AUSTRALIAN LOGISTICS COUNCIL
SUPPLY CHAIN EFFICIENCY AND SAFETY

Submission to the Road and Rail Supply Chain Resilience Review

October 2022

Introduction

The Australian Logistics Council (ALC) welcomes the opportunity to make a submission on the Road and Rail Supply Chain Resilience Review.

ALC is the peak national body representing major companies participating in the freight logistics industry. ALC's policy focus is on delivering enhanced supply chain productivity, sustainability, efficiency and safety.

Freight affects every Australian, every day, everywhere. Common goods purchased by Australians such as food, clothing, household appliances and medicine all need to be transported by freight operators.

The COVID crisis and recent extreme weather events have highlighted the importance of a freight chain capable of efficiently moving things as basic as food, essential groceries, and personal hygiene products to places such as supermarkets and emergency response points.

ALC has had regard to the terms of reference for the inquiry and make the following general observations.

Infrastructure Australia

There are signs that governments have commenced identifying what needs to be done.

Infrastructure Australia (**IA**) and Infrastructure NSW has published a series of publications called *A Pathway to Infrastructure Resilience*.[1]

The papers recommend a whole-of-system, all-hazards approach to resilience planning focussing on strengthening infrastructure assets as well as providing advice on how communities and infrastructure owners can absorb and respond to shocks and stresses as they occur.

It identifies ten opportunities for a systemic approach to managing risk, which are set out in the **Attachment**.

IA has also published an early-stage proposal entitled *Regional Road and Rail Freight Corridor Resilience*.[2]

ALC agrees with IA that resilience can be enhanced if action is taken in a co-ordinated, cross-jurisdictional, and cross-sectoral way and that coordinated infrastructure planning, emergency management, supply chain management and land use planning, informed by improved data collection and sharing is required.

Jurisdictions should agree to implement the IA proposals set out above.

National Freight and Supply Chain Strategy

[1] https://www.infrastructureaustralia.gov.au/sites/default/files/2021-08/Advisory%20Paper%201%20-%20A%20pathway%20to%20Infrastructure%20Resilience%20FINAL.pdf

[2] https://www.infrastructureaustralia.gov.au/map/regional-road-and-rail-freight-corridor-resilience

The National Freight and Supply Chain Strategy is scheduled to be reviewed in 2024.

There needs to be clear review of what has been learned over the last 5-10 years, with those learnings reflected in a revised Strategy.

It is clear the continued resilience of the supply chain is something that needs to be addressed in a revised strategy.

This means there is a need to clearly identify what 'resilience' means for the supply chain, and then develop strategies across jurisdictional boundaries to deliver that outcome.

The National Infrastructure Advisory Council (**NIAC**), which advises the White House on physical and cyber threats to critical infrastructure, has prepared a Critical Infrastructure Resilience Study which concluded that resilience can be characterised by four key features otherwise known as the 'Four Rs' - **Robustness, Resourcefulness, Rapid Recovery and Redundancy**.[3]

Strategies designed to encourage supply chain resilience should use the 'Four Rs' as their basis.

Government investments in supply chain infrastructure

Governments and regulators must set and enforce regulatory requirements. Government also controls public funding for infrastructure, allocating public investment dollars to preventative works, preparedness, response and recovery.

A revised strategy will need to recognise that more significant capital upgrades need to be invested into infrastructure so critical network segments can withstand the increasing frequency of extreme weather events.

It may therefore be appropriate to consider whether it is appropriate whether governments should design and maintain infrastructure so as to be able to sustain a once in 200-year climatic event.[4]

Other elements that should be contained in a revised Freight and Supply Chain Strategy

ALC members have also indicated that other matters that should be dealt with in a revised Strategy would include:

1. **An analysis of what a network would look like in 15 years.**
2. **What net zero looks like for the supply chain.**
3. **Identifying how coordination can be improved between levels of government across Australia, which could include a specialised Committee of National Cabinet to deal with supply chain resilience issues.**

<u>Resilience of the road network</u>

[3] https://www.cisa.gov/sites/default/files/publications/niac-critical-infrastructure-resilience-final-report-09-08-09-508.pdf

[4] What constitutes a once in 200 years event is explained here: https://www.chiefscientist.qld.gov.au/publications/understanding-floods/chances-of-a-flood#:~:text=This%20refers%20to%20a%20flood,exceeded%20in%20any%20one%20year.

With the predicted transition to alternative fuels and exponential increase in the uptake of zero emission vehicles (ZEV), the consequential impact on fuel excise means we need to start planning now for alternative road funding methods. Put simply, less petrol and diesel use means less fuel excise revenue collected.

This source of funding is (in theory) tied to road transport funding, and less revenue will mean less investment in road infrastructure.

The ongoing viability of the funding model for the Australian road network will come under threat at the very point in time when the freight task is growing, urban infrastructure is under greater strain and cities grow.

Finally, States and Territories are also going in different directions as to whether, or when, they will charge a road user charge for electric vehicles.

The resilience in the road network is at risk.

Australia can no longer rely on the fuel excise to adequately fund the roads the country needs into the mid and long term.

The expectation is that road users will pay some form of per kilometre charge for road access, regardless of their vehicle class.

If this does not happen, there will be insufficient investment in new road infrastructure and maintenance, increasing congestion, reducing safety, hampering efficiency and negating productivity. Moreover, it will not be fare or reasonable for the cost burden to solely fall on the users of internal combustion engine (ICE) vehicles as the take-up rate of ZEVs increases. Given the nature of the task, heavy road transport will continue to utilise ICE vehicles for a bulk of road trips for the foreseeable future.

Reforming road funding by implementing a road user charge in place of excise and other road-related charges such as licensing and registration has been recognised by groups such as IA[5], Infrastructure Victoria[6] and the Productivity Commission[7].

In its 2022 document *Towards a Sustainable Australian Supply Chain – A Pathway for an Incoming Government*, ALC recommended:

[5] Infrastructure Australia, 2021 Implementation Pathway, 2021 Australian Infrastructure Plan https://www.infrastructureaustralia.gov.au/sites/default/files/2021-09/Implementation%20Pathway%20%28IP%29.pdf : 38 and 57-58 15

[6] Infrastructure Victoria, Victoria's infrastructure strategy 2021-51, Volume 1, https://www.infrastructurevictoria.com.au/wp-content/uploads/2021/08/1.-Victorias-infrastructure-strategy-2021-2051-Vol-1.pdf - recommendation 53

[7] Productivity Commission, Shifting the dial, 5 year productivity review, supporting paper 9, funding and investment for better roads, 3 August 2017 https://www.pc.gov.au/inquiries/completed/productivity-review/report/productivity-review-supporting9.pdf

1. For the reasons generally set out in the NSW Review of Federal Financial Relations[8] design a RUC based on a model of distance-based and location charging and so provide a sustainable stream revenue to invest in transport infrastructure

2. National Cabinet (or any successor process that may be created) authorise the development of a report establishing a pathway for the immediate development of a RUC capable of being applied to all classes of vehicle

3. Phase out jurisdictional electric vehicle charging schemes that would duplicate a national RUC to remove confusion, provide a consistent cost basis for businesses to plan and encourage the adoption of ZEVs

4. Transfer any relevant work developed under the HVRR process to any newly created process established to create a national RUC mechanism.[9]

These recommendations should be taken up.

Skills

The volume of freight carried is expected to continue to grow by over 35 per cent, to 2040.[10]

In order to meet this task, the workforce will need to grow with it. The criticality of the supply chain workforce was come evident during the pandemic and supported by National Cabinet, with changes to essential worker furlough arrangements.

As Australia emerges from the pandemic, labour and skills shortages continue to greatly impact the transport and logistics sector. A failure to address labour and skills shortages, as freight movements increase, will compound supply chain disruption and delays.

The continued development of skills is an important part of ensuring the resilience of the supply chain.

Possible policies that can be adopted are set out in the ALC *Towards a Sustainable Supply Chain* document.[11]

Modal share

In 2020-21, 230 tonne kilometres (TKM) of non-bulk freight was moved using road freight,

[8] Department of Treasury, New South Wales, Final Report, NSW Review of Federal Financial Relations: Supporting the road to recovery: https://www.treasury.nsw.gov.au/sites/default/files/2020-10/FFR%20Final%20Report%20-%20200828%20%281%29.pdf: Chapter 8

[9] https://austlogistics.com.au/wp-content/uploads/2022/09/Incoming-Government-Brief_ALC-2022.pdf :15

[10] National Freight and Supply Chain Strategy, Freight Australia, 2019, https://www.freightaustralia.gov.au/sites/default/files/documents/national-freight-and-supply-chain-strategy.pdf

compared with 111.9TKM moved on rail.[12]

IA has observed growing congestion on our roads and railways impacts the timeliness and costs to moving freight – a problem only set to worsen with the forecast doubling of Australia's freight task over the next 20 years.[13]

One way to meet this growing task is to encourage modal shift of freight from road to rail.

As Transport for NSW has indicated, one train can carry as much cargo as at least 54 trucks. Increasing rail freight would meet predicted demand for, and efficiency of, freight movements, improve congestion, particularly on urban roads and have positive environmental impacts.[14]

One of the major ways that this outcome can be supported is the continued development of Inland Rail. This project holds the promise of moving freight from Melbourne to Brisbane in 24 hours, which could change the way freight is moved along this critical component of Australia's east coast corridor, from a ratio of 30 per cent movement of rail to 60 per cent by 2050.[15]

Given extensive existing investment in the project, and significant capital investment decisions being taken by industry, the Inland Rail project should proceed to completion. Furthermore, other initiatives that can encourage the movement of freight from road to rail such as the Victorian Port Rail Shuttle Network should be identified and funded.

Fuel security

Finally, ALC members have indicated that a key in ensuring supply chain resilience is fuel security.

As indicated in the Government's *Australia's National Hydrogen Strategy* document:

> Using locally made hydrogen can help reduce Australia's heavy dependence on importing liquid fuels, especially for transport. This would potentially strengthen Australia's strategic security and maximise our energy resilience. The Australian Government has considered the opportunity for hydrogen along with other alternative fuels to improve Australia's resilience to disruptions in fuel supply through the Liquid Fuel Security Review. Reducing fuel imports could also improve Australia's terms of trade[16]

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[12] Bureau of Infrastructure and Transport Economics. (2021). Australian Infrastructure and Transport Statistics,. Department of Infrastructure, Transport, Regional Development and Communications. https://www.bitre.gov.au/sites/default/files/documents/Bitre-yearbook-2021.pdf

[13] Australian Infrastructure Audit, 2019, Chapter 5: Transport https://www.infrastructureaustralia.gov.au/sites/default/files/2019-08/Australian%20Infrastructure%20Audit%202019.pdf: 339

[14] New South Wales, Auditor-General's report, Rail Freight and Greater Sydney (2021): 13 - https://www.audit.nsw.gov.au/sites/default/files/documents/Rail%20freight%20and%20Greater%20Sydney_0.pdf

[15] ARTC, Melbourne-Brisbane Inland Rail Alignment Study, Final Report (July, 2010), http://www.artc.com.au/library/IRAS_Final%20Report.pdf: 60

[16] https://www.dcceew.gov.au/sites/default/files/documents/australias-national-hydrogen-strategy.pdf: 17

The production of hydrogen for fuel should be encouraged and is particularly necessary to support other initiatives such as ARENA's recently launched Future Fuels program, designed to encourage fleet owners to shift to new zero emissions vehicle technology over the next four years.[17]

Vehicle uptake is more likely to increase if there is confidence that the fuel is available in the market for these new technology vehicles. In parallel,

To that extent, one of the interesting takeaways from the recent ALC Technology Summit held in Melbourne on 15 September 2022 was an insufficient presence of biofuel in commercial volumes. The Summit was told that this is something requiring correction so ship, rail and heavy vehicle operators can meet net zero targets.

Finally, previous ALC Technology Summits have been told it is important to ensure the efficient supply of electricity to ensure the grid can meet an increased peak in demand caused through the recharging of electric vehicles.

This is particularly the case at electricity substation level, where a substation is servicing a commercial precinct where electric vehicles are being recharged. This infrastructure must be fit for this important purpose.

Commercial ZEV operators will also require adequate refuelling/recharging infrastructure at locations that ensure route viability. As such, it is important that government support recognises the need for both public refuelling and back-to-base refuelling/recharging infrastructure. Both options play a critical role in the operation of a modern transport fleet in Australia.

It is therefore clear that fuel security must be an important element in designing policies to ensure a resilient Australian supply chain.

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October 2022

[17] https://arena.gov.au/news/future-fuels-funding-round-open-for-fleets/

ATTACHMENT – TEN OPPORTUNITIES FOR A SYSTEMIC APPROACH TO MANAGE RISK IDENTIFIED IN THE INFRASTRUCTURE AUSTRALIA PATHWAY TO INFRASTRUCTURE RESILIENCE SERIES

1. Improve strategic alignment of resilience governance: Governance that adopts a systemic view of risk and establishes the accountability and resourcing.

2. Manage uncertainty through scenario planning: A common set of future scenarios to streamline planning and support cross-sector coordination and shared responsibility across jurisdictional boundaries.

3. Improve data collection and sharing for informed planning, action and decision-making: Coordinating, sharing and standardising critical disaster and climate data.

4. Adopt place-based approaches for resilience: Planning tools and data to consider multiple place-based issues and address resilience and community needs.

5. Embed resilience into land use planning and development decisions: Planning systems that value and set resilience as policy objectives, incorporate new and emerging data, capture local opportunities.

6. Improve infrastructure investment decision-making: Agreed mechanisms and guidance for quantifying the projected economic, social, environmental and governance implications of the impacts associated with managing uncertainty or resilience.

7. Collect and share information on asset and network vulnerability: A shared understanding of the impacts to interconnected systems.

8. Value blue and green infrastructure: Improving the understanding, valuation and governance of the green and blue infrastructure.

9. Build trust through more inclusive decision-making: Including communities and informing them about the risk, uncertainty and trade-offs related to infrastructure services and their livelihoods.

10. Embed traditional ecological knowledge in decision-making: Draw on traditional ecological knowledge to manage land and natural resources and mitigate risk.