SUBMISSION

Inquiry into the use of technology to assist in improving productivity

Submission to the House of Representatives Standing Committee on Economics

Australian Logistics Council

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No.	ALC recommendation
1	Full government funding for the National Freight Data Hub should continue in future financial years.
2	The Government should continue support provided under the National Competition Policy Federation Funding Agreement to encourage state and local governments to allow the National Automated Access System for heavy vehicles to operate to its full potential.
3	Planning and other regulatory approvals should not operate in ways that prevent industry from adopting technology to its full potential.
4	Strengthen baseline digital and cyber resilience through minimum cyber standards, practical uplift measures, clear information-sharing mechanisms and recovery planning for freight-critical systems and operators, particularly SMEs, recognising freight as essential economic infrastructure.
5	The Government should support the development and national recognition of short, industry-designed training programs in freight, logistics, digital systems and energy transition technologies to accelerate workforce adaptability, productivity and technology uptake.
6	The Government should encourage the development of programs that support people to take up the critical technology-related skills identified in this submission.

1. About the Australian Logistics Council

The Australian Logistics Council (ALC) is the national peak body representing Australia's supply chain logistics and freight transport industry.

Our members work across the end-to-end supply chain, including road transport, freight rail, ports, airports, intermodal terminals, warehousing and distribution, retail, manufacturing, technology and major freight customers.

ALC works with governments, regulators and industry to improve the safety, productivity, efficiency and resilience of Australia's supply chains.

2. Executive summary

Technology is a critical enabler of modern freight systems. As supply chains become more complex and time-sensitive, the ability to collect, share and act on high-quality data increasingly determines system performance.

For Australia, accelerating technology adoption in freight is essential to lifting productivity and effective network capacity without proportionate increases in infrastructure expenditure.

Digital fragmentation remains a key constraint. Many operators deploy advanced systems internally, including telematics, terminal operating systems and warehouse automation, but interoperability between systems remains limited. This creates avoidable delays, idle assets and manual workarounds across supply chains.

Evidence cited in the National Freight and Supply Chain Strategy indicates that improved digital coordination and interoperability could lift effective network capacity by around 10 to 15 per cent without new physical assets.

Digital capability should therefore be treated as enabling infrastructure. When deployed at scale and in an interoperable way, technology improves asset utilisation, reduces variability and supports more reliable freight movements across the national network.

3. Technology and freight productivity

ALC supports technology adoption that improves the productive use of existing freight infrastructure and helps the end-to-end supply chain operate as a connected system.

The policy focus should extend beyond individual technologies. Productivity gains depend on interoperable data, fit-for-purpose physical infrastructure, regulatory certainty, cyber resilience and the skills needed to operate and integrate new systems.

4. Improving productivity through technology adoption and diffusion

National Freight Data Hub

One example is the National Freight Data Hub.[1]

By securely aggregating standardised data on freight volumes, network performance and operational conditions, the Hub enables evidence-based policy-making and informed operational decisions for government and industry. It also creates a clear industry value proposition to support evidence-based policy and corridor investment.

Full government funding for the Hub should continue in future financial years.

National Automated Access System

Another example is the development of the National Automated Access System (NAAS).[2]

[1]National Freight Data Hub, Australian Government, https://datahub.freightaustralia.gov.au/

[2]Queensland Department of Transport and Main Roads, National Automated Access System (NAAS), https://www.tmr.qld.gov.au/business-industry/heavy-vehicles/class-1-heavy-vehicle-access-regime/about/about-the-naas

NAAS is designed to automate route assessments and access decisions through a single digital platform, using rules-based algorithms to assess vehicle attributes against infrastructure limits and network conditions.

It has the potential to shift access decisions from weeks or months to near-real-time in many cases, while improving consistency, transparency and auditability.

Accelerating the implementation and national adoption of NAAS would deliver productivity, safety and decarbonisation benefits simultaneously.

The Government should continue support currently provided under the National Competition Policy Federation Funding Agreement to encourage state and local governments to allow NAAS to operate to its full potential.[3]

5. Opportunities to facilitate uptake and promote investment in productive technologies

Cyber resilience

Cybersecurity is an emerging systemic risk. High-profile cyber incidents affecting logistics operators and ports in Australia and internationally have demonstrated the potential for digital disruption to halt freight movements entirely.

Supporting baseline cyber resilience across the freight sector, particularly for small and medium operators, should be treated as part of national critical infrastructure protection. This includes minimum standards, information-sharing mechanisms and recovery planning.

Planning, infrastructure and regulatory certainty

ALC identifies regulatory certainty and complementary infrastructure as essential to private technology investment. Freight businesses operate capital-intensive assets with long replacement cycles, and new investment requires confidence in future operating arrangements.

Industrial precincts must also be freight functional. Multi-storey logistics developments, robotics, high-capacity power loads and advanced automation require specific built-form envelopes, pavements and utility capacity. Intensification must therefore be compatible with freight operations rather than driven by aspirational density targets.

ALC members have also identified inconsistent planning rules as a regulatory barrier. Infrastructure and investment barriers include unsuitable land, constrained energy and connectivity, and regulatory uncertainty.

These barriers should be removed.

[3]Australian Government, address referencing the National Competition Policy Federation Funding Agreement, https://ministers.treasury.gov.au/ministers/andrew-leigh-2025/speeches/address-ceda-edith-cowan-university-city-campus-perth

6. Workforce and skills requirements to enable effective and productive use of new technologies

ALC identifies workforce capability as an essential condition for successful technology adoption. Automation, AI, advanced vehicles and new energy systems require skilled personnel to operate, maintain and integrate them.

Traditional training pathways are often too slow or inflexible, particularly for mid-career workers. Micro-credentials and modular training programs offer rapid, targeted upskilling while minimising time away from employment.

National recognition of these credentials supports workforce mobility across jurisdictions and modes, addresses skills gaps efficiently and optimises productivity.

Therefore, the development of these credentials should be encouraged.

ALC has identified serious skill shortages in the following areas, which constrain industry capacity to fully use developing technologies.

Core skills occupation list

Occupation	ANZSCO Code	Critical impact / rationale
Warehouse / Terminal Electricians, HVAC & Mechanical Technicians	341411, 312211	Maintain facilities, automation systems, and rolling stock; shortages affect operational continuity.
IT/OT Specialists	262112, 262113	Support logistics technology, automated storage and retrieval systems, cyber and physical security; regional shortages are acute.
Robotics Engineers / Mechatronics Technicians	233999	Support automation deployment and EV/mechanical maintenance; critical for precincts integrating automated materials handling.
Automation & Digital Specialists	262114	Design, implement, and manage logistics automation and AI systems
AI Architects, Governance & Enablement Specialists	262111 / 262114	Enterprise AI solutions for predictive logistics, governance, and optimisation
Data Engineers, Modelling & Governance Specialists	261111 / 261112	Structure, manage, and govern logistics data; underpin AI, visibility, and predictive analytics.
Operational Network Design & Automation Specialists	133611, 133612	Optimise network design, throughput, and automation for operational efficiency and resilience.

Steps should be taken to ensure skilled people are available to fill these positions.

7. Additional comments

ALC has otherwise provided the Committee with comments relevant to this inquiry in its submission to the Senate Select Committee on Productivity in Australia.[4]

[4]Australian Logistics Council, submission to the Senate Select Committee on Productivity in Australia, April 2026, https://austlogistics.com.au/wp-content/uploads/2026/04/Submission-260423-Productivity-Commission-Hearing.pdf