesses, governments, and communities across Australia.
- 3.2.3 Telecommunications networks also enable the benefits of AI to be distributed throughout the economy.² They support AI-enabled applications in healthcare, agriculture, manufacturing, transport, emergency management, education, and government services, while connecting regional and remote communities to the same digital capabilities available in metropolitan areas.³
- 3.2.4 The nature of AI deployment is also evolving. While many AI workloads will continue to rely on cloud and data centre infrastructure, increasingly sophisticated capabilities are being deployed at the network edge and directly within connected devices. AI-enabled smartphones, sensors, drones, vehicles, robots, and industrial systems are becoming an increasingly important part of the AI ecosystem. Supporting these technologies will require high-capacity, low-latency and resilient fixed and mobile telecommunications networks capable of enabling real-time communications, secure data exchange, and distributed computing.⁴
- 3.2.5 As AI adoption accelerates, demand for cloud services, intelligent devices, machine-to-machine communications, and edge computing capability will continue to grow. Telecommunications networks will play an increasingly important role in connecting the various layers of Australia's AI technology stack, and ensuring that AI capability can be accessed, adopted, and utilised throughout the economy.

3.3 CONNECTIVITY UNDERPINS THE PRODUCTIVITY CASE

- 3.3.1 Telecommunications networks are not simply an input to the digital economy; they are a significant contributor to productivity growth across the broader economy. Australian Government analysis estimates telecommunications services contributed an estimated 14.7 per cent of economy-wide multifactor productivity growth between 2009-10 and 2019-20, demonstrating the enabling role of connectivity across all industries and sectors.⁵
- 3.3.2 The productivity benefits generated by telecommunications infrastructure extend beyond the telecommunications sector itself. An Accenture study commissioned by nbn estimated that investment in the nbn contributed approximately \$122 billion to Australia's GDP between 2012 and 2022, representing around 4 per cent of GDP growth during the period and supporting productivity improvements across the economy.⁶

¹ Australian Mobile Telecommunications Association (AMTA), [2025-26 Pre-Budget Submission](#) (2025); AMTA, [Submission to the Economic Reform Roundtable](#) (2025); and, Ericsson, [Ericsson Mobility Report 2025](#).

² BCARR, [Telecommunications Services and Productivity](#) (2023); Accenture, [The Economic and Social Impact of Investment in the nbn Network](#) (2024)

³ AMTA, [2025-26 Pre-Budget Submission](#) (2025); AMTA, [Submission 188 to the Senate Select Committee on Productivity in Australia](#) (2026)

⁴ AMTA, [2025-26 Pre-Budget Submission](#) (2025); AMTA, [Submission to the Economic Reform Roundtable](#) (2025); and, Ericsson, [Ericsson Mobility Report 2025](#).

⁵ BCARR, [Telecommunications Services and Productivity](#) (2023)

⁶ Accenture, [The Economic and Social Impact of Investment in the nbn Network](#) (2024)

- 3.3.3 Deloitte research commissioned by ATA found almost two-thirds of Australians are already using AI tools through mobile devices and that users reported average productivity improvements of approximately one hour and forty-five minutes per week.⁷
- 3.3.4 These findings demonstrate that investment in telecommunications networks provides the connectivity that delivers economy-wide benefits by enabling digital adoption, innovation and new ways of working. The same principle applies to AI. While data centres provide the compute capacity required to develop and operate AI systems, telecommunications networks enable businesses, governments, and communities to access and utilise those capabilities. Maintaining investment in high-capacity, secure and resilient telecommunications networks will therefore be essential to ensuring Australia captures the productivity benefits of AI and data centre investment.
- 3.3.5 These productivity benefits will only be realised if there is a continuous flow of investment in telecommunications networks. AI and networks must evolve together, as even the most powerful AI engine cannot deliver its full value if the underlying connectivity infrastructure does not keep pace. Accordingly, connectivity considerations should be integrated into planning and approval processes from the outset.

3.4 CONNECTIVITY MUST BE PLANNED FROM THE OUTSET

- 3.4.1 Major AI infrastructure projects assess energy, water and land-use requirements. They also assess connectivity requirements. Planning and approval processes should assess the following types of connectivity requirements before a project is approved or publicly supported:
- Availability and diversity of high-capacity fibre
 - Ability of surrounding networks to accommodate forecast traffic
 - Mobile network requirements
 - Redundancy and disaster-recovery arrangements
 - International and inter-capital transmission requirements
 - Cybersecurity and physical security dependencies
 - New infrastructure and land access needs along connecting routes, and
 - Implications for surrounding communities and regional connectivity capabilities.
- 3.4.2 High-capacity fibre, mobile network capability, international connectivity, redundancy and cyber security dependencies are fundamental inputs to AI services. Failure to consider connectivity requirements early may increase costs, reduce resilience and delay access to and benefits from AI-enabled services.
- 3.4.3 The ATA suggests the Committee recommend that telecommunications network connectivity requirements, and their installation permit processes, be assessed as part of a broader planning approval process, and as part of any government support processes for major data centre developments that will support AI services.

3.5 FIBRE ROUTES ARE CRITICAL AI INFRASTRUCTURE

- 3.5.1 Fibre connectivity is a critical enabler of Australia's AI future. While data centres provide the compute capacity required to develop and operate AI systems, fibre networks provide the high-capacity, low-latency, and resilient connections to telecommunications networks that allow data to move between users, businesses, devices, cloud platforms, and data centres. Fibre supports AI model training, cloud-based AI services, real-time analytics, data replication, disaster recovery, and distributed computing architectures. It is the infrastructure that allows AI capability to be accessed and utilised throughout the economy.
- 3.5.2 As AI adoption grows, the importance of fibre infrastructure will continue to increase. AI-enabled services rely on the movement of large volumes of data between data centres, cloud services, devices, and end

⁷Deloitte Access Economics, [Future of Mobile: Reforms to Modernise Australia's Telecommunications](#) (2026)

users. Fibre networks provide the capacity, reliability, and performance necessary to support these requirements while enabling the low-latency communications increasingly required by advanced AI applications.

- 3.5.3 Fibre infrastructure also contributes to Australia's sovereign digital capability. Domestic fibre transmission networks, inter-capital routes, subsea cable systems, and international connectivity pathways underpin Australia's ability to access cloud services, support digital trade, connect to global technology ecosystems, and maintain resilient communications during periods of disruption.
- 3.5.4 The importance of fibre infrastructure is recognised in the Australian Government's *National AI Plan*, which identifies both telecommunications networks and data centres as the foundational infrastructure required to support AI adoption, innovation and investment across the economy.⁸ Government and industry analysis similarly demonstrates that high-speed, reliable communications networks are a prerequisite for the adoption of advanced digital technologies and the productivity gains they enable.⁹
- 3.5.5 Accordingly, fibre infrastructure should be recognised as a strategic component of Australia's AI ecosystem. Investment in AI capability and data centres cannot deliver their full economic value unless supported by the communications infrastructure required to connect those capabilities to users, businesses, and communities.

4. AI'S BENEFITS MUST BE AVAILABLE TO ALL AUSTRALIANS

The value of AI is not created when AI is developed. AI capability creates opportunity, and connectivity determines who benefits from it. Therefore, the value and benefits of AI accrues when it is accessed and used by businesses, governments, and communities across Australia.

4.1 AI DELIVERS VALUE THROUGH ADOPTION

- 4.1.1 Public discussion of AI often focuses on frontier models, compute infrastructure, and data centres. While these are important components of the ecosystem, they are not the ultimate source of economic value. Economic value is created when AI technologies are adopted by governments, businesses and communities, and used to improve productivity, decision-making, service delivery. And innovation.
- 4.1.2 History demonstrates that technological breakthroughs do not automatically translate into productivity improvements. Economic benefits emerge when technologies are widely adopted and integrated into business processes, public services, and daily activities. AI is unlikely to be different. Australia will capture the benefits of AI not because AI capability exists somewhere in the economy, but because businesses, workers, and communities can access and use it.
- 4.1.3 Telecommunications infrastructure is the mechanism through which AI capability becomes economic value. Telecommunications networks connect users, devices, cloud platforms, edge-computing facilities, and data centres, enabling AI-enabled services to be accessed wherever they are needed. Without connectivity, AI capability remains concentrated around infrastructure assets rather than being distributed throughout the economy.
- 4.1.4 The policy objective should therefore be to accelerate the diffusion of AI capability across the economy. That requires complementary action on connectivity, digital capability, cyber resilience, workforce skills,

⁸ Department of Industry, Science and Resources, [National AI Plan](#) (2025)

⁹ BCARR, [Telecommunications Services and Productivity](#) (2023); and, ATA, [Submission 190 to the Senate Select Committee on Productivity in Australia](#), (2026)

and confidence in responsible use. AI investment will generate its greatest national return when organisations of different sizes and in different locations can integrate AI into productive activity.

4.2 REGIONAL AUSTRALIA SHOULD PARTICIPATE, NOT MERELY HOST

- 4.2.1 Regional Australia presents one of the clearest tests of whether AI benefits are being successfully distributed.
- 4.2.2 The ATA suggests the Committee recommend that Government ensure regional Australia shares in the economic, social, and connectivity benefits arising from investment in data centres and AI infrastructure. While policy discussions often focus on the location, energy, and water requirements of data centres, consideration should also be given to how regional communities, businesses, and industries can benefit from the enhanced digital capabilities these investments support. This would be consistent with the Australian Government's objective of improving regional data connectivity and economic participation through investment in telecommunications infrastructure and digital technologies.¹⁰
- 4.2.3 This is particularly important given the inquiry's focus on the impacts of AI and data centres on Australian communities. Ensuring regional communities can access and adopt AI-enabled services will be essential to maximising the national benefit arising from investment in AI infrastructure.
- 4.2.4 Regional participation is not solely a question of fairness. It is also a question of national productivity. Much of Australia's economic activity occurs outside major metropolitan areas, particularly in sectors such as agriculture, mining, manufacturing, logistics and tourism. Ensuring these industries can adopt AI-enabled technologies will be critical to maximising the national productivity benefits of AI.
- 4.2.5 Government support for significant data centre developments should include a **Connectivity and Regional Benefit Plan**. The Plan could demonstrate how associated investments in telecommunications infrastructure will improve digital capability and support AI adoption in regional and remote Australia. Such Plans could consider:
- new and upgraded fibre routes
 - mobile network coverage and capacity improvements
 - opportunities for shared digital infrastructure
 - network resilience and redundancy outcomes
 - regional workforce, training, and skills development opportunities
 - access to AI-enabled services and applications
 - support for regional industries such as agriculture, mining, manufacturing, and tourism, and
 - responsibility for funding and delivery of associated infrastructure.
- 4.2.6 Reliable telecommunications connectivity is a prerequisite for regional participation in the AI economy. The *2024 Regional Telecommunications Review* recognised the increasing importance of high-quality communications infrastructure for economic development, resilience and access to essential services in regional Australia.¹¹ Similarly, the Australian Government's National AI Plan identifies the need for enabling digital infrastructure and investment settings that support AI adoption across the economy.¹²
- 4.2.7 A Connectivity and Regional Benefit Plan would help align three important objectives: encouraging continued investment in AI and digital infrastructure, meeting community expectations, and ensuring the economic and connectivity benefits of that investment are shared more broadly. Such plans would help

¹⁰ Department of Infrastructure, Transport, Regional Development, Communications, Sport and the Arts (DITRDCA), [Better Connectivity Plan for Regional and Rural Australia](#) (2022); DITRDCA, [Regional Investment Framework](#) (2023)

¹¹ Regional Telecommunications Independent Review Committee, [2024 Regional Telecommunications Review](#) (2024)

¹² Department of Industry, Science and Resources, [National AI Plan](#) (2025)

maximise the value generated by major infrastructure projects while supporting regional capability, productivity and participation in the AI economy.¹³

- 4.2.8 The ATA notes the Department of Infrastructure, Transport, Regional Development, Communications, Sport and the Arts (DITRDCSA) has recently undertaken stakeholder engagement on the design of future regional connectivity programs. While these discussions did not specifically address data centres or AI infrastructure, ATA considers there is an important and growing intersection between these policy areas. Future regional communications policies and programs should explicitly consider the telecommunications infrastructure required to support AI adoption, regional access to AI-enabled services, and the broader economic opportunities arising from Australia's investment in data centres and digital infrastructure.¹⁴

4.3 SMALL AND MEDIUM ENTERPRISES

- 4.3.1 Small and medium enterprises (SMEs) will play a critical role in determining whether Australia captures the productivity benefits of AI.
- 4.3.2 While much AI policy discussion focuses on frontier models, large-scale compute infrastructure and emerging technologies, the economic impact of AI will ultimately depend on adoption across the broader business community. SMEs account for the overwhelming majority of Australian businesses and are a significant source of employment, innovation and economic activity. Their ability to adopt and utilise AI technologies will therefore be central to Australia's future productivity and competitiveness.
- 4.3.3 For many SMEs, the challenge is not whether AI tools exist. Increasingly, AI capability is embedded within mainstream business software, cloud platforms, customer relationship management systems, accounting products, cybersecurity solutions and productivity tools already used by Australian businesses. AI capability is becoming increasingly commoditised and accessible through existing digital services. The more significant question is whether businesses have the connectivity, skills, cybersecurity capability and supporting infrastructure required to integrate these tools into their operations effectively.
- 4.3.4 This distinction is important. Policy discussions relating to AI often focus on the development of AI capability itself, yet many of the barriers to business adoption are practical rather than technological. SMEs frequently face challenges including limited digital capability, constrained resources, cyber security concerns, unreliable connectivity, and the costs associated with adopting and integrating new digital tools. Without addressing these foundational barriers, the availability of AI technologies alone will not necessarily translate into widespread adoption or productivity gains.
- 4.3.5 Telecommunications infrastructure is a key enabler of SME adoption. Reliable and affordable connectivity allows businesses to access cloud-based AI services, automate routine processes, analyse business data, engage with customers, strengthen cyber resilience and adopt new digital business models. Conversely, poor connectivity can limit access to AI-enabled services and reduce the ability of businesses to participate fully in an increasingly digital economy. As AI capabilities become embedded throughout business software and digital platforms, access to high-quality communications infrastructure will become an increasingly important determinant of business productivity and competitiveness.
- 4.3.6 Policies seeking to accelerate SME adoption should address the practical barriers preventing businesses from integrating AI into their operations. This includes access to reliable and affordable high-performance connectivity, stronger digital capability and cyber resilience, and measures that give businesses the confidence and skills to adopt AI responsibly. AI adoption is not solely a technology challenge. It is also an infrastructure, capability, and trust challenge.

¹³ Regional Telecommunications Independent Review Committee, [2024 Regional Telecommunications Review](#) (2024); Australian Strategic Policy Institute (ASPI), [Recognising the Economic Potential of Digital Infrastructure Resilience](#) (2025)

¹⁴ Regional Telecommunications Independent Review Committee, [2024 Regional Telecommunications Review](#) (2024); Department of Industry, Science and Resources, [National AI Plan](#) (2025)

5. AI ADOPTION DEPENDS ON CONTINUOUS DIGITAL INFRASTRUCTURE INVESTMENT

AI adoption is fundamentally an infrastructure challenge. Australia's AI ambitions depend on sustained investment across the entire digital infrastructure ecosystem, including telecommunications, compute, cloud, spectrum, and energy infrastructure. AI capability alone will not deliver economic and social benefits unless the supporting infrastructure exists to connect businesses, communities and consumers to those capabilities.

5.1 ENABLING THE NEXT WAVE OF DIGITAL TRANSFORMATION

- 5.1.1 AI will increase demand not only for data centre capacity but also for telecommunications networks that connect users, devices, and businesses to AI-enabled services. AI adoption will drive growth in machine-to-machine communications, cloud workloads, Edge AI applications, automation, data replication, real-time analytics, and intelligent services, all of which depend on high-capacity, low-latency, and resilient networks.
- 5.1.2 Every AI-enabled application relies on a broader ecosystem comprising:
- Fixed and mobile communication networks
 - Cloud infrastructure
 - Edge-computing capability
 - Fibre transmission infrastructure
 - International connectivity
 - Spectrum resources, and
 - Resilient network capacity.
- 5.1.3 The growing importance of this ecosystem is already evident. Australian consumers downloaded approximately 14.4 million terabytes of data during the December 2024 quarter, with around 80 per cent carried over NBN services, 16 per cent over mobile networks and 4 per cent over other fixed network services.¹⁵ Mobile traffic increased by approximately 15 per cent over the previous six-month period and Ericsson has reported mobile traffic growth approaching 400 per cent since 2020.¹⁶ AI adoption is expected to accelerate these trends further.
- 5.1.4 Recent consumer research undertaken by Deloitte Access Economics for the ATA found that almost two-thirds of Australians are already using AI tools on mobile devices, with users reporting average productivity gains of approximately one hour and forty-five minutes each week. While the report is not yet publicly available, these findings suggest AI is no longer an emerging phenomenon but an increasingly mainstream part of digital life and economic activity. These findings also demonstrate that AI-enabled consumer devices are themselves a key means by which AI investment translates into productivity gains. While network demand will grow overall, increasingly capable on-device and edge processing can complement cloud and data-centre capacity, reduce unnecessary data transmission for some workloads, and support lower latency, resilience, and privacy. Telecommunications networks will remain critical in connecting these distributed components and services as adoption expands.
- 5.1.5 Future technologies including robotics, autonomous systems, industrial automation, advanced healthcare technologies, smart energy networks and next-generation communications services will increase these demands further. Australia's AI future will therefore depend not only on investment in compute infrastructure but also on investment in the telecommunications infrastructure that allows these capabilities to be accessed and utilised throughout the economy.

¹⁵ Accenture, [The Economic and Social Impact of Investment in the nbn Network](#) (2024)

¹⁶ Ericsson, [Ericsson Mobility Report 2025](#)

5.2 SUPPORTING SUSTAINABLE NETWORK INVESTMENT

- 5.2.1 Telecommunications infrastructure differs from many forms of infrastructure because it is never complete. Networks require continual upgrades, expansion into new locations, technology refresh cycles, resilience investments, and increasing capacity to support evolving technologies and user needs. AI adoption will accelerate each of these pressures.
- 5.2.2 Maintaining investment capacity across telecommunications networks will therefore become increasingly important to Australia's productivity performance and economic competitiveness. AI adoption is expected to increase overall demand on telecommunications networks. The scale and composition of network demand will vary by workload and architecture, including as more processing occurs on-device or at the edge. However, fixed, mobile, and satellite networks will continue to require investment in capacity, coverage, security and resilience to support distributed AI services.

AI will reshape network demand

By 2030:

- Australian data centre capacity is expected to **triple**.
- AI workloads are projected to drive **85-95%** of long-haul fibre demand.
- AI workloads are projected to drive **70-80%** of metro fibre demand.

Source: Vocus Australia Digital Infrastructure Platform announcement (June 2026)

- 5.2.3 Today's telecommunications networks provide the foundation for current AI adoption. However, the scale of AI-driven demand expected over coming years cannot be assumed to be accommodated through existing infrastructure alone. When launching its *Australia Digital Infrastructure Platform*, Vocus noted an expectation that by 2030, data centre capacity in Australia is projected to triple, with AI workloads driving 85 to 95 per cent of long-haul fibre demand, and 70 to 80 per cent of metro demand.¹⁷ AI-enabled services are expected to increase demand not only for network capacity, but also for performance, resilience, and geographic reach. Many emerging applications, including Edge AI, industrial automation, connected devices, robotics, autonomous systems, and real-time analytics, depend on high-capacity, low-latency connectivity operating across distributed locations rather than solely between major data centres.
- 5.2.4 As AI becomes embedded throughout the economy, network infrastructure will increasingly be required to support larger data volumes, more connected devices, greater redundancy requirements, and more demanding service expectations. Continued investment will therefore be required to expand network capacity, improve resilience, and extend coverage to meet projected demand. Without this investment, telecommunications infrastructure risks becoming a bottleneck to AI adoption, limiting the ability of businesses, governments, and communities to fully realise the productivity, innovation, and economic benefits AI is expected to deliver.
- 5.2.5 Mobile data traffic has already increased substantially over recent years, with Ericsson reporting growth of almost 400% since 2020.¹⁸ At the same time, telecommunications services have become more affordable, with prices falling by around 23 per cent between 2011 and 2024, despite sustained industry investment in network infrastructure.¹⁹
- 5.2.6 This trend highlights a key challenge for policymakers. The productivity and economic benefits expected from AI is dependent on continued investment in the telecommunications networks that connect users, devices, businesses and cloud platforms to those computing resources. Policy settings that constrain investment in network infrastructure ultimately risk constraining the adoption and benefits of AI itself.

¹⁷ Vocus, News and Insights, [Vocus announces intent to build and operate Australia's first ducted long-haul fibre route](#), 30 June 2026

¹⁸ Ericsson, [Ericsson Mobility Report 2025](#)

¹⁹ Australian Bureau of Statistics (ABS), [Consumer Price Index, Australia](#), Telecommunications series (accessed 2026)

- 5.2.7 The importance of maintaining investment in telecommunications infrastructure is reinforced by Australian Government analysis which estimates telecommunications services contributed approximately 14.7 per cent of economy-wide multifactor productivity growth between 2009-10 and 2019-20, highlighting the role connectivity plays in enabling economic growth across industries.²⁰ As AI becomes embedded throughout the economy, the productivity benefits associated with digital infrastructure are likely to become even more significant.
- 5.2.8 Spectrum is a critical input for mobile, fixed wireless and satellite communications and should therefore be recognised as a key component of Australia's AI infrastructure ecosystem. Advanced AI applications, including Edge AI, autonomous systems, industrial automation, remote monitoring and smart energy networks, will increasingly rely on high-capacity wireless connectivity enabled through access to sufficient quality spectrum.
- 5.2.9 ATA has previously noted that approximately 85 per cent of spectrum licences used by mobile network operators are due to expire between 2028 and 2030, representing a significant future cost for the sector.²¹ ATA recognises that spectrum is a valuable public resource and that Government has an important role in ensuring spectrum is allocated efficiently. However, spectrum pricing should be considered in the context of the broader public benefits generated by telecommunications investment, including improved connectivity, productivity, resilience and digital adoption.
- 5.2.10 Spectrum policy should therefore seek to maximise long-term public value through network investment, coverage, capacity, innovation, competition and resilience, rather than focusing predominantly on short-term fiscal outcomes. Every dollar directed towards spectrum acquisition or renewal is a dollar unavailable for network deployment, upgrades, resilience initiatives and future technologies that support AI-enabled services.
- 5.2.11 International evidence supports this approach. Analysis by the GSMA found that higher spectrum costs are associated with lower network coverage and reduced download speeds.²² The same analysis found that, between 2014 and 2023, the value generated per licensed megahertz (MHz) of spectrum declined by 67 per cent globally, while the ratio of spectrum costs to operator revenue increased by 63 per cent. These findings suggest that operators are paying more for access to spectrum while experiencing declining economic returns, placing greater pressure on future investment capacity.
- 5.2.12 Reduced investment capacity has direct implications for Australia's digital future. Lower investment in telecommunications infrastructure can result in slower network deployment, reduced network resilience, delayed technology upgrades and constrained service innovation. These outcomes would undermine Australia's ability to maximise the benefits of data centre investment and AI adoption across the economy.
- 5.2.13 The investment environment for telecommunications infrastructure is further affected by the cumulative impact of regulatory obligations. The ATA has identified more than 200 sector-specific legislative and regulatory requirements applying to telecommunications providers, with approximately 20 additional obligations introduced or under development in recent years. While each individual measure may have merit, their cumulative effect can divert capital and resources away from investment in network infrastructure.
- 5.2.14 The ATA seeks a recommendation from this Committee that Government assess spectrum pricing, spectrum renewal arrangements, and telecommunications regulatory settings through the lens of Australia's long-term AI, digital infrastructure, and productivity objectives, ensuring that policy settings support sustainable investment in the telecommunications networks that underpin data centres, AI deployment, and digital economic growth.

²⁰ BCARR, [Telecommunications Services and Productivity](#) (2023)

²¹ ATA, [Submission 190 to the Senate Select Committee on Productivity in Australia](#), (2026)

²² GSMA, [Global Spectrum Pricing](#), (2025)

5.3 SUPPORTING TELECOMMUNICATIONS INFRASTRUCTURE DEPLOYMENT

- 5.3.1 Infrastructure deployment is increasingly becoming an AI policy issue. Telecommunications infrastructure is a foundational component of Australia's AI ecosystem. Fixed, mobile, and fibre networks provide the connectivity required to transport data, connect users to AI-enabled services, support cloud and edge computing, and distribute the benefits of AI throughout the economy. Realising Australia's AI ambitions will therefore require telecommunications infrastructure deployment to keep pace with investment in data centres and AI capability.
- 5.3.2 Delays affecting telecommunications infrastructure can delay the deployment of AI-enabled services and reduce the productivity, resilience, and economic benefits expected from AI and digital infrastructure investment. Supporting AI adoption therefore requires efficient deployment pathways for fibre, mobile, and associated connectivity infrastructure.
- 5.3.3 Despite being recognised as critical infrastructure, telecommunications networks continue to face significant deployment challenges. Industry evidence submitted to previous parliamentary inquiries identified average approval timeframes of approximately 211 days for new telecommunications facilities, and estimated that reducing approval timeframes by 25 per cent could facilitate an additional 150 to 200 mobile site deployments annually.²³ These delays increase costs, reduce investment efficiency, and slow the delivery of connectivity services required to support AI adoption.
- 5.3.4 The challenge is particularly acute for fibre infrastructure. Telecommunications fibre routes frequently traverse multiple land tenures, local government areas and regulatory frameworks, requiring compliance with a wide range of planning, environmental, heritage and access requirements before construction can commence. ATA member evidence demonstrates the scale of this challenge.
- One major inter-capital fibre route required:
 - More than 3,000 land access notices;
 - 1,128 construction certificates;
 - 1,723 land access surveys; and
 - 171 cultural heritage and environmental assessments.
 - A separate 2,000-kilometre fibre project in the Pilbara experienced delays of between 12 and 18 months, and involved engagement with more than 200 entities before deployment could proceed.

Why deployment reform matters

Telecommunications deployment is increasingly an AI policy issue.

- **3,000+** land access notices
- **1,100+** construction certificates
- **18 months** project delays

Telecommunications deployment delays can become AI deployment delays.

- 5.3.5 These delays have implications beyond the telecommunications sector. As demand for AI services grows, telecommunications networks will be required to carry increasing volumes of data between users, businesses, devices, cloud platforms and data centres. Delays in deploying fibre, mobile and other supporting network infrastructure risk slowing the adoption of AI-enabled services and reducing the productivity, innovation and resilience benefits that data centre investment is intended to deliver.

²³ AMTA, [Submission 188 to the Senate Select Committee on Productivity in Australia](#) (2026); Deloitte Access Economics, [Future of Mobile: Reforms to Modernise Australia's Telecommunications](#) (2026)

- 5.3.6 Schedule 3 of the *Telecommunications Act 1997* (Tel Act) was intended to facilitate the efficient deployment of telecommunications infrastructure by empowering carriers to install specified low-impact facilities without requiring planning approval. However, the effectiveness of this framework has been progressively eroded through the application of additional state, territory and local government requirements, increasing complexity and reducing deployment efficiency.
- 5.3.7 The ATA welcomed the Government's commitment in the 2026-27 Budget to review these provisions in the Tel Act and looks forward to working closely with Government on proposed reforms. The ATA supports reforms that provide:
- risk-based definitions of low-impact facilities
 - clear maintenance and replacement powers
 - streamlined pathways for equipment and infrastructure upgrades
 - appropriate treatment of rural and industrial facilities
 - clear emergency and restoration powers
 - standardised land-access arrangements
 - defined assessment and decision-making timeframes, and
 - periodic legislative review to ensure the framework keeps pace with evolving technology and infrastructure requirements.
- 5.3.8 Reforming telecommunications deployment frameworks should be recognised as part of Australia's AI, data centre, and productivity agenda. Streamlined deployment pathways for fibre, mobile, and supporting communications infrastructure would accelerate AI adoption, strengthen network resilience, and help ensure the benefits of AI are distributed across Australian businesses, communities and regions.

6. SOVEREIGN AI CAPABILITY REQUIRES TRUSTED AND RESILIENT INFRASTRUCTURE

Sovereign capability is built through resilience, trust and infrastructure strength. Sovereign AI capability depends not only on where compute infrastructure is located, but on Australia's ability to access, operate, secure and rely upon trusted digital infrastructure and trusted technology ecosystems.

Australia's future AI capability will be shaped by a complex network of telecommunications infrastructure, data centres, cloud services, subsea cables, energy systems, software platforms, and global technology supply chains. A resilient and trusted digital infrastructure ecosystem will therefore be fundamental to Australia's economic resilience, national security, and AI ambitions.

6.1 SOVEREIGNTY THROUGH CAPABILITY AND RESILIENCE

- 6.1.1 Discussions of AI sovereignty often focus on ownership of AI models, the physical location of data centres or domestic compute capability. While these considerations are important, sovereign capability should be understood more broadly as Australia's ability to access, operate, secure, and maintain trusted digital infrastructure and trusted technology partnerships.

KEY INSIGHT

Sovereignty is more than data centres.

Sovereign AI capability depends on trusted telecommunications networks, resilient international connectivity, secure supply chains, reliable energy systems, and trusted technology partnerships.

Australia's ability to access, operate, and rely on AI-enabled services during disruption may ultimately matter more than where individual AI workloads are physically located.

- 6.1.2 No nation can independently provide every component of the modern digital technology stack. AI systems depend on global supply chains, cloud services, semiconductor manufacturing, international connectivity, and technology partnerships. Australia's objective should therefore be to build sovereign capability through resilience, diversity, and trusted ecosystems, rather than seeking complete technological self-sufficiency.
- 6.1.3 This approach is consistent with Australia's broader critical infrastructure, cyber security, and national security frameworks, which increasingly focus on resilience, risk management, and trusted partnerships as the foundations of national capability.

Trusted and Interconnected Infrastructure Ecosystem

- 6.1.4 Australia's AI ecosystem relies upon a highly interconnected set of digital infrastructure assets, including:
- telecommunications networks;
 - cloud services;
 - subsea cable systems;
 - data centres;
 - fibre transmission infrastructure;
 - hardware and software supply chains;
 - energy infrastructure; and
 - trusted technology providers.
- 6.1.5 These assets should not be viewed independently. They operate as a single digital infrastructure ecosystem through which AI capability is delivered to businesses, governments and communities. A vulnerability, disruption, or failure in any part of the ecosystem can affect the availability, reliability, or security, of AI-enabled services. Sovereign capability therefore depends not only on individual assets, but on the strength and resilience of the entire system.
- 6.1.6 Australia's economy is deeply integrated with global cloud services, software platforms, digital supply chains, and international communications networks. Consequently, sovereign capability cannot be assessed solely through the lens of domestic ownership or infrastructure location. It also depends on maintaining access to trusted international technology ecosystems, resilient supply chains, and reliable international connectivity.
- 6.1.7 Telecommunications infrastructure plays a central role in enabling these connections. Telecommunications networks link Australian users, businesses, and governments to cloud platforms, AI services, and global innovation ecosystems, while also supporting national resilience and security objectives.

International Connectivity as Strategic Infrastructure

- 6.1.8 International connectivity has become increasingly important to Australia's AI future.
- 6.1.9 Australia remains heavily reliant on international data flows, cloud services, software platforms, and digital trade. Subsea cable systems, cable landing stations, and associated terrestrial transmission networks are therefore strategic national assets. As AI adoption grows and Australia seeks to strengthen its role as a regional digital and AI hub, the capacity, diversity, and resilience of international connectivity infrastructure will become increasingly important.
- 6.1.10 Policy settings should support investment in diverse international connectivity pathways, resilient cable landing stations, inter-capital fibre routes and associated telecommunications infrastructure. Concentrating compute capability without corresponding diversity in connectivity can create vulnerabilities that undermine the reliability, resilience, and availability of AI-enabled services.

Security and National Resilience

- 6.1.11 The resilience of Australia's AI ecosystem depends not only on cybersecurity controls, but on the resilience of the broader digital infrastructure ecosystem.
- 6.1.12 A key component of resilience is **network diversity**. Geographically diverse fibre routes, domestic carrier diversity, international connectivity, backup wireless and satellite capability, prioritised restoration arrangements, and secure supply chains all contribute to reducing systemic risk. These measures become

increasingly important as AI-enabled services become embedded in critical infrastructure, public services, and economic activity.

- 6.1.13 Cyber security should similarly be viewed through a whole-of-system lens. Security requirements should extend across telecommunications networks, cloud platforms, data centres, operational technology environments, supply chains, interconnection points, identity systems, and recovery arrangements. A failure in any component of this ecosystem has the potential to affect AI service availability and public confidence.
- 6.1.14 Security and resilience obligations should remain risk-based, technology-neutral and proportionate. Where possible, risks should be addressed at the most appropriate point within the value chain and aligned with existing cyber security, privacy, telecommunications, and critical infrastructure frameworks. This will reduce duplication, improve regulatory certainty, and ensure investment is directed towards strengthening resilience outcomes.

Shared Infrastructure Dependencies

- 6.1.15 AI infrastructure policy should also recognise the growing interdependence between telecommunications, data centres, and energy infrastructure.
- 6.1.16 While significant attention is often focused on the energy requirements of data centres, the broader AI ecosystem also depends on fibre routes, mobile network sites, telecommunications exchanges, edge-computing facilities, cable landing stations, and backup communications systems. These assets are essential to enabling AI services and should be considered alongside compute infrastructure in planning and investment decisions.
- 6.1.17 ATA members have reported power-connection delays for telecommunications infrastructure of up to 2.5 years. These experiences highlight the need for more coordinated planning across telecommunications, energy, and digital infrastructure sectors to ensure future AI growth is supported by sufficient connectivity, resilience, and supporting infrastructure.²⁴

7. POLICY SETTINGS THAT ENABLE INVESTMENT IN INFRASTRUCTURE DEPLOYMENT

Australia's ability to benefit from AI will depend not only on AI capability itself, but on the policy settings that support investment, infrastructure deployment, adoption and innovation.

As AI becomes embedded throughout the economy, decisions affecting telecommunications infrastructure, spectrum, data centres, cloud services, cyber security, energy systems, and digital regulation will increasingly shape Australia's ability to realise the benefits of AI. These policy domains are becoming more interconnected and should be considered as components of a broader digital infrastructure ecosystem, rather than through isolated policy processes.

7.1 WHY FRAGMENTATION MATTERS

- 7.1.1 Fragmented decision-making can create conflicting incentives, overlapping regulatory obligations, poorly sequenced reforms, and barriers to coordinated infrastructure investment.²⁵

²⁴ ATA, [Submission 190 to the Senate Select Committee on Productivity in Australia](#), (2026); ATA, [Creating a More Dynamic and Resilient Economy Interim Report Submission](#) (2025).

²⁵ AMTA, [Submission 188 to the Senate Select Committee on Productivity in Australia](#) (2026); ATA, [Submission 190 to the Senate Select Committee on Productivity in Australia](#), (2026); and, AMTA, [Submission to the Economic Reform Roundtable](#) (2025)

- 7.1.2 AI capability increasingly depends on a range of infrastructure systems that have traditionally been managed separately. Telecommunications networks, spectrum, cloud services, data centres, energy systems, cyber security frameworks, and digital regulations are now closely interconnected. Decisions in one area can have significant consequences for the others.
- 7.1.3 The consequences of fragmentation are likely to become more significant as AI adoption accelerates. For example:
- AI adoption will increase demand for telecommunications networks, spectrum, and energy infrastructure.
 - Data centre investment decisions influence telecommunications deployment, resilience, and regional development.
 - Telecommunications infrastructure deployment affects the ability of businesses and communities to access AI-enable services.
 - Cyber security, privacy, and critical infrastructure reforms increasingly affect the systems through which AI services are delivered.
 - Spectrum policy will shape the future deployment of Edge AI, advanced mobile networks, industrial automation, and emerging communications technologies.
- 7.1.4 A more coordinated approach would improve regulatory certainty, support long-term investment planning, , and help ensure government policies collectively advance Australia’s AI, digital economy, and productivity objectives.

7.2 A NATIONAL DIGITAL INFRASTRUCTURE FRAMEWORK

- 7.2.1 The ATA considers the establishment of a National Digital Infrastructure Framework to be the most significant structural reform that could arise from this inquiry.
- 7.2.2 The Framework would provide a coordinated approach to infrastructure planning, investment settings, and regulatory reform across telecommunications, AI, data centres, cloud services, cyber security, spectrum, and energy infrastructure. It would help ensure government decisions are aligned with national productivity, resilience, sovereign capability, and regional development objectives.
- 7.2.3 The ATA proposes four core components.

National Digital Infrastructure Framework

A coordinated framework for Australia’s AI and digital infrastructure future.

Component	Purpose
National Spectrum Strategy	Support future wireless connectivity, Edge AI and emerging technologies
National Digital Infrastructure Plan	Coordinate planning across telecommunications, data centres, compute and energy infrastructure
Digital Infrastructure Coordinator-General	Reduce deployment barriers and improve project delivery
Digital Infrastructure Regulatory Initiatives Grid	Improve regulatory coordination, transparency and investment certainty

Outcome: A single governance framework aligning AI, telecommunications, data centres, energy, and cyber security policy around national productivity, resilience, and sovereign capability objectives.

National Spectrum Strategy

- 7.2.4 Spectrum is a fundamental input to mobile, fixed wireless, and satellite communications, and should be recognised as a critical component of Australia's AI infrastructure ecosystem.
- 7.2.5 Future AI-enabled applications including Edge AI, autonomous systems, industrial automation, smart energy networks, precision agriculture, and advanced health technologies will increasingly rely on high-capacity wireless connectivity. Spectrum policy will therefore play an increasingly important role in determining Australia's ability to adopt and benefit from AI-enabled services.
- 7.2.6 A National Spectrum Strategy should support long-term network investment certainty and consider spectrum policy through the lens of national productivity, innovation, resilience and digital infrastructure objectives. The Strategy should also support Australia's preparedness for future technologies, including 6G networks, and emerging AI-enabled services.
- 7.2.7 Similar long-term approaches have been adopted internationally to support investment planning and emerging wireless technologies.²⁶

National Digital Infrastructure Plan

- 7.2.8 The framework should also include a National Digital Infrastructure Plan establishing a coordinated approach to telecommunications infrastructure, data centres, supporting energy systems, and associated digital infrastructure.
- 7.2.9 As AI adoption grows, governments will increasingly need to manage competing requirements relating to connectivity, compute, energy, water, land use, resilience, and community outcomes. A whole-of-system planning approach would improve long-term infrastructure coordination and investment certainty.²⁷
- 7.2.10 The Plan could:
- Map existing and forecast data centre capacity;
 - Map fixed, mobile, fibre, satellite, and submarine-cable infrastructure;
 - identify connectivity gaps, resilience risks, and single points of failure;
 - forecast network demand arising from AI and digital technologies;
 - Identify suitable locations for data centres, edge-computing facilities, and supporting telecommunications infrastructure;
 - coordinate investment in energy, water, and telecommunications infrastructure;
 - establish resilience, security, and redundancy expectations;
 - support regional and remote area participation in the AI economy;
 - identify pathways for nationally significant digital infrastructure projects, and
 - clearly allocate responsibilities across governments, regulators and infrastructure operators.

Digital Infrastructure Coordinator General

- 7.2.11 The ATA also proposed the establishment of a Digital Infrastructure Coordinator-General responsible for improving coordination across major digital infrastructure projects and regulatory frameworks. The role could:
- facilitate approvals for nationally significant digital infrastructure;
 - identify complementary telecommunications, data centre, and energy requirements;
 - support early engagement with communities and stakeholders;
 - maintain a national pipeline of major digital infrastructure projects;

²⁶ AMTA, [2025-26 Pre-Budget Submission](#) (2025); ATA, [Submission 190 to the Senate Select Committee on Productivity in Australia](#), (2026); National Telecommunications and Information Administration (NTIA), [National Spectrum Strategy](#), US Government (2023); Department for Science, Innovation and Technology, [Spectrum Statement](#), UK Government (2023).

²⁷ ATA, Submission 190 to the Senate Select Committee on Productivity in Australia, (2026); Department of Industry, Science and Resources, National AI Plan (2025); Australian Strategic Policy Institute (ASPI), [Recognising the Economic Potential of Digital Infrastructure Resilience](#) (2025).

- coordinate sequencing across government approvals and regulatory processes;
- improve access arrangements for Crown land and public assets;
- resolve inter-jurisdictional infrastructure barriers, and
- monitor and report publicly on systemic deployment constraints.

7.2.12 International experience suggests coordinated approval frameworks can significantly reduce deployment delays and improve infrastructure delivery outcomes.²⁸

Digital Infrastructure Regulatory Initiatives Grid

7.2.13 The framework should also include a rolling 24-month Digital Infrastructure Regulatory Initiatives Grid.

7.2.14 Modelled on the Australian Treasury's Regulatory Initiatives Grid in the financial services sector, the Grid would improve transparency and coordination across reforms affecting telecommunications infrastructure, AI, cloud services, cyber security, privacy, data governance, online safety and digital platforms.²⁹

7.2.15 The Grid could identify:

- Lead agencies;
- Implementation timeframes;
- Interactions between reforms;
- Cumulative compliance impacts, and
- Expected obligations on industry participants.

7.2.16 Improved visibility of future reforms would assist investors, infrastructure providers, and government agencies in managing regulatory change while reducing duplication and unintended consequences.

7.2.17 Together, the components of the National Digital Infrastructure Framework provide the governance architecture necessary to align infrastructure planning, investment settings, and regulatory frameworks around a common objective: ensuring that Australia can access, adopt, and benefit from AI capability at scale.

7.3 REGULATION SHOULD ENABLE ADOPTION

7.3.1 Governments have an important role in managing AI-related risks and maintaining public confidence in emerging technologies. Effective governance will be critical to ensuring AI systems are deployed safely, responsibly, and consistently with community expectations.

7.3.2 However, the objective of AI regulation should not be limited to risk management alone. Regulatory frameworks should also support innovation, investment, and adoption. Overly prescriptive or fragmented approaches risk creating barriers to the uptake of technologies capable of improving productivity, competitiveness and service delivery.

7.3.3 The ATA supports regulatory approaches that are:

- risk-based;
- proportionate;
- technology-neutral; and
- aligned with existing regulatory frameworks wherever possible.

7.3.4 Risk-based approaches allow regulatory effort to focus on identifiable harms and high-consequence use cases rather than regulating technologies in isolation. Technology-neutral approaches are equally important

²⁸ Deloitte Access Economics, [Future of Mobile: Reforms to Modernise Australia's Telecommunications](#) (2026); AMTA, [Submission 188 to the Senate Select Committee on Productivity in Australia](#) (2026); US Federal Permitting Improvement Steering Council, [Permitting Council](#).

²⁹ ATA, [Creating a More Dynamic and Resilient Economy Interim Report Submission](#) (2025); ATA, [Submission 190 to the Senate Select Committee on Productivity in Australia](#), (2026); Australian Treasury, [Regulatory Initiatives Grid](#), Edition 3 (2026).

given the pace of AI innovation and the growing diversity of deployment models across cloud, edge, and device environments.

- 7.3.5 Where possible, risks should be addressed at the most appropriate point within the AI value chain and aligned with existing cyber security, privacy, consumer protection and critical infrastructure frameworks. This will help reduce unnecessary compliance burdens while maintaining appropriate safeguards.

7.4 AI POLICY IS ECONOMIC POLICY

- 7.4.1 Australia's ability to benefit from AI will depend not only on research capability or compute infrastructure, but also on the policy settings that encourage infrastructure investment, deployment, adoption, resilience, and innovation across the economy. The most successful AI economies will be those that develop effective governance frameworks while simultaneously enabling the infrastructure required to support AI-enabled services.
- 7.4.2 Australia's AI success will depend not only on how it regulates AI, but on how effectively it aligns infrastructure, investment, and regulatory policy. A National Digital Infrastructure Framework would provide a practical mechanism to coordinated these systems and help ensure Australia captures the productivity, resilience, and economic benefits of AI.

8. RECOMMENDATIONS

The Committee's Terms of Reference consider a broad range of issues including productivity, economic growth, innovation, adoption, regional participation, national capability, security, and regulation. Throughout this submission, the ATA has argued that these issues are connected by a common challenge: ensuring AI capability can be accessed, adopted, and trusted across the Australian economy.

The recommendations below are intended to support that objective. Together, they recognise telecommunications infrastructure as a foundational component of Australia's AI ecosystem, strengthen the enabling conditions for AI adoption, and support a coordinated policy framework capable of delivering long-term productivity, resilience, and economic benefits.

	Recommendation	Why it matters
1	Recognise telecommunications infrastructure as foundational AI infrastructure Formally recognise fixed, mobile, fibre, satellite, and international telecommunications networks are core components of Australia's AI infrastructure ecosystem, alongside compute, data centre, cloud, and energy infrastructure.	AI capability only creates economic value when it can be accessed and used. Telecommunications networks are the infrastructure that connects AI capability to businesses, governments and communities.
2	Integrate connectivity requirements into major AI infrastructure planning Telecommunications connectivity requirements be assessed as part of planning, approvals, and government support	Major AI infrastructure projects cannot deliver their full value unless connectivity requirements are considered from the outset. Early consideration of fibre, mobile, international connectivity, and resilience requirements can

	Recommendation	Why it matters
	processes for major AI and data centre developments	reduce delays, cost, and future infrastructure constraints.
3	Ensure regional Australia participates in the AI economy Government supported AI and data centre projects include a Connectivity and Regional Benefit Plan demonstrating how associated infrastructure investment will improve regional connectivity, capability, and access to AI-enabled services	Regional Australia should participate in AI-enabled productivity and economic growth, not simply host the infrastructure that supports it.
4	Support SME adoption through enabling infrastructure and capability Policies designed to accelerate AI adoption should address practical barriers including connectivity, digital capability, workforce skills, cyber resilience, and AI readiness	Australia's AI productivity gains will depend on SME adoption, not simply the existence of AI capability.
5	Support sustainable investment in telecommunications infrastructure Spectrum pricing, spectrum renewal arrangements, and telecommunications regulatory settings should be assessed against Australia's long-term AI, productivity, resilience, and digital infrastructure objectives	Sustained telecommunications investment is necessary to ensure network capacity, resilience and coverage evolve alongside growing AI demand.
6	Streamline telecommunications infrastructure deployment. Urgently progress reforms to telecommunications planning, land access, and deployment frameworks to support the timely deployment and upgrading of telecommunications infrastructure	Delays in fibre and mobile infrastructure deployment can delay AI deployment and reduce the returns on AI and data centre investment.
7	Strengthen trusted and resilient AI infrastructure ecosystems Australia's sovereign AI strategy should recognise trusted telecommunications networks, international connectivity, secure supply chains, network diversity, and infrastructure resilience as essential components of sovereign AI capability	Sovereign AI capability depends on resilient and trusted digital infrastructure ecosystems, not solely on the location of compute infrastructure.
8	Establish a National Digital Infrastructure Framework integrating AI, telecommunications, data centre, energy, cyber security, and digital infrastructure policy	Australia's AI future depends on infrastructure systems that are increasingly interconnected but currently governed through separate policy processes.
8.1	Establish a National Spectrum Strategy	Long-term wireless infrastructure planning
8.2	Establish a National Digital Infrastructure Plan	Whole-of-system planning and investment certainty

	Recommendation	Why it matters
8.3	Establish a Digital Infrastructure Coordinator-General	Improved project delivery and deployment coordination
8.4	Establish a Digital Infrastructure Regulatory Initiatives Grid	Greater transparency and regulatory certainty
9	Adopt risk-based, proportionate, and technology-neutral AI regulation. AI governance should focus on identifiable harms and high consequence use cases while remaining technology-neutral. AI governance should align with existing regulatory frameworks wherever possible	Effective AI governance should support innovation and adoption while managing genuine risks and maintaining public trust.

Artificial intelligence presents a significant opportunity to improve Australia's productivity, economic resilience, and global competitiveness. However, the benefits of AI will not be realised through investment in compute infrastructure alone.

AI capability creates opportunity, but economic and social value is only realised when that capability can be accessed, adopted and utilised by businesses, governments and communities. Telecommunications networks provide the connectivity that enables that outcome. They connect data centres, cloud services, edge infrastructure, devices and users, while supporting the resilience, security and reach required for AI-enabled services to operate effectively across Australia.

For this reason, AI policy should not be viewed solely as technology policy. It is also infrastructure policy, productivity policy, regional development policy and economic policy.

The ATA's recommendations provide a practical pathway for ensuring Australia captures the full benefits of AI by strengthening the digital infrastructure ecosystem that underpins adoption, innovation and growth. In particular, a National Digital Infrastructure Framework would provide the coordination necessary to align AI, telecommunications, data-centre, energy and regulatory policy around a common national objective.

The ATA and its members stand ready to work with government, Parliament, regulators and other stakeholders to support implementation of these reforms and to help ensure Australia's AI future is productive, resilient, secure and accessible to all Australians.

Ends

