

11 July 2019

Mr. Charles Millsteed Chief Executive Officer Queensland Competition Authority GPO Box 2257 Brisbane QLD 4001 Submitted via QCA online portal

Dear Mr. Millsteed

#### Draft Decision - Queensland Rail's 2020 Draft Access Undertaking

Pacific National (PN) welcomes the opportunity to provide a submission to the QCA's Draft Decision (Draft Decision) on Queensland Rail (QR)'s 2020 Draft Access Undertaking (2020 DAU). While the 2020 DAU proposed limited changes to its current undertaking (2016 AU), PN's November 2018 submission did not support the majority of these changes due to an inappropriate risk shifting from the network to rail operators. Accordingly, PN agrees with the Draft Decision to not approve the 2020 DAU.

PN is strongly of the view QR has not sufficiently justified that its 2020 DAU has had appropriate regard to the QCA approval criteria in s. 138(2) of the *Queensland Competition Authority Act* (QCA Act). The overarching objective of Part 5 of the QCA Act is the importance of promoting competition in upstream and downstream markets (s. 69 E).

Rail freight transport has significant inherent benefits for the economy and community relative to road – to quantify in terms of positive externalities, moving freight by rail (instead of road) generates benefits for society of around 1.45 cents per tonne kilometre. Conversely, moving freight off rail incurs 14 times greater accident costs and produces 16 times more pollution per tonne kilometre.

The QCA Act is very clear in listing matters which the QCA must have regard to when deciding whether to approve the 2020 DAU under s.138(2). The criteria require the QCA to have regard to the public interest, the interests of persons who may seek access and other matters the it deems relevant. QR is fully aware of the QCA's statutory obligations, yet it has submitted a 2020 DAU exclusively on using the pricing principles in s. 168A to maximise its commercial position without reference to the QCA's statutory considerations. In addition, its 2020 DAU Standard Access Agreement is largely drafted to accommodate coal operations on the West Moreton line – inappropriate for general freight and bulk on the North Coast line (NCL) and Mt Isa line (MIL).

PN is extremely disappointed QR's 2020 DAU provides no incentives or aspirations to encourage modal shift from road to rail to grow upstream and downstream competition. PN's access costs are highest QR is a large percentage of these costs (for freight and bulk on a gross tonne per kilometre basis). QR's access costs are the highest on its short and medium segments which compete with road. Rail operators are forced pay for a poorly maintained network while its road freight competitors operate on brand new (and/or well-maintained) roads at no or little cost.



We request QCA consider whether the 2020 DAU has made adequate provision for the public interest and the interests of rail operators who require access to the QR network (in particular the NCL and MIL) to provide rail freight services in competitive downstream markets.

We submit if the QR 2020 DAU contained a road to rail modal shift pricing rule (which reduced access costs), by conservative forecasts, it could result in a 15 percent increase in non-coal volumes hauled by rail in Queensland. Alternatively, without this rule, and with continued price increases, rail operators will move their narrow guage rolling stock and locomotives to service the growing Western Australia (WA) rail freight market. QR's approach to wilfully raising access charges risks stranding its assets.

To prosecute this argument, our submission on the Draft Decision is divided into two parts. An assessment of the effectiveness of the current QR undertaking (2016 AU) against the approval criteria in s. 138(2) in the QCA Act for the purposes of recommending changes to the 2020 DAU. Secondly, commentary on the 2020 DAU Standard Access Agreement (including the outstanding matters from PN's November 2018 submission on the 2020 DAU Standard Access Agreement drafting).

Our conclusion is for the QCA to discharge its obligations under the QCA Act, it must amend the 2020 DAU to include a road to rail modal shift pricing rule. This is to deliver urgent rail freight access price reductions on the NCL and MIL to encourage modal shift. Additionally, it must 'hard code' commitment dates in the 2020 DAU for parties to establish an effective performance reporting regime with financially based incentives and sanctions.

We also submit a new 2020 DAU Standard Access Agreement needs to be submitted by QR for QCA approval which exclusively covers the freight and bulk commodities operating on the NCL and MIL. The proposed 2020 DAU Standard Access Agreement is largely drafted to accommodate coal operations on the West Moreton line. These need to be completely separate agreements.

Yours sincerely

Robert Millar

Regulation and Policy Manager



## **Pacific National Submission**

# QCA Draft Decision Queensland Rail's 2020 Draft Access Undertaking

**July 2019** 

**Public** 

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#### **Executive Summary**

Pacific National (PN) welcomes the opportunity to provide a submission on the QCA's Draft Decision (Draft Decision) on Queensland Rail (QR)'s 2020 Draft Access Undertaking (2020 DAU). While the 2020 DAU proposed limited changes to its current undertaking (2016 AU), PN's November 2018 submission did not support the majority of these changes due to an inappropriate risk shifting from the network to rail operators. Accordingly, PN agrees with the Draft Decision to not approve the 2020 DAU.

PN is strongly of the view QR has not sufficiently justified that its 2020 DAU has had appropriate regard to the QCA approval criteria in s. 138(2) of the *Queensland Competition Authority Act* (QCA Act) (Summary table in Attachment B). The overarching objective of Part 5 of the QCA Act is the importance of promoting competition in upstream and downstream markets (s. 69 E).

PN is a major rail freight operator on the narrow gauge North Coast line (NCL) and Mt Isa line (MIL). QR's approach to wilfully raising access charges risks stranding its assets. PN is currently assessing the commercial viability of operating on these lines and whether some of its narrow gauge locomotives could be more usefully deployed to service the growing Western Australia rail freight market. This is because:

- PN's access costs are highest QR is a large percentage of these costs (for freight and bulk on a gross tonne per kilometre basis).
- The narrow gauge NCL and MIL rail lines are in a poor condition.
- The Queensland Government has not spent the necessary capital expenditure on upgrading these lines to offer a viable alternative to the road freight market. For example, the ability to operate efficient 1,800 metre freight trains is a necessary requirement to ensure a modal shift from road to rail. Trains are limited to approximately 700 metres on these lines.
- QR's maintenance practices and its conservative approach to new or innovative technology means its network languishes in 'steam-age' era rules.
- Access charges, particularly for intermodal rail freight, are not commensurate with the condition of the lines or the performance levels required to operate an effective rail freight market. PN's road freight competitors operate on brand new (or well-maintained) roads at no or little cost.
- QR's 2020 DAU provides no incentives or aspirations to encourage modal shift. This is despite evidence road
  freight incurs 14 times greater accident costs and produces 16 times more carbon pollution than rail freight per
  tonne kilometre and does not contribute to road maintenance costs.
- Despite rail freight transport imposing far fewer costs to the community in terms of accidents, congestion and emissions than road, these costs are not factored into QR's prices – rail is charged up to double that of road.
   Hence the freight playing field is far from level despite the obvious benefits to the economy and community.

To prosecute this argument, our submission on the Draft Decision is divided into two parts. An assessment of the effectiveness of the current QR undertaking (2016 AU) against the approval criteria in s. 138 (2) in the QCA Act (in summary table Attachment B) for the purposes of recommending changes to the 2020 DAU. Secondly, commentary on the 2020 DAU Standard Access Agreement (including the outstanding matters from PN's November 2018 submission on the 2020 DAU Standard Access Agreement drafting).

Our conclusion is for the QCA to discharge its obligations under the QCA Act, it must amend the 2020 DAU to include a road to rail modal shift pricing rule – to deliver urgent rail freight access price reductions on the NCL and MIL lines to encourage modal shift. Additionally, it must 'hard code' commitment dates in the 2020 DAU for parties to establish an effective performance reporting regime with financially based incentives and sanctions.

We also submit a new 2020 DAU Standard Access Agreement needs to be submitted by QR for QCA approval which exclusively covers the freight and bulk commodities operating on the NCL and MIL. The proposed 2020 DAU Standard Access Agreement is largely drafted to accommodate coal operations on the West Moreton line. These need to be completely separate agreements.



#### Introduction

#### QR's 2020 DAU provides no incentive to encourage modal shift from road to rail

QR's 2020 DAU provides no incentives or aspirations to encourage modal shift (a failure to regard s. 138(2) (a) and (g) of the QCA Act). Rail freight transport has significant inherent benefits for the economy and community relative to road. A 2017 Deloitte Access Economics report<sup>1</sup> found:

- Rail imposes far fewer costs to the community in terms of accidents, congestion and emissions than road. These
  costs are not factored into transport prices.
- Each passenger journey made by rail instead of road generates benefits for society of between \$3.88 and \$10.64 by reducing congestion, accident and carbon costs.
- There are also health, social inclusion and amenity benefits from using rail.
- Road freight incurs 14 times greater accident costs than rail freight per tonne kilometre and produces 16 times as much carbon pollution as rail freight per tonne kilometre.
- Moving freight by rail instead of road generates benefits for society of around 1.45 cents per tonne kilometre. If all road freight moving between Sydney and Melbourne travelled by rail, this would generate social benefits of \$111 million a year.
- A single train is estimated to be able to replace up to 800 cars during peak hour or around 110 trucks moving freight.

Despite rail freight transport imposing far fewer costs to the community in terms of accidents, congestion and emissions than road, these costs are not factored into QR's prices (a failure to regard s. 138(2) (d) and (g) of the QCA Act). PN's access costs are its highest cost (for freight and bulk on a gross tonne per kilometre basis (QR's access costs are the highest on its short and medium segments which compete with road. Rail operators are forced pay for this poorly maintained network while its road freight competitors operate on brand new (or well-maintained) roads at no or little cost. Hence the freight playing field is far from level despite the obvious benefits to the economy and community.

<sup>&</sup>lt;sup>1</sup> Value of Rail. The contribution of rail in Australia. A report commissioned by the Australasian Railway Association (ARA). Deloitte Access Economics. November 2017.





Policy imbalances between road and rail

A significant projected increase in the land freight task over the coming decade makes it vital for land transport systems to operate as efficiently as possible. To achieve improved levels of efficiency, it is critical for economic regulators, safety regulators, industry and governments to address policy imbalances in the Australian transport industry.

PN has identified several policy imbalances (Attachment B) requiring attention from the above stakeholders. These policy imbalances, which include an inequitable pricing regime, disproportionate accreditation frameworks and variable safety requirements, exist within an environment where there are significantly different requirements to entry and operation.

Domestic rail freight markets should operate on a level footing with other modal choices (particularly road) by creating an environment where there is an equitable and comparable regulatory environment and/or competitive neutrality between competing modes of transport. We submit to discharge its obligations under the QCA Act (and to play its part in addressing these imbalances), the QCA must amend the 2020 DAU to include a road to rail modal shift pricing rule to lower access charges.

#### The 2016 AU (on which the 2020 DAU is based) has proven to be defective

#### **Pricing**

PN submits the 2016 AU upon which the 2020 DAU is based has proven to be defective. Under the 2016 AU, the QCA does not review or approve access charges on the MIL and NCL. Prices are individually negotiated with each user. As such, there is no visibility (for either the QCA or rail operators) on the proportion of these charges attributable to freight traffic as opposed to passenger traffic (a failure to regard s. 138(2) (f) of the QCA Act).

The involvement of Transport Service Payments (Queensland Government policy) and investment based on non-rail freight requirements raises a question as to what the 'efficient costs' of providing freight access are on these lines. For example, the wide gap between QR's floor and ceiling pricing limits do not contemplate any of the volume growth benefits via lower access tariffs and they do not encourage road to rail modal shift (a failure to regard s. 138(2) (a) and (g) of the QCA Act).

This situation is compounded by the fact there is no regulatory oversight of the prudency of capital expenditure on these lines. This is because QR is a Queensland Government statutory authority under the portfolios of the Treasurer and Minister for Transport and Main Roads (DTMR). Accordingly, the Treasurer and DTMR decides on network investments and passenger operations are prioritised over freight – freight rail operator commercial outcomes are secondary. Capital expenditure is set purely based on the policy/political needs of the day (a failure to regard s. 138(2) (a) and (f) of the QCA Act).



In comparison, the West Moreton line (WML) is subject to a rigorous apolitical QCA assessment on the efficiency of the proposed reference tariffs, and the prudency of capital expenditure required to service coal traffic on this line. The WML is a better maintained and more efficiently run line (compared to the NCL and MIL) and the QCA constrains inefficient monopoly pricing. For example, the QCA's Draft Decision requires a 24 per cent reduction for West Moreton coal services reference tariffs in the 2020 DAU.

The absence of QCA oversight on NCL and MIL is stark. During the 2016 AU period, rail freight volumes on both the NCL and MIL have declined. In comparison road freight relative to rail has increased. (a failure to regard s. 138(2) (a) and (b) of the QCA Act).

PN is not in a position to negotiate better terms of access to QR's infrastructure to supply freight services in competition with road. Indeed, PN's terms of access (offered by QR) are not distinguished between circumstances where it does and does not face competition from road. QR takes essentially the same approach to negotiating the terms of access across all the services it provides to PN, even though the degree of competitive constraint faced by PN varies by freight task (a failure to regard s. 138(2) (g) of the QCA Act).

QR does not offer more favourable terms for those freight tasks subject to a degree of inter-modal competition. We submit even where there is competition between rail and road haulage in downstream markets, this does not appear to constrain QR's ability to exercise market power and charge rail operators any price below the high ceiling limit; we are certainly not seeing any proposed price reductions like the QCA is able to enforce on the draft tariffs for the WML (a failure to regard s. 138(2) (g) of the QCA Act).

On the NCL which can be segmented into short (Brisbane to Rockhampton), medium (Brisbane to Townsville) and long (Brisbane to Cairns) the rail share to road is approximately 18, 27 and 61 per cent respectively.

However, despite the claim<sup>2</sup> by QR about competition (acting as a constraint on monopoly pricing) on the short and medium segments, it does not change its behaviour. In fact, the QR access costs are the highest on the short and medium segments which compete with road (\$4.91 and \$4.60 respectively) with long haul segments being the lower access price - \$4.27<sup>3</sup> (a failure to regard s. 138(2) (g) of the QCA Act).

Given road is a competitive threat to rail, QR pricing behaviour (if wasn't a monopolist) would suggest lower access prices on these segments (a failure to regard s. 138(2) (g) of the QCA Act). Its pricing behaviour is contrary to QR's own assertion: "Road transportation offers an effective substitute service to rail, which has a significant and direct downward impact on the prices that Queensland Rail negotiates with access seekers".<sup>4</sup>

It appears to PN, QR consider rail operators can carry proposed price increases without adversely effecting volume. This is a concern to PN given the implied price/volume trade off which underpins the setting of prices in a competitive market. QR is a natural monopoly and is not subject to competitive pressures. Accordingly, PN has a much different view of future rail freight operations in Queensland without reduced rail access prices.

<sup>&</sup>lt;sup>2</sup> Declarations Review Queensland Rail's Response to the QCA's Draft Recommendation, 11 March 2019, p 25.

<sup>&</sup>lt;sup>3</sup> BITRE/ARTC 2014 estimates for road rail share. Access cost information is a calculation from QR published tariffs assuming 600m max length trains.

<sup>&</sup>lt;sup>4</sup> Queensland Rail, QCA Declarations Review sub. 8, p. 1, para 3, 30 May 2018



Despite the entrance of Linfox, the exit of Aurizon from intermodal freight operations in Queensland has resulted in rail freight being shifted to road. QR will serve it business interests through a road to rail modal shift by increasing volumes on these lines. Rail operators cannot carry access price increases without adversely effecting volume. Access price reductions will increase volumes.

Road versus rail competition in the provision of rail freight transport services

The proposed pricing framework in the 2020 DAU is perplexing to PN when viewed from the perspective of our end-customers' alternative – the road freight transport industry (a failure to regard s. 138(2) (a) and (g) of the QCA Act).

Specifically, we draw attention to:

- Major north south highway capital upgrade programs.
- Favourable regulatory approval processes and national heavy vehicle road freight charging framework.
- Emerging road transport innovation and technology which is currently seeing the release of the new Super B doubles on major highways carrying intra-state freight.
- Proposed Commonwealth Government coastal shipping legislative amendments currently before Parliament.
- Any other movements in the cost, availability, reliability and attractiveness of alternative modes of transport that
  relatively disadvantage rail and that should be taken into consideration when setting the regulatory framework
  for the interstate rail network.

As noted above, QR makes references to having considered road competition when it sets the freight rates for access to its network. However, evidence suggests that this is not the case:

- QR's long-standing policy is to increase prices at CPI and to continue this escalation.
- Heavy vehicle road access charges have not similarly increased by an annual CPI escalation over the same period.
- Road freight operators have experienced significant productivity benefits through major road investments, particularly on the east coast without being subject to the threat of any consequential increases in heavy vehicle road access charges. These productivity benefits are expected to increase as the regulatory framework for the approval of substantially larger road freight heavy vehicles is becoming increasingly favourable for these vehicles.

Heavy vehicle road access charges (which the QR identifies as being the major source of competition and price pressures) have stayed fairly constant since 2012. Despite this, QR includes cumulative annual CPI and real price increases of access tariffs over the regulatory period (a failure to regard s. 138(2) (a) and (g) of the QCA Act).

If the QR 2020 DAU contained a road to rail modal shift pricing rule (to reduce access charges), by conservative forecasts, it could result in a 15 percent increase in non-coal freight volumes<sup>5</sup> hauled by rail in Queensland. Alternatively, without this rule, rail operators will move their narrow guage rollingstock and locomotives to service the growing Western Australia (WA) rail freight market (a failure to regard s. 138(2) (b) of the QCA Act). QR's approach to wilfully raising access charges risks stranding its assets.

Escalation of Reference Tariff inputs

As noted above, QR has not provided any basis or rationale for escalation of reference tariff inputs as provided for in clause 3.2 of the 2020 DAU (a failure to regard s. 138(2) (g) of the QCA Act). For every one percent increase in CPI, costs are increased by **Sec** million.



In the past, regulators have permitted escalation of annual price increases by CPI. However, this approach does not consider the declining competitive position of rail to its main competitor road. In contrast, it is estimated heavy vehicle operators have enjoyed only a 0.3 per cent increase in road user access charges from 2012-13 to 2017-18<sup>6</sup>. This increase for rail is an order of magnitude higher and significantly hampers the establishment of an efficient national competitive freight market across transport modes.

Moreover, CPI is not appropriate where there is doubt about the efficiency of the starting point – which is certainly the case with the NCL and MIL (a failure to regard s. 138(2) (a), (d), (f) and (g) of the QCA Act). ACCC Chairman Rod Sims made the follow observations<sup>7</sup> which Pacific National agrees with:

'On the face of it, using a benchmark such as CPI may seem like a reasonable outcome. However, simply defaulting to CPI price increases does not necessarily mean that prices will reflect efficient costs over time. Firstly, what is the starting point; initially prices may not reflect efficient cost. Further, increasing volumes could mean that the average cost of providing services may actually decrease over time while, at the same time, revenues may increase due to both higher volumes and prices. This could increase the gap between costs and revenues and (potentially) monopoly rents.'

In addition, while a CPI escalation is a useful administrative tool for escalating incomes (or to determine if prices of an individual commodity are increasing or decreasing relative to the 'average'), it is fundamentally flawed method of setting the price of a particular service in the longer term<sup>8</sup>.

In the absence of economically set reference tariffs, combined with no productivity gains on the NCL and MIL (and a lack of an efficient starting point on which to base escalation), PN submits QR should be prohibited from escalation (CPI or otherwise) of non-coal carrying train services during the term of the 2020 DAU under 3.2 of the DAU 2020 Schedule 3 – Calculation of Access Charges and other charges.

More generally, and in light of the above, our only conclusion is the 2016 AU on which the 2020 AU is based is defective for the purposes of providing regulatory oversight of the NCL and MIL.

We do not consider the 2020 DAU appropriately balances the rights and obligations of QR against those of rail operators, end customers and the wider public interest. PN requests all of the concerns identified above be fully considered by the QCA when forming a view on whether to approve or not approve the 2020 DAU, having regard to the matters listed in s. 138(2) of the QCA Act.

Consistent with s 138 (2) and s. 168A, we submit, for the QCA to discharge its obligations under the QCA Act, it must deliver urgent access pricing relief on the NCL and MIL lines through the inclusion of a road to rail modal shift pricing rule and the removal of CPI escalation in the 2020 AU (a natural outcome of the new rule).

<sup>&</sup>lt;sup>6</sup> National Transport Commission (NTC): PAYGO – Heavy Vehicle Charges Model. Version 2.2 (25 May 2018).

<sup>&</sup>lt;sup>7</sup> Ports: What measure of regulation', Rod Sims, Port Australia Conference, Melbourne, 20 October 2016

<sup>&</sup>lt;sup>8</sup> The ABS itself stipulates that it is "too broad to be of direct use" when constructing price samples of individual goods and services. Kalisch, D. (2017) A Guide to the Consumer Price Index: 17<sup>th</sup> Series. Canberra. Australian Bureau of Statistics.



#### Box 1 - How would the new road to rail modal shift pricing rule work?

The recognition by Government and Industry of the importance of road to rail to modal shift is not new. Both the Commonwealth and State Governments recognise the importance of rail freight and modal shift<sup>9</sup>. States such as Western Australia<sup>10</sup> actively encourage modal shift through Government policies, including incentives and rebates. However, an explicit recognition of modal shift has not been built into the regulatory framework. PN submits the 2020 DAU is a unique (and timely) opportunity to include it as a pricing principle subject to QCA regulatory oversight.

Clause 3.1 of the 2020 DAU deals with the pricing objectives for non-coal carrying train services. As the QCA knows, these services (which largely operate on the NCL and MIL) are subject to a price floor/ceiling negotiated framework, with the price floor/ceiling so wide you can drive a metaphorical truck through it. In addition to the floor/ceiling limit, the non-coal pricing objectives are subject to two pricing rules 3.1.1 revenue adequacy and 3.1.2 network utilisation. If these clauses are in conflict they are to be applied in an order of precedence (clause 3.4). PN submits a new pricing rule – road to rail modal shift needs to be inserted as a new clause 3.1.3. Importantly, this clause should take precedence over 3.1.1 revenue adequacy and 3.1.2 network utilisation.

While PN is happy to work with the QCA on the actual drafting of the rule, it needs to have the following characteristics:

- QR must lower its access charges (and be able to demonstrate how it has set its access charges) to increase rail to road modal shift.
- The rule should take precedence over 3.1.1 revenue adequacy and 3.1.2 network utilisation. Clause 3.4 will need to be amended.
- The methodology for setting access charges under this rule must use an appropriate road to rail proxy to reduce access charges to align as close as possible to road pricing.
- This proxy can be in the form of a positive externality measurement moving freight by rail instead of road generates benefits for society of around 1.45 cents per tonne kilometre or negative externally measurement moving freight off rail incurs 14 times greater accident costs and produces 16 times more pollution than rail freight per tonne kilometre. Ultimately, rail freight must equal road prices on a tonne per kilometre basis.
- The very nature of this rule would prohibit CPI escalation over the term of the 2020 DAU.

We would submit, given the QCA pricing reductions for the better maintained and operated WIL, at the very minimum we would expect the outcome to be a price reduction of at least 24 percent on the NCL and MIL.

#### Recommendation

The QCA needs to amend the 2020 DAU to include a road to rail modal shift pricing rule (the addition of clause 3.1.3 Road to rail modal shift). QR must demonstrate to the QCA and rail operators how pricing on the NCL and MIL has been set to encourage road to rail modal shift through lower access charges. This should be coupled with a restriction on escalation (CPI or otherwise) of the access charges during the term of the 2020 DAU. Importantly, the road to rail modal shift pricing rule should take precedence over the pricing rules clauses 3.1.1 revenue adequacy and 3.1.2 network utilisation. Clause 3.4 will need to be amended,

For example, NSW Freight and Ports Plan Future Transport 2056, Queensland Freight Strategy, National Freight and Supply Chain Strategy.
 https://www.transport.wa.gov.au/mediaFiles/Freight-Ports/Freight P FS FremantleContainerRailSub.pdf
 Accessed 9 July 2019.



#### **Performance**

The narrow gauge NCL and MIL rail lines are in a poor condition. Performance is so dire on the NCL and MIL, PN is currently assessing the commercial viability of operating on these lines and whether some of its narrow gauge locomotives could more usefully deployed to service the growing Western Australia rail freight market (a failure to regard s. 138(2) (a) and (b) of the QCA Act). This is because:

- The Queensland Government has not spent the necessary capital expenditure on upgrading these lines to offer
  a viable alternative to the road freight market (a failure to regard s. 138(2) (a) and (f) of the QCA Act). For
  example, the ability to operate efficient 1,800 metre freight trains is a necessary requirement to ensure a modal
  shift from road to rail. Trains are limited to approximately 700 metres on these lines.
- QR's maintenance practices and its conservative approach to new or innovative technology means its network languishes in steam-age era rules (a failure to regard s. 138(2) (a) of the QCA Act).
- Rail freight operators are also subject to systemic 'go slow' speed restrictions (due to the poor conditions of the lines) which do not impact on road to the same degree. This erodes rail competitiveness relative to road.
- More generally, access charges, particularly for intermodal rail freight, are not commensurate with the condition
  of the line or the performance levels required to operate an effective rail freight market.

In addition to lower access pricing, QR needs to significantly improve the performance and condition of the NCL and MIL. Robust performance metrics with financially based incentives and sanctions and quality reporting are required to incentivise appropriate maintenance and capital upgrades and improve operating performance. This would be consistent with s. 138 (2) (a) of the Act.

While the 2016 AU (and 2020 DAU) provides for performance level reporting (Schedule 5), there is a need to populate 1.2 Agreed Performance Levels and 1.3 Agreed Reporting Regime of Schedule 5 in 2020 DAU before the commencement of the 2020 DAU. PN is currently working with the interstate network provider - ARTC on similar metrics which we detail in Attachment C. It can be achieved.

#### Recommendation

PN recommends clause 6.7 Performance Level Reporting (which gives effect to Schedule 5) be modified in the following manner.

6.7 (a) Queensland Rail will provide monthly reports to each other Party documenting Queensland Rail's performance in relation to the relevant performance levels as set out in schedule 5 (Performance Levels). The 1.2 Agreed Performance Levels and 1.3 Agreed Reporting Regime of Schedule 5 in the 2020 DAU need to be agreed before the Commencement Date.

6.7 (d) The Parties' agreed Performance Levels may must include involve financially based incentives and sanctions and, unless otherwise agreed, will be applicable for the Term.

#### Annual capital expenditure process

The Draft Decision proposes capital expenditure prudency reviews be undertaken once per regulatory period as opposed to annually in the 2016 AU. PN strongly opposes this weakening of regulatory oversight. PN submits because of the significant information asymmetry when dealing with a monopoly infrastructure business, it is very important for the regulator to rely on its information gathering powers to insist on timely, accurate and fulsome information to assess capital expenditure to be rolled into the Regulatory Asset Base (RAB). This is because customers ultimately pay for imprudent capital expenditure rolled into the RAB in future regulatory years.

In is important for rail operators to be consulted on the design and implementation of capital expenditure decisions on monopoly networks. We note clause 4.2(c)(i) of the Prudency of Standard of Schedule E of the 2016 AU requires consideration of rail operators and what is required to comply with access agreements.



It is also important for rail operators to influence maintenance/capital expenditure trade-off decisions. PN strongly asserts the need for the retention of an annual capital expenditure QCA prudency assessment.

#### 2020 DAU Standard Access Agreement

With reference to the commentary above, PN asserts the 2020 DAU Standard Access Agreement is not fit for purpose. The proposed 2020 DAU Standard Access Agreement is largely drafted to accommodate coal operations on the WML (a failure to regard s. 138(2) (e) of the QCA Act). QR needs to submit a new access agreement for QCA approval which exclusively covers the freight and bulk commodities operating on the NCL and MIL. This needs to be a completely separate agreement to the WML.

#### Recommendation:

We also submit a new 2020 DAU Standard Access Agreement needs to be submitted by QR for QCA approval which exclusively covers the freight and bulk commodities operating on the NCL and MIL. The proposed 2020 DAU Standard Access Agreement is largely drafted to accommodate coal operations on the West Moreton line. These need to be completely separate agreements.

Commentary on the outstanding issues from PN's November 2018 submission

While we submit a new freight and bulk standard agreement needs to be drafted for NCL and MIL, for completeness we raise outstanding matters from PN's November 2018 submission to the 2020 DAU Standard Access Agreement.

Relinquishment fees

QR proposed excessive relinquishment fee requirements - if an access holder seeks to permanently relinquish a train path they must pay a relinquishment fee equivalent to 80 per cent of the present value of the aggregate take or pay charges payable on the path to the end of the contract term. This not only acts as disincentive to long term contracting it is also excessive compared to other rail networks.

The QCA's Draft Decision agrees with PN – the relinquishment fees proposed by QR are inappropriate and they must be removed for non-reference tariffs. However, for the reasons above, PN remains concerned they are still applied to reference tariffs.

Ad hoc possessions and special events

Special events and possessions scheduling have a highly disruptive impact on freight train operations. There are inherent dangers in removing scheduling from the access undertaking.

The 2020 DAU introduces a new category of 'Ad Hoc Planned Possessions' which will allow QR to undertake a greater number of possessions outside the master train plan to the detriment of end users and rail operators. In particular, we are concerned QR could use this category to undertake routine maintenance on its passenger network (to the detriment of freight).

This is particularly concerning because QR currently has a window allocated for <u>every Monday</u> expressly for maintenance. We note QR only utilises this window infrequently. Accordingly, the new possession category 'Ad Hoc Planned Possessions' is not required and an alignment calendar (as suggested by the QCA) to allow possessions outside the Master Planning schedule is not appropriate.

QR should be obligated under the Network Management principles to use reasonable endeavours to find alternative train paths for freight train paths impacted by all possessions (including special events).

Accordingly, we recommend modification of the Daily Train Plan Principles clause 2.2 (f) to include an additional clause (iv) to mandate this requirement.



#### Operations Requirements Manual

PN opposes the removal of the Operating Requirements Manual (the Manual) from the 2020 DAU as this reduces the level of transparency and regulatory oversight applied to QR's operational decision making (including scheduling). PN's position is any changes to the Manual must be subject to approval by rail operators and the QCA.

PN does not support the proposal by the QCA to adopt the System Rules approach in Aurizon Network's 2017 access undertaking (UT5) (clauses 7A.2.4–7A.2.6). The Central Queensland Coal Network (CQCN) is a very different network to the QR network – particularly the NCL and MIL.

In addition, the QCA UT5 Final Decision commentary gives us cause for concern, with the QCA noting: 'there is an information imbalance between Aurizon Network and access holders/customers within the scheduling environment' and 'a significant potential for risks and uncertainty should the network manager be in position to undertake scheduling, including the scheduling of maintenance, in a way that does not seek to use reasonable endeavours to minimise disruption to train services.'<sup>11</sup>

#### Definition of 'on time' performance

QR should hold itself accountable to the same on time performance windows (for scheduling, performance and reporting) as it prescribes for its freight rail operators. PN notes most networks allocate a 15-minute leeway either side of an arrival/departure time to determine if a freight train is on time. PN requires the amendment and consistency throughout the 2020 DAU.

#### Other drafting

<u>Schedule H 1.3 Productivity and Efficiency Variations</u> – The proposed deletion in clause 1.3 a) of the requirement to negotiate reduces the obligation on QR to take productivity and efficiency into account. The new drafting requires QR to consider proposals and have regard to certain factors. PN believes the obligation to negotiate, having regard to the list of factors, should be reinstated. The clause should read:

... Queensland Rail must reasonably consider those proposed variations and negotiate in good faith having regard to factors including ...

<u>Schedule H 12.2 Operators Carriage Indemnity</u> –As currently drafted, the clause appears to allow QR to be indemnified in circumstances where QR is negligent. This clause should be deleted.

<u>Schedule H 13.4 Liability for Network</u> – The proposed inclusion at 13.4 a) iv) seeks to further shift risk from QR to rail operators and access holders. Under this clause, except in relation to negligence, QR is not liable for damage arising from the condition of the network, the failure of the network, the maintenance of the network or the failure of the network to meet performance levels (where these performance levels, as set out in Schedule 5 of the agreement, are currently undefined).

PN does not accept the amendment as it further reduces QR's liability and shifts risk to access holders and rail operators. QR should be responsible for its own performance and if it cannot meet its performance targets then it should be liable for the consequences of not meeting these targets. QR's customers should not be required to bear the risk of QR being unwilling to accept the risks which may arise from its inability to meet performance targets.



PN's position is a risk should be borne by the party best able to manage the risk. QR is best placed to manage the risk of not meeting its own performance targets and so should bear this risk. Shifting this risk to access holders/rollingstock operators who cannot manage the risk results in economically inefficient outcomes.

<u>Schedule H 13.5 Claims in respect of delays to Train Movements</u> – The definition of 'emergency' contained in footnote 3 to clause 13.5 b) vii) should be shifted to the Definitions section of the access agreement.

Schedule H 15.2 Termination of Operator by Queensland Rail – Clause 15.2 a) should be amended to read:

"the Operator fails in any material respect to perform or comply with this agreement, other than where this Agreement excludes the Operator's liability for that failure, or where the Operator is not otherwise liable under this Agreement for that failure"

This wording protects the rail operator from termination of an agreement for failure if it was not liable.

<u>Schedule H 15.4 Termination by the Operator</u> –A new subclause should be added to clause 15.4 allowing the rail operator to terminate the agreement if QR fails to comply with safety related obligations under the agreement.

QR can terminate the agreement in the event the rail operator fails to comply with safety related obligations under the agreement (clause 15.2) and, given the importance of safety, PN requires the wording be reciprocal.

<u>Schedule H 16.9 Claims</u> – The clause implies claims are paid in respect to damage to the network; however, PN's responsibility is to insure for third party liability (which may include damage) that PN may cause to others (including QR). As such any claim paid is for PN's legal liability to QR, not for damage to the network. This clause should be redrafted.

<u>Schedule H Clause 18.2 Adjustment for Material Change</u> – This clause allows QR to force increased QR costs on to access holders/ rail operators in the event of a change in taxes, a change in law or a change in credit (including a change in funding).

Changes in taxes, laws and credit are beyond QR's control, however passing these costs through to access holders and rail operators (who almost certainly cannot fully pass these costs through to their customers) is an example of QR attempting to shift risk on to its customers, who are no better placed to manage this risk than QR. This clause should be re-drafted to re-balance impacts and responsibilities for material changes.

#### Conclusion

PN is strongly of the view QR has not sufficiently justified that its 2020 DAU has had appropriate regard to the QCA approval criteria in s. 138(2) of the QCA Act.

Our conclusion is for the QCA to discharge its obligations under the QCA Act, it must amend the 2020 DAU to include a road to rail modal shift pricing rule – to deliver urgent freight rail access price reductions on the NCL and MIL lines and encourage modal shift. Additionally, it must 'hard code' commitment dates in the 2020 DAU for parties to establish an effective performance reporting regime with financially based incentives and sanctions.

We also submit a new 2020 DAU Standard Access Agreement needs to be submitted by QR for QCA approval which exclusively covers the freight and bulk commodities operating on the NCL and MIL. The current 2020 DAU Standard Access Agreement is largely drafted to accommodate coal operations on the West Moreton line. These need to be completely separate agreements.



## Attachment A - Policy Imbalances in the Transport Industry<sup>12</sup>

Issue	Road Freight	Rail Freight
Accreditation  Capital costs	No minimum accreditation regime. Driver only needs a licence for vehicle combination to be operated. Can access/use any road network. A NSW truck driver can move from operating a semitrailer for a year to handling a B-Double or Road Train in just two days at minimal cost with immediate access to thousands of kilometres of road across every jurisdiction in the country.  Relatively low capital costs.	A multi-faceted accreditation process (including ongoing re-certification) applies to use of the rail networks. This covers company accreditation as a rail operator, the rolling stock to be used for services and capability/knowledge of staff to operate the equipment.  Equipment has high capital cost and long life.
Environmental	Heavy vehicles in 2017 accounted for more than 20 per cent of total transport emissions in Australia; growing to almost 30 per cent by 2030.	Freight and passenger rail transport accounted for a mere 4 per cent of total transport sector greenhouse gas emissions but are often unfairly/disproportionately targeted with environmental regulations.
Fatalities	134 people died in fatal crashes involving articulated trucks.	A 15% shift of freight from road to rail would save 20 lives based on the number of 134 fatalities (for articulated trucks). 13
Fatigue	Truck drivers can drive 14 hours per 24-hour period. As well, truck drivers can utilise Advanced Fatigue Management which enables a solo truck driver to increase their hours to 15.5 hours per 24-hour period (including 1.5-hour regulatory breaks). Fatigue management regime is moving towards a risk-based approach.	Driving hours for train drivers is significantly less despite rail operating in a controlled/isolated system – mandated driver hours, for example 9 hours.  Rail continues to be subjected to overly prescriptive, and complex rules which often produce perverse safety outcomes – the driver needs to drive home in their car from greater distances.
Market size	There are extensive road transport equipment fleet providers and a robust used equipment market.	Freight rollingstock suppliers are limited with the markets dominated by a few major suppliers.
Network	Other than toll roads, road networks are a public good and predominantly publicly owned by state and local governments with no legal access constraints on main roads or an expectation of a commercial return.	Rail networks are owned by commercial or semi- commercial entities seeking a return. There is a commercial/legal framework applied to users seeking access.
Operations	No requirements for two-driver operations.	Varying requirements for two driver operations – widespread use of rail vigilance systems.

 $<sup>^{12} \</sup> Based \ on \ \underline{https://ara.net.au/sites/default/files/u647/Policy\%20Imbalances\%20in\%20the\%20Transport\%20Industry.pdf} \ (accessed 7 July 2019)$   $^{13} \ \underline{https://theconversation.com/too-many-loads-on-our-roads-when-rail-is-the-answer-24118} \ (accessed 7 July 2019).$ 



Pricing	Heavy vehicle road charges set with PAYGO model  — it is a weighted average — no attempt to charge users for the road they use or to recover historical costs.  No contribution to maintenance of road infrastructure.	Network providers are regulated monopolies and it has been the industry norm for access pricing to escalate by CPI.  Above Rail operator pay (through charges or contributions) significant capital and maintenance expenditure.  Pricing regulation widens the gap as rail users
		often pays the full economic cost (marginal cost + returns) while road typically only pays marginal cost and have the benefit of substantial infrastructure funding.
Regulation	One road safety regulator – productivity and efficiency mandate. No economic access regulatory regime.	Ten regulatory and standards bodies (State/Federal). Federal rail safety regulator has no productivity or efficiency mandate.
Training	Basic licence and medical requirements.	Significant training requirements, including ongoing assessments, accreditation and medical and safety checks.



### Attachment B- Assessment against Approval criteria in the QCA Act

The QCA Act provides that the QCA may approve a draft access undertaking only if it considers it appropriate to do so having regard to the matters mentioned in s. 138(2), which are:

The QCA Act	2020 DAU
(a) the object of Part 5 of the QCA Act, which is: to promote the economically efficient operation of, use of and investment in, significant infrastructure by which services are provided, with the effect of promoting effective competition in upstream and downstream markets (s. 69E).	No upgrading of the North Coast line (NCL) and Mt. Isa line (MIL) to offer a viable alternative to the road freight market and decreasing competition in upstream and downstream markets.  Capital expenditure is set purely based on the policy/political needs of the day.  QR's maintenance practices and its conservative approach to new or innovative technology means it network languishes in 'steam-age' era rules. In comparison, road operators are able operate or new (and/or well-maintained roads) with no contribution to maintenance costs and essentially free access. This reduces competition in rail freight upstream and downstream markets.
(b) the legitimate business interests of the owner or operator of the service;	Intermodal freight and bulk are in decline on the NCL and MIL. Despite the entrance of Linfox, the exit of Aurizon from intermodal freight operations in Queensland has resulted in rail freight being shifted to road.  QR will serve it business interests through a road to rail modal shift by increasing volumes on these lines. Rail operators cannot carry access price increases without adversely effecting volume. Access price reductions will increase volumes.  Otherwise rail operators will move their narrow guage rollingstock and locomotives to service the growing Western Australia (WA) rail freight market.



(d) the public interest, including the public interest in having competition in markets (whether or not in Australia);

QR's 2020 DAU provides no incentives or aspirations to encourage modal shift and increase competition in rail freight markets. Rail freight transport has significant inherent benefits for the economy and community relative to road (the public interest). A 2017 Deloitte Access Economics report<sup>14</sup> found:

- Rail imposes far fewer costs to the community in terms of accidents, congestion and emissions than road. These costs are not factored into transport prices.
- Each passenger journey made by rail instead of road generates benefits for society of between \$3.88 and \$10.64 by reducing congestion, accident and carbon costs.
- There are also health, social inclusion and amenity benefits from using rail.
- Road freight incurs 14 times greater accident costs than rail freight per tonne kilometre and produces 16 times as much carbon pollution as rail freight per tonne kilometre.
- Moving freight by rail instead of road generates benefits for society of around 1.45 cents per tonne kilometre. If all road freight moving between Sydney and Melbourne travelled by rail, this would generate social benefits of \$111 million a year.
- A single train is estimated to be able to replace up to 800 cars during peak hour or around 110 trucks moving freight.

<sup>14</sup> Value of Rail. The contribution of rail in Australia. A report commissioned by the Australasian Railway Association (ARA). Deloitte Access Economics. November 2017.



	Despite rail freight transport imposing far fewer costs to the community in terms of accidents, congestion and emissions than road, these costs are not factored into QR's prices
(e) the interests of persons who may seek access to the service, including whether adequate provision has been made for compensation if the rights of users of the service are adversely affected;	Access charges, particularly for intermodal rail freight, are not commensurate with the condition of the lines or the performance levels required to operate an effective rail freight market. Rail operator's road freight competitors operate on brand new (or well-maintained) roads at no or little cost.
	The current 2020 DAU Standard Access Agreement is largely drafted to accommodate coal operations on the West Moreton line. A new agreement for freight and bulk operations on the NCL and MIL is required.
(f) the effect of excluding existing assets for pricing purposes;	PN submits the 2016 AU upon which the 2020 DAU is based has proven to be defective. Under the 2016 AU, the QCA does not review or approve access charges on the MIL and NCL. Prices are individually negotiated with each user. As such, there is no visibility (for either the QCA or rail operators) on the proportion of these charges attributable to freight traffic as opposed to passenger traffic
	As noted above, the Queensland Government has not spent the necessary capital expenditure on upgrading these lines to offer a viable alternative to the road freight market and increasing competition in upstream and downstream markets.
	Rail operators should not be paying for substandard infrastructure. Assets should be subject an effective performance reporting regime with financially based incentives and sanctions.
(g) the pricing principles in s. 168A of the QCA Act, which in relation to the price of access to a service are that the price should:	PN's access costs are its second highest cost after labour, QR is a signficant percentage of these costs (for freight and bulk on a gross tonne per kilometre basis –



- (i) generate expected revenue for the service that is at least enough to meet the efficient costs of providing access to the service and include a return on investment commensurate with the regulatory and commercial risks involved; and
- (ii) allow for multi-part pricing and price discrimination where it aids efficiency; and
- (iii) not allow a related access provider to set terms and conditions that discriminate in favour of the downstream operations of the access provider or a related body corporate of the access provider, except to the extent the cost of providing access to other operators is higher; and
- (iv) provide incentives to reduce costs or otherwise improve productivity;

segments which compete with road. Rail operators are forced pay for this poorly maintained network while its road freight competitors operate on brand new (and/or well-maintained) roads at no or little cost.

The involvement of Transport Service Payments (Queensland Government policy) and investment based on non-rail freight requirements raises a question as to what the 'efficient costs' of providing freight access are on these lines. For example, the wide gap between QR's floor and ceiling pricing limits do not contemplate any of the volume growth benefits via lower access tariffs and they do not encourage road to rail modal shift.

PN is not in a position to negotiate better terms of access to QR's infrastructure to supply freight services in competition with road. Indeed, PN's terms of access (offered by QR) are not distinguished between circumstances where it does and does not face competition from road. QR takes essentially the same approach to negotiating the terms of access across all the services it provides to PN, even though the degree of competitive constraint faced by PN varies by freight task.

QR does not offer more favourable terms for those freight tasks subject to a degree of inter-modal competition. We submit even where there is competition between rail and road haulage in downstream markets, this does not appear to constrain QR's ability to exercise market power and charge rail operators any price below the high ceiling limit; we are certainly not seeing any proposed price reductions like the QCA is able to enforce on the draft tariffs for the WML.

Heavy vehicle road access charges (which the QR identifies as being the major source of competition and price pressures) have stayed fairly constant since 2012. Despite this, QR includes cumulative annual CPI and real price increases of access tariffs over the regulatory period. If the QR 2020 DAU contained a road to rail modal shift pricing rule (to reduce access charges), by conservative forecasts,



	it could result in a 15 percent increase in non-coal freight volumes <sup>15</sup> hauled by rail in Queensland.
(h) any other issues the QCA considers relevant.	Road versus rail competition in the provision of rail freight transport services. The recognition by Government and Industry of the importance of road to rail to modal shift is not new. Both the Commonwealth and State Governments recognise the importance of rail freight and modal shift <sup>16</sup> . States such as Western Australia <sup>17</sup> actively encourage modal shift through Government policies, including incentives and rebates. However, an explicit recognition of modal shift has not been built into the regulatory framework. PN submits the 2020 DAU is a unique (and timely) opportunity to include it as a pricing principle subject to QCA regulatory oversight.

http://www.qtlc.com.au/transport-logistics-industry/rail-transport-industry/ Accessed 9 July 2019.
 For example, NSW Freight and Ports Plan Future Transport 2056, Queensland Freight Strategy, National Freight and Supply Chain Strategy.
 https://www.transport.wa.gov.au/mediaFiles/Freight-Ports/Freight\_P\_FS\_FremantleContainerRailSub.pdf



#### **Attachment C**

		Mar QTR	Mar QTR	2018/2019	2017/2018	
	Mar-19	19	18	YTD	FY	Ta
RELIABILITY						
East - West						
On time Performance % "15" tolerance	57.8%	63.8%	60.5%	65.2%	63.3%	Т
On time performance Healthy Trains %	92.6%	95.8%	96.7%	95.7%	97.1%	
Unhealthy Services Undeteriorated %	85.1%	86.5%	89.9%	86.6%	89.2%	
Unhealthy Trains deteriorating further %	14.9%	13.5%	10.1%	13.4%	10.8%	Т
Minutes lost Unhealthy vs healthy trains						1
Melbourne to Sydney						
On time Performance % "15" tolerance	44.7%	53.4%	46.2%	57.4%	52.0%	1
On time performance Healthy Trains %	93.1%	94.7%	93.6%	93.6%	93.8%	
Unhealthy Services Undeteriorated %	88.5%	85.2%	97.8%	92.5%	98.2%	
Unhealthy Trains deteriorating further %	11.5%	14.8%	2.2%	7.5%	1.8%	
Minutes lost Unhealthy vs healthy trains			o Be Develo			
Sydney to Brisbane						
On time Performance % "15" tolerance	86.6%	81.0%	72.0%	78.1%	68.5%	
On time performance Healthy Trains %	96.4%	92.8%	92.7%	92.9%	91.0%	
Unhealthy Services Undeteriorated %	100.0%	97.3%	99.3%	98.7%	97.2%	
Unhealthy Trains deteriorating further %	0.0%	2.7%	0.7%	1.3%	2.8%	
Minutes lost Unhealthy vs healthy trains	0.070		o Be Develo		2.070	
Malhauma ta Driahana						
Melbourne to Brisbane On time Performance % "15" tolerance	47.7%	54.9%	29.0%	53.4%	34.8%	
	83.8%	87.9%	81.7%	91.8%	80.5%	
On time performance Healthy Trains %	100.0%	94.3%	85.2%	91.6%	87.7%	
Unhealthy Services Undeteriorated %	0.0%	5.7%	14.8%	8.4%	12.3%	
Unhealthy Trains deteriorating further % Minutes lost Unhealthy vs healthy trains	0.0%		o Be Develo		12.5%	
,						
		Mar QTR	Mar QTR		2017/2018	_
REIGHT AVAILABILITY	Mar-19	19	18	YTD	FY	T
Brisbane	88	86	77	81.7	68 84	
Sydney Melbourne	92.9	91	85	89.7		
Adelaide	93	87 93	77 95	84.9 94.1	75 90	
Perth	71.5	72	71	71.6	78	
VETERA AVAILABILITY AND VELOCITY						
YSTEM AVAILABILITY AND VELOCITY		Mar QTR	Mar QTR	2018/2019	2017/2018	
	Mar-19	19	18	YTD	FY	
Newcastle to Queensland Border						
Infrastructure (Configuration Capability) kph	76.4	76.4	76.4	76.4	76.4	
Transit Time (Infrastructure Practical Capability) kph	74.6	74.6	74.4	75.0	74.6	
Transit Time- Availability to Market kph	56.5	56.5	57.1	56.4	57.1	
Melbourne to Sefton Park Jct (Sydney)						
Infrastructure (Configuration Capability) kph	83.9	83.9	83.9	83.9	83.9	
Transit Time (Infrastructure Practical Capability) kph	78.6	78.6	78.4	78.9	79.1	
Transit Time- Availability to Market kph	68.3	68.3	68.4	68.7	68.7	
Cootamunda to Crystal Brook						
Infrastructure (Configuration Capability) kph	90.7	90.7	90.7	90.7	90.7	
Transit Time (Infrastructure Practical Capability) kph	88.8	88.8	90.1	89.0	89.6	
Transic time (initiastractare tractical capability) kpii						

81.3

98.8

94.8

67.4

81.3

98.8

94.8

67.4

78.0

98.8

92.2

64.6

80.8

98.8

94.8

67.1

Transit Time- Availability to Market kph

Transit Time- Availability to Market kph

Infrastructure (Configuration Capability) kph

Transit Time (Infrastructure Practical Capability) kph

Melbourne to Parkeston

98.8

92.3

65.4