29 May 2024

Freight Policy Reform Program
Transport for NSW
PO Box K659
Haymarket NSW 1240

Submission online via: Freight Policy Reform Program | Have Your Say (nsw.gov.au)

Dear Freight Policy Reform Team,

Re: Freight Policy Reform: Consultation Paper

Pacific National welcomes the opportunity to engage on the Freight Policy Reform Consultation Paper and submits this letter of support for the Australasian Rail Association (ARA) and Freight on Rail Group (FORG) industry submission.

Pacific National supports the joint industry call to address infrastructure resilience, decarbonisation, interoperability and skill shortages in the rail sector and encourages the New South Wales (NSW) Government to set rail freight mode share targets.

As Australia's largest private rail freight company with a proud state heritage which dates to the formation of the NSW Government Railways in 1855, Pacific National has a strong presence and investment profile in NSW, including:

- Head office located in Sydney and more than 1,800 highly trained workers deployed across the state, including 1,300 people based in the regions. Our operations in NSW form the backbone of the national rail supply chain, which includes our essential frontline workers transporting 880,000 intermodal containers and 28 million tonnes of bulk freight (e.g. export grain, steel etc) each year.
- More than half-a-billion dollars invested in recent years in the delivery of critical rail freight infrastructure and initiatives like St Marys Freight Hub (Western Sydney), Parkes Logistics Terminal (Central West) and $350 million acquisition of 50 new more environmentally friendly freight locomotives (being assembled by UGL in Broadmeadow).

Pacific National is therefore keen to support the development of a resilient and efficient NSW freight network that will reduce double-handling, increase resilience between networks and deliver productivity and environmental benefits within NSW and across interstate supply chains.

NSW's freight network will need to cater for future demand, with volumes forecast to increase 26 per cent in NSW by 2041.[1] Rail is the most carbon efficient and safest form of line-haul land transport and will be critical to meeting this challenge.[2]

Freight reform and policy must be framed with the end customer in mind. Findings from Pacific National surveys highlight that customers need competitive pricing, capacity and availability, and predictability of freight deliveries. This determines or drives the mode they choose. In line with these findings and with government targets to decarbonise and accommodate future freight demand, Pacific National suggests the following strategic themes be prioritised with the NSW Freight Reform program:

[1] Transport for NSW, Freight Policy Reform: Consultation Paper, April 2024
[2] Rail freight transport is three to four times more carbon efficient than road freight transport. Source: Pacific National estimates; Association of American Railroads, Freight Rail Facts and Figures Freight Rail Facts & Figures - Association of American Railroads (aar.org)

- Rail mode share, pricing, and value
- Network reliability, safety, and performance
- Decarbonisation, harmonisation, and environmental planning improvement.

Rail mode share, pricing, and value

It is critical to invest and build a safe and resilient NSW rail freight network to drive mode shift from road to rail and reduce transport carbon emissions. While trucks are appropriate for small distances and first and last mile, rail should be the mode of choice for long distances. Growing rail mode share is good for the economy, good for the environment, and a smart way to strengthen the resilience of Australia's supply chains. Over long distances trains burn less fuel and carry higher volumes than road transport, so when freight switches to rail it reduces supply chain emissions. Pacific National believes the NSW Freight Policy Reform should recognise the benefits of decarbonisation and reduced road congestion and crashes brought about by prioritising rail freight over road freight.

There is a significant difference in how rail and road is funded. Despite rail freight transport imposing fewer costs on the community in terms of accidents, congestion, and emissions than road freight, rail access charges are higher and are based on a formula that incorporates full cost recovery, including returns on investor capital. By comparison trucks pay registration and a road user charge that does not cover their share of road wear and tear / road maintenance. This disadvantages rail freight, despite the obvious benefits of rail to the economy and community and warrants additional support for rail freight.

To grow rail freight mode share, along with ensuring the affordability of rail access charges, the NSW Government has an opportunity to rebalance road and rail pricing and set a rail freight mode share target to actively grow the proportion of rail freight across the state. Incorporated into this should be mechanisms to address the declining Port Botany rail traffic share.[3]
Government subsidies to support freight rail infrastructure and mode shift are justified on the basis of social benefits and positive rail freight externalities, compared to road freight. The public and social environmental, pollution, safety and health benefits associated with a 1 per cent shift of freight moved from road to rail are worth $72m per annum.[4]

Recommendations

- Set mode share targets to actively grow rail freight and address declining Port Rail Traffic.
- Level the playing field for rail freight compared to road freight and address inequities in rail and road pricing.

Network reliability, safety and performance

Infrastructure resilience and investment in the below rail network

Many sections of NSW's interstate and regional railways lack resilience and are being increasingly impacted by floods and other severe weather events. Recent natural disasters that have disrupted NSW and connected rail freight routes for Pacific National are documented in Table 1.[5]

[3] While the NSW Government's target remains at 28%, rail share at Port Botany is only 14%-16%, down from 18%-20% a decade ago.
[4] ARA / FORG NSW Freight Policy Submission, 31 May 2024
[5] Interruptions to rail outside of NSW often have flow-on effects within NSW.

In addition to the economic impacts, track closures and extensive speed restrictions due to weather events and poor track condition significantly affect service delivery and reliability. This creates additional risks for rail operators and negatively impacts the reputation of rail. As a result of rail closure, rail operators have permanently lost volume as customers switch to road.

Table 1: Weather events affecting Pacific National since 2021-22

Date	Affected unit of measure	Route	Track Operator / Section	Impact
Nov – Dec 21	Non-bulk (intermodal)	Western NSW	UGL Regional Linx	Flooding over tracks and washouts resulting in closure
Nov – Dec 21	Bulk (coal)	Hunter Valley Coal Network	ARTC via Hunter Valley Coal Chain Coordinator	Flooding over tracks resulting in closure
Jan – Feb 22	Non-bulk (intermodal)	Trans- Australian Railway between Adelaide and Tarcoola	ARTC	Route closed for 4 weeks following significant flooding and washout of the track with 300km of track requiring major repair. Subsequent temporary speed restrictions in place
Jan – Apr 22	Non-bulk (intermodal)	NSW North Coast line	ARTC	Flooding and washout over tracks resulting in closure
Feb – Oct 22	Bulk (bulk & coal)	Illawarra Mountain line (Moss Vale to Unanderra line (Pt Kembla Grain)	ARTC	Route closed following significant flooding and washout of the track
3 March to 29 Apr 22	Non-bulk (intermodal)	NSW North Coast Line	ARTC, Sydney Metro Network, Country Regional Network	Flooding and washout over tracks resulting in closure
3 Jul to 29 Jul 22	Bulk, Intermodal	Blue Mountains, Cockle Creek, Hunter Valley	Sydney Metro Network,	Closures following major flooding and landslip
8 Nov 22 to 29 Jan 23	Bulk, Intermodal	Cootamundra to Parkes; Parkes to Broken Hill	ARTC	Closures following major flooding
8 Nov to 1 Dec 22	Bulk, Intermodal	Several lines around Country Regional Network	Country Regional Network	Closures following major flooding Lines reopened in stages, final reopening 1 Dec 22
6 Apr 24 to 9 Apr 24	Intermodal	South Coast Line	Sydney Metro Network	Closures following major flooding
23 Feb to 25 Feb 24	Intermodal	North Coast Line	Queensland Rail	Closure due to significant wet weather and related flooding

A more resilient rail network will minimise closures and disruption and help shore up NSW and connected supply chains to improve reliability across the freight system. Government and freight policy settings should encourage investment and foster resilience of the rail freight network. This includes governments providing additional grant funding to make the rail network more resilient and enable more efficient and productive rail freight operations.

Government grant funding is required to improve the capability of rail assets to withstand weather events and to provide redundancy in network systems with an alternate route in case of closure. It is important to build resilience between networks, so if one network fails rail operators have the ability to utilise alternative pathing.

Recommendations:

- Establish government and freight policy settings that encourage investment and foster resilience of the rail freight network. This includes providing additional grant funding so network systems have alternative routes in case of closure due to flooding, bushfire and other climate-related impacts.

Safety

Freight Policy Reform should be optimised for improved safety outcomes, as well as improved environmental and economic outcomes. The increased use of rail as a mode of freight transport can save lives on NSW's roads. Trucks have an outsized impact when it comes to road crashes and are over-represented in fatal crashes, compared to kilometres travelled. By comparison, rail is significantly safer than trucking. By reducing the prevalence of trucks on our roads we reduce road crashes, as well as air pollution, emissions, and congestion. These safety benefits are well articulated in the ARA and FORG industry submission to the Freight Policy Reform Consultation Paper.

There is an urgent need to drive safety improvements by aligning signalling, systems, operating rules, and operational standards signalling across Australia's rail network. Pacific National has a particular concern on the need for improved safety measures where rail and road intersect at level crossings. There are a range of factors that impact level crossing safety, from driver behaviour to environmental conditions and road/rail infrastructure. Along with the need for upgraded infrastructure and removal of level crossings, there should be extensive government support for improved driver behaviour to reduce risky behaviour at level crossings.

Recommendations:

- Standardisation of infrastructure including signals, stop boards and network rules to reduce Proceed Authorities Exceedance (PAE) and avoid collisions.[6]
- Road and rail interface protocols that defaults to the removal of level crossings, and if that is not possible, then active crossings that promote segregation.
- Risk reviews of large trucks to ensure stopping distances and rail crossing warning signs are synchronised.

Future demands of freight and passenger rail

Passenger rail should not crowd out freight rail. Freight rail is less carbon intensive and the only way of economically transporting a range of materials vital to the Sydney metropolitan area (including concrete and putrescible waste). The alternative is that increasing amounts of these materials will congest Sydney's roadways, with attendant environmental, cost, and quality of life impacts.

The population of NSW will grow 20 per cent to 9.9 million by 2041[7] and NSW's freight network will need to cater for future demand, with freight forecast to increase 26 per cent in NSW by 2041.[8] The

[6] A PAE is when a train exceeds the limit of authority, a train proceeds without a proceed authority or proceeds whilst a restraint authority is in place. A PAE includes passing signals at stop and signals without indication without authority.
[7] Transport for NSW, Freight Policy Reform: Consultation Paper, April 2024
[8] Transport for NSW, Freight Policy Reform: Consultation Paper, April 2024

NSW freight plan must consider how the competing demands of passenger and freight rail will be addressed and how it will promote innovation and investment to increase the capacity and resilience of NSW rail networks. It is critical that NSW has a rail access framework that supports improved rail freight productivity and allows both passenger and freight trains to coexist on the rail network.

Recommendations:

- Facilitate access for freight to shared rail networks.
- Evaluate where the provision of dedicated freight lines in the Sydney Trains network would improve both commuter and freight economy outcomes.
- Explore the concept of priority paths for freight trains which are carrying materials vital to the wellbeing of Sydney and NSW residents and otherwise likely to move on road transport, e.g. putrescible waste, food and consumer goods.

Terminals, freight movement architecture and preservation of rail freight corridors

Intermodal terminals are the transition points between road and freight modes and enable the consolidation of rail freight moving between different locations. The effectiveness of an intermodal terminal is governed by its size and layout, the availability of rail access paths for freight trains to arrive and depart, and its proximity to freight catchments including quality of road connection.

As freight volumes grow, Government needs to assist in securing appropriate land zonings to enable development of new Intermodal Terminals. Ideally situated alongside existing rail infrastructure, these land parcels need to be zoned as industrial to enable a Special Zoning for terminal activities. The migration of industrial freight catchments westwards in Sydney will require the preservation of suitable freight rail corridors and intermodal precincts. Such land must be fit for purpose and of an appropriate size and shape to permit efficient freight rail operations.

Across most of the eastern seaboard these land parcels are limited. The scarcity of industrial zoned land, due to planning constraints and planning delays, is preventing new terminal developments and the lack of “development ready” industrial land is creating upward pressure on land values.

Development applications are becoming more onerous, complicated and costly for pure industrial developments, let alone the complexity added when considering the development of terminals. Time frames for approvals from State Government are prolonged, adding additional costs to proponents. State governments are commonly introducing new, or increasing existing, infrastructure charges. These charges are often quite onerous and have had a measurable negative effect on the supply of newly developed land. The lack of consistency in charges between the states has influenced the location of new development.

All mainland capitals have several intermodal rail terminals. In the near term, maximising throughput of these terminals through a combination of terminal upgrades and improved road and rail access is an effective way to improve freight network performance. This does, however, require policy certainty around modal competition policy (e.g. the future expansion of heavy road vehicle networks) to encourage private sector investment in these sites.

In the longer term, freight efficiencies can be boosted, and double handling reduced by planning for more rail freight to run directly to terminals and distribution centres. For example, on-dock rail creates efficiencies and supports greater container throughput. It reduces supply chain cost by removing the double handling of containers on trucks. Currently only Port Botany has on-dock rail capacity but with future freight growth planning this should be expanded to other ports and major distribution centres.

Rail terminals may take forms other than intermodal. The Sydney metro includes several rail terminals handling putrescible waste and concrete and construction materials. The expansion of these sites and the creation of new ones will be just as vital to Sydney's future freight network as intermodal terminals.

Recommendations:

- More active government collaboration with industry and rail freight operators to identify future capacity needs and plan and preserve land precincts and rail freight corridors.
- Sites owned by NSW Government agencies and government businesses that are adjacent to rail corridors should be identified and considered for their potential as rail freight load out sites or terminals, sidings, and passing loops.
- Greater state and federal policy consistency for development applications and for planning and approving terminals.
- Planning should seek to reduce freight double handling by supporting rail freight to run directly to terminals and distribution centres.
- Future intermodal terminal(s) in Western Sydney to support the future NSW economy and ensure rail freight volumes can meet future demand.
- Proposals to expand heavy vehicle networks be considered in the context of modal share policy.

Ports

The movement of freight requires an integrated approach, particularly around ports, with seamless connections required between the ports, road and rail.

It is critical that ports have sufficient capacity for trains, in addition to trucks, to ease congestion on the surrounding road network[9] and minimise 'wear and tear' on road infrastructure. By incorporating rail capacity, ports can create a more balanced and efficient freight transport system, optimising the flow of goods while minimising the negative impacts on road congestion and the environment.

Historically, rail access pathing through the Sydney Trains network, ARTC network, and individual stevedores have made port shuttle operations in Port Botany exceptionally difficult. Furthermore, the economics of road transport in the Sydney metro (even accounting for tolls) do not fully capture the negative externalities of this mode and as a result, rail struggles to be price competitive despite its many social and economic benefits. An incentive scheme payable to freight owners who choose rail transport would reduce congestion, road maintenance costs, and emissions in Sydney.

Recommendations:

- A centralised approach for port rail access coordination and planning for adequate rail capacity.
- Creation of an incentive scheme encouraging Sydney's businesses to choose rail.

[9] A 1,800m long train replacing the equivalent of approximately 110 B-double trucks from the road. ARTC - Inland Rail Business Case / Inland Rail facts https://inlandrail.artc.com.au/what-is-inland-rail/

Decarbonisation, harmonisation, and environmental planning improvement

Decarbonisation and emissions abatement

Rail freight transport is more carbon efficient than road freight and provides a low-emissions transport solution for NSW freight movements. A 1,800m long train removes the equivalent of approximately 110 B-double trucks from the road.[10] Rail also indirectly supports emissions reduction by taking trucks off the road to alleviate traffic congestion.

Transport decarbonisation requires careful consideration of the systems needed to deliver state and national outcomes. We note that most NSW decarbonisation options rely on the availability of electricity, preferably 'green' or renewable electricity, for not only use in charging battery electric locomotives, but also producing green hydrogen or producing renewable diesels. For example, rail operators can introduce battery locomotives but these then need support from a renewable energy grid that is suitably sized and located to support the new energy demands. Given the dependence on electricity we suggest that a NSW and national grid analysis be undertaken to understand future transport energy demands and identify locations for electrification and charging facilities to best support the movement of freight to Australia's communities.

Impacts on end-consumers must be factored into government decarbonisation decisions, including the effect of imposing costs on business (ultimately passed on to consumers) that do not permanently decarbonise operations. Businesses like Pacific National are covered under the Safeguard Mechanism and have an obligation to buy and surrender Australian Carbon Credit Units (ACCUs) in the event that baseline targets aren't met. This means that increases in our costs are driven by both the need to invest in decarbonisation technology and the requirement to purchase and surrender ACCUs. This results in higher costs for freight organisations and for end customers.

Climate is a collective concern and greater visibility is needed around how the NSW Government is working collaboratively with other state, federal and local governments to address climate change and establish processes that deliver aligned goals among jurisdictions. This would provide greater certainty for national businesses such as Pacific National.[11] It would also support the skilling up that is required to support the development of decarbonised infrastructure and operations.

In a decarbonised future rail should remain a preferable transport option and will continue to be more energy efficient than road freight due to factors such as the size of the trains and the 'steel on steel' coefficient and thus low-friction nature of the task.[12]

Recommendations:

- Target setting for the decarbonisation of above-rail operations should consider the maturity of technology and available solutions. While electric vehicle solutions for cars and road vehicles are widely available, the same is not true for locomotives.

[10] ARTC - Inland Rail Business Case / Inland Rail facts https://inlandrail.artc.com.au/what-is-inland-rail/

[11] We recently saw Victoria separately set its own target to cut the state's greenhouse gas emissions and achieve net zero emissions by 2045. Long term planning for businesses is difficult in this evolving and disaggregated regulatory environment where jurisdictions are not aligned on goals.

[12] A turning steel wheel in contact with a steel rail reduces by 85-99% the amount of rolling friction than a rolling rubber truck tire has in contact with an asphalt or concrete pavement.

- Support and promote the use of rail as a low-carbon mode of freight transport.
- Investigate and model the energy needs to decarbonise and the location and availability of renewable electricity.
- Continue working to align targets, regulations, and standards across Australia, to simplify long-term planning for businesses that face an evolving and disaggregated regulatory environment.

Environmental Regulation

The Australian rail sector is subject to complex and often inconsistent environmental regulatory frameworks when operating interstate. There are around 150 different environmental regulations that rollingstock operators are required to comply with on freight routes between Brisbane and Perth.[13]

In NSW rollingstock operators, such as Pacific National, are regulated under the *Protection of the Environment Operations Act 1997* (POEO Act) Environmental Protection License (EPL) scheme. Rollingstock Operator EPLs are intended to provide a flexible regulatory mechanism to drive a reduction in the impacts of the NSW operational rail network over time, with an emphasis on exhaust and noise emissions (engine, wheel/rail interface and wagon related).

Under the NSW EPL scheme[14] Pacific National has made significant investments in its monitoring and compliance program, including the implementation of a substantial Freight Wagon Steering Performance Rectification Program (FWSPRP) across our non-bulk (containerised freight) fleet. Pleasingly, Pacific National's FWSPRP (that targets wheel squeal mitigation) is yielding positive results, however much of the regulatory burden (including investment in R&D, supply chain establishment and implementation costs) has been borne by Pacific National as the largest participant, by market-share, in the interstate rail freight market.

The societal and environmental benefits[15] associated with increasing rail mode-share are significant, but harnessing these benefits requires the development of a collaborative approach to address environmental externalities, such as rail noise in sensitive settings. Disappointingly, the current regulatory framework tends to consider rail environmental performance in isolation[16]. Current policy and regulatory settings place much of the onus on rollingstock operators to invest in solutions to issues that are multi-faceted and often exacerbated by ageing infrastructure and urban encroachment on rail freight corridors. Notably, road freight participants are far less exposed to costs associated with social and / or environmental externalities. This can contribute to a reduction in the relative rail cost competitiveness per tonne of freight moved.

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[13] PwC Consulting (2018), Review of rail access regimes, p.22, <https://www.infrastructure.gov.au/sites/default/files/migrated/rail/publications/files/Review-of-Rail-Access-Regimes.pdf >

[14] The NSW EPL scheme has directly captured rollingstock operators since 2020.

[15] The societal and environmental benefits of shifting freight from trucks to trains includes reduced congestion, emissions intensity, noise and improved air quality.

[16] Australasian Railway Association & Freight on Rail Group (2023), The future of freight, Workstream 4 – Policy: Study Into Establishing and Efficient Freight Transport Network, p.85, <https://ara.net.au/wp-content/uploads/Future-of-Freight-Combined-Report.pdf>

Recommendations:

- Environmental impacts associated with rail freight transport should not be considered in isolation. The costs of environmental policy and regulatory frameworks aimed at improving environmental outcomes and reducing environmental externalities must be shared on a fair and equitable basis between government, infrastructure providers and rollingstock operators to avoid negatively impacting rail freight competitiveness.
- Greater collaboration between government agencies, rail infrastructure providers and rollingstock operators regarding rail-related noise in sensitive areas along key freight corridors.
- Government incentivisation programs should consider measures that support a reduction in environmental externalities, in addition to considering improved efficiency, decarbonisation and infrastructure resilience. In NSW environmental externalities such as clean air and noise are highly regulated, punitive and generally considered in isolation from the broader benefits associated with increasing rail mode share.

Operational harmonisation and interoperability

The NSW Freight Policy Reform can't be done in isolation. It must link to the National Freight and Supply Chain Strategy, and to the National Transport Commission to drive harmonisation and consistency of approach across Australia's networks.

Operationally it must deliver improved network interfaces within NSW. For example, Transport Asset Holding Entity (TAHE) owns two NSW networks: MRN & CRN. However, the networks rules, processes and safety requirements are different for each. These should be harmonised at the earliest opportunity.

Rail networks do not operate in isolation and in a single journey rail operators may cross multiple networks and will need to comply with the differing requirements of each network. These include different operational requirements such as restrictions on axle loads, train height, length and speed; different signalling and communication systems; different safe working arrangements and fatigue management; and different rolling-stock, train driver and skills accreditation rules. Lack of harmonisation between rail networks is a key source of inefficiency for rail operators.

Pacific National is pleased that rail harmonisation recently became an action on the National Transport Commission's (NTC). This must include a focus on aligning Train Protection Systems. Due to the delays in ARTC's 15-year Advanced Train Management System (ATMS) project, the touted interoperability solution between Sydney Train's European Train Control System (ETCS) and ATMS is unlikely to be delivered before freight trains utilising the Sydney Trains network will be required to be ETCS Level 2 compliant. This will require joint fitment of ETCS and a future ARTC system on all freight trains accessing Sydney Trains 400km of shared track. Freight train drivers will be required to be certified in two systems and operate under different safeworking rules within a single journey.

Recommendations:

- Support the NTC interoperability strategy and harmonise NSW networks rules, processes and environmental and safety requirements.
- Establish a consultative group between all NSW and adjoining networks, along with rail operators, to work through short and long term opportunities to align systems and processes.
- NSW Government should work with the NTC and the Federal Government to address Train Protection System issues for freight trains using the Sydney Trains network.

Inland Rail

Inland Rail will be vital for improving reliability and building capacity to accommodate future freight demand. The Independent Review of Inland Rail undertaken by Kerry Schott AO confirmed that Inland Rail is an important project to meet Australia's growing freight task, improve road safety and to help decarbonise our economy.

Construction of Inland Rail has commenced, and its success relies on rail operators making complementary investments in rollingstock and terminals. Before this can happen, however, rail operators need to understand how Inland Rail will integrate into the NSW and other sections of the Interstate Rail Network.

Recommendations:

- The NSW Government work with the Inland Rail delivery team to provide rail operators with certainty on the timing of key completion dates for NSW segments and on the final completion date for Inland Rail into Queensland.

Pacific National thanks you for the opportunity to support the Australasian Rail Association (ARA) and Freight on Rail Group (FORG) joint industry submission and contribute to shaping NSW Freight Policy Reform. A more resilient and efficient freight network will improve reliability and boost productivity and competitiveness.

Should you wish to discuss any of the items raised in this letter, please contact [redacted]

[redacted]