AURIZON

Productivity Commission Inquiry into Transport Regulation

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Submission to the Productivity Commission

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Productivity Commission Inquiry into Transport Regulation

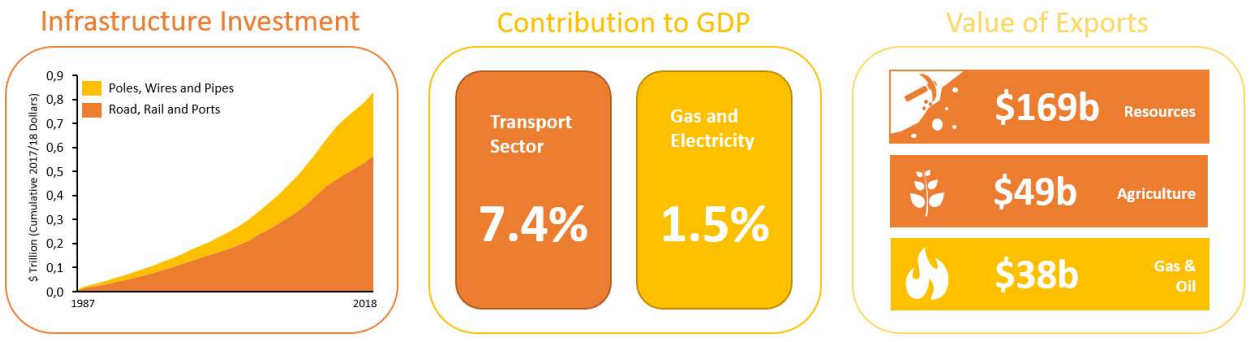
Executive Summary

Aurizon welcomes the Productivity Commission's (**PC**) Inquiry into Transport Regulation (**the Inquiry**) as an opportunity to review what benefits have been achieved from the reform of safety regulation across the road, rail and maritime sectors of the economy. Importantly, the Inquiry also provides an opportunity for the PC to evaluate the benefits that could be realised from a more comprehensive regulatory reform program to harmonise access and pricing regulation across the transport sectors of the economy.

On balance, the introduction of the Rail Safety National Law (**RSNL**) and the establishment of the Office of the National Rail Safety Regulator (**ONRSR**) has yielded tangible benefits and improvements in regulatory practice. However, the benefits of complete harmonisation of safety regulation both within the rail sector and across competing transport modes remains unfulfilled. In this regard, Aurizon has contributed to, and is broadly supportive of, the Australasian Railway Association responses and recommendations in its opening submission to this Inquiry.

While there have been tangible benefits in the area of safety regulation, successive Government reviews have identified various deficiencies in the productivity and performance of the rail freight sector and that there are likely benefits from the introduction of a simpler, nationally consistent approach to economic regulation of significant transport infrastructure. However, a comprehensive independent review has not been undertaken to formally and critically evaluate the institutional and regulatory reforms that are needed to address these deficiencies.

Significant reforms that have occurred in the energy sector to nationalise and harmonise regulatory arrangements have delivered economic benefits to the economy and consumers. Given the significant investment in the transport sector, its contribution to GDP and its critical role in Australia's export supply chains the economic benefits from similar reforms to the transport sector would be comparable to, or exceed, those achieved in the energy sector. For example, the PC's 2007 Review of Road and Rail Infrastructure Pricing concluded a 5% productivity improvement in road and rail would increase GDP by $4.2 billion (2017-18 dollars).



Source: Aurizon analysis of ABS, BITRE, ABARES and DoIIS 2017-18 data.

In relation to access regulation, Aurizon Network has recently completed a negotiated settlement with its customers to implement changes to the access undertaking for the provision of declared below rail services provided by the Central Queensland Coal Network. This outcome was obtained following a regulatory review process which effectively commenced in 2013 and concluded in February 2019. A

catalyst for the negotiated settlement with the majority of its customers was a broad and bilateral dissatisfaction with the performance of regulation and the sub-optimal results it achieved.

Aurizon recognises the significant role of its customers in negotiating alternate regulatory arrangements which better balance and align the interests of all parties for the benefit of the supply chain. Nevertheless, Aurizon considers such outcomes should be the product of a well performing regulatory framework rather than a consequence of regulatory failure. It also recognises that outcomes from negotiated settlements provide a more constructive approach to regulating infrastructure than direct regulatory control and prescription.

Aurizon supports the application of economic regulation where there is a clear economic problem that may be addressed via regulatory intervention and where there are measurable, material economic benefits to society. However, that regulation must be well-designed, targeted and consistently applied to reduce the costs of governments intervening in the operation of those markets and commercial transactions.

The material inconsistencies that currently prevail in the regulatory frameworks across the rail sector and between the road and rail sectors is producing sub-optimal outcomes in terms of efficient investment in, and utilisation of transport infrastructure. Regulatory harmonisation would promote a consistent national approach to access and price regulation of transport infrastructure through the application of common regulatory standards, including:

- ***Objective Standards***. The regulatory objectives are consistent with the economic problem regulation is intended to address and the objectives provide clear guidance to regulators and stakeholders to inform how regulation is applied;
- ***Procedural Standards***. The procedures used by the regulator are aligned to achievement of the regulatory objectives and include matters such as evidentiary requirements, transparency, consistency, accountability, performance and statutory requirements; and
- ***Methodological Standards***. The methods employed to give effect to the regulatory objective and includes:
  - regulatory instruments;
  - how the regulator facilitates and promotes either collective or bilateral negotiated settlements; and
  - how matters will be resolved where collective or bilateral negotiations are unsuccessful.

Of more fundamental importance is that procedural and methodological standards will not be appropriate where the objective standards are mis-specified or are not sufficiently clear. In this regard, the current objectives of access regulation in the rail sector may not be relevant to the current industry structure, economic conditions and the direct contractual relationship between providers of monopoly services and the end users of those services.

Aurizon recommends that the PC consider the prospective productivity and efficiency benefits from a more holistic reform agenda to improve the institutional and regulatory arrangements applying to Australia's transport infrastructure and include in its final report to Government recommendations for an independent review of:

- the performance of rail access regulation to identify areas for removing barriers to productivity and lifting the productivity and performance of the sector; and
- the costs and benefits of a establishing a national transport access and pricing regulator and the regulatory standards that should apply to promote a consistent approach to the economic regulation of Australia's significant transport infrastructure.

National Rail Safety Regulation has improved industry outcomes, but further reform is necessary

The inclusion of Queensland under the RSNL and the transition of regulator functions to ONRSR is still relatively new (having been implemented less than two years ago) and some areas of ONRSR are still evolving. Therefore, it remains common for Aurizon to experience inconsistency of approaches between Rail Safety Officers within and between state offices.

On balance, Aurizon considers that the development and implementation of ONRSR has been preferable to operating under the previous state-based arrangements and while it has led to some improvements, further benefits (including productivity benefits), could be realised through improving the focus and remit of the regulator.

Aurizon has contributed to and endorses the submission made by the Australasian Railway Association in respect the PC Inquiry on the National Rail Safety Law and ONRSR aspects of the Inquiry.

In summary, Aurizon considers that:

> the expectations of what a national regulator would be able to achieve in relation to national consistency in rail has been disappointing. For example, inconsistencies in treatment of Fatigue Management (**FM**) and Drug and Alcohol Management Plans (**DAMPs**) remain despite an extensive engagement with industry to develop approaches that would have brought national consistency. ONRSR's inability to convert this work into results is an indication that it is at best a national co-ordinator of state-based preferences;

> at a strategic level ONRSR describes a vision for 'co-regulation', which has at its heart the philosophy that risks should be managed by the parties best able to do so, within some guiding principles. However, in practice much of the application of the RSNL still feels prescriptive; and

> there appears to be no effective coordinating mechanisms between ONRSR and National Heavy Vehicle Regulator to harmonise safety regulation across transport modes. In particular, FM is an area where opportunities for harmonisation, and bringing the notion of 'co-regulation' to life have been missed.

Opportunities for further productivity improvement and efficiency benefits from regulatory harmonisation

The Issues Paper notes that the Inquiry is to *'include an examination of opportunities for reform to further integrate and harmonise the regulation of the national freight market, and to examine the remit and focus of the national regulators*'.

The PC also notes that:

> *'reforms with the potential to contribute to the achievement of the related, but separate, objectives of improved transport safety and productivity might be considered. The scope of these potential reforms, particularly those related to improving productivity more broadly in the transport sector, is potentially wide'*

Aurizon considers that, subject to a further comprehensive review, there are additional productivity benefits to be pursued through harmonisation of regulation of the national freight market with respect to access regulation and pricing. More specifically, harmonisation would take the form of:

- a nationally consistent approach to rail access regulation;
- consistency in the pricing and access to road and rail infrastructure; and
- a consistent regulatory model for the commercial negotiation of terms and conditions of access to common services provided by monopoly infrastructure.

While these matters are not explicitly within the primary objectives of this Inquiry, they are aligned with the Inquiry's intent of identifying opportunities to harmonise the national freight market and the PC's policy guidelines to improve the overall economic performance of the economy through higher productivity in the public and private sectors.[1]

Aurizon recognises that the depth and complexity of analysing these matters has the potential to distract the PC from satisfying the Inquiry's terms of reference within the required timeframes. Therefore, Aurizon requests that the PC recognise the importance and benefits of harmonisation in the area of access regulation and recommend that it should be subject to a more formal review by an independent agency such as the PC.

Nationally consistent approach to rail access regulation

Since the introduction of National Competition Policy (**NCP**) and the signing of intergovernmental agreements in 1995, including the Competition Principles Agreement (**CPA**), most significant infrastructure sectors have been subject to substantive, and in some circumstances numerous, reviews of the objectives and performance of the respective regulatory models applying to those sectors.

These reviews have resulted in significant institutional and statutory changes to how markets and infrastructure are regulated. In contrast, the objectives and performance of regulation of the rail sector have not been the subject of any substantive scrutiny by an independent body of any kind.

Similarly, while regulation of sectors such as electricity and gas have been nationalised, initially through the application of a consistent regulatory code and later through the establishment and transfer of

[1] Productivity Commission Act (1998), clause 8.

responsibilities to the Australian Energy Regulator (**AER**), the rail industry regulatory framework remains fragmented with a number of:

> state based regimes and state-based regulators and voluntary arrangements within the national access regime;

> generic access regimes, undertakings and codified models; and

> inconsistent technical and operating requirements across network boundaries resulting in barriers to productivity and innovation to rail operators.

The following table summarises the inconsistent regulatory frameworks relevant to access regulation within the mainland rail sector.

Table 1. Overview of Mainland National Rail Access Regulation

State	Regulator	Framework	Certification
Victoria	Ministerial Direction	Principle based statute with instruments	Nil
Western Australia	ERA (ARC, FMG, Roy Hill)	Codified with instruments and commercial arbitration	Expired
	ACCC (NAR declared)	Part IIIA. Negotiate-Arbitrate	Not required
	ACCC (Roy Hill)	Optional Voluntary Rail Haulage Access Undertaking	N/A
South Australia	ESCOSA (GWA)	Principle based statute with Information Kit	Expires 26 July 2021
	ESCOSA (Darwin to Tarcoola)	AustralAsia Railway (Third Party Access) Code with guidelines	Expires 31 December 2030
Queensland	QCA (QR and Aurizon Network)	Generic access regime with mandatory access undertakings. Regulator arbitration.	Expires 19 January 2021
New South Wales	IPART (RailCorp)	Principle based access undertaking with negotiate-arbitrate	Nil
	IPART (ARTC)	Default regime for HVCN and Interstate if no ACCC approved access undertaking	
National Rail Access Regime	ACCC	Voluntary access undertakings submitted under the generic access regime	Not applicable

ACCC – Australian Competition and Consumer Commission, ARC – Arc Infrastructure, ERA – Economic Regulation Authority, ESCOSA – Essential Services Commission of South Australia, FMG – Fortescue Metals Group Limited, GWA – Genesee and Wyoming Australia, IPART – Independent Pricing and Regulatory Tribunal, QCA – Queensland Competition Authority, QR – Queensland Rail.

In circumstances where the rail sector has been subject to indirect review, such as the PC's review of the National Access Regime (**NAR**) in 2001 and 2013, a common theme from most stakeholders who operate rail businesses across more than one jurisdiction is the lack of consistency and increased costs and uncertainty of multiple state-based access regimes.

The problems with inconsistency in the regulation of land transport infrastructure have also been identified in multiple other reviews with seemingly little progress made or policy impetus towards progressing reforms to rail access regulation.

For example, the PC 2005 inquiry into NCP reforms concluded that the reforms had been largely successful and delivered significant economic benefits. However, it also noted that:

> *progress in addressing issues where coordinated reform effort is critical — such as regulatory fragmentation — appears to have been very slow. A nationally coordinated reform agenda that seeks to maximise the contribution of the rail industry to Australia's national freight system, and ensure rail services are sustainable in the longer-term, could therefore be of great benefit to rail freight customers and the wider community.*[2]

The PC therefore recommended that:

> *The Australian Government, in consultation with State and Territory governments, should initiate an independent national review into the requirements for an efficient and sustainable national freight transport system (encompassing all freight transport modes)….. It should also examine what future institutional arrangements would give best effect to the next phase of freight transport reform.*[3]

In parallel with this work the Prime Minister's 2005 Exports and Infrastructure Taskforce review of regulatory arrangements and its impacts on the export infrastructure noted:

> *Australia has at least nine different economic regulators applying differing legislation and placing their own interpretations upon that legislation. Each of these regulators has substantial discretionary powers — powers that would normally be thought of as going to matters of policy, rather than as naturally being part of the regulatory function. The fragmentation of regulation, the extent of the powers vested in regulators and the scope for inconsistency in the exercise of those powers create uncertainty for businesses investing in infrastructure, increasing the level of risk to which otherwise efficient investments are exposed.*[4]

and concluded:

> *That the Council of Australian Governments (**COAG**) consider whether the multiplicity of regulators and the fragmentation of the regulatory system is in Australia's long run interest and examine the scope for establishing a single national regulator or, in other ways, reducing the number of regulators affecting Australia's export-oriented infrastructure.*[5]

The benefits from a nationally consistent approach to regulation of rail infrastructure appeared to have relative universal stakeholder and government support as embodied in the Competition and Infrastructure and Reform Agreement (**CIRA**) signed by COAG on 10 February 2006. The objective of the CIRA was to:

> *provide for a simpler and consistent national system of economic regulation for nationally-significant infrastructure, including for ports, railways and other export-related infrastructure. The agreed reforms aim to reduce regulatory uncertainty and compliance costs for owners, users and investors in significant infrastructure and to support the efficient use of national infrastructure.*[6]

The CIRA committed the relevant jurisdiction to:

- modify the respective state-based access regimes to include the agreed objects clause and pricing principles; and

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2 Productivity Commission (2005) *Review of National Competition Policy Arrangem*ents, Inquiry Report 28, Canberra, p. 220.

3 Ibid, p. 224

4 Prime Ministers Export and Infrastructure Taskforce (2005) Australia's Export Infrastructure, Report to the Prime Minister by the Exports and Infrastructure Task Force, May, p. 2

5 Ibid, p. 52

6 COAG (2006) Council of Australian Government's Meeting Communique, 10 February, p. 6

> submit the respective state-based regimes to the National Competition Council (**NCC**) for certification.

The CIRA also included agreement to implement a simpler and consistent national approach to rail access regulation, using the Australian Rail Track Corporation (**ARTC**) access undertaking to the Australian Competition and Consumer Commission (**ACCC**) as a model, to be applied to the following agreed nationally significant railways:

> interstate rail track from Perth to Brisbane, currently managed by the ARTC and other parties, subject to the outcome of commercial negotiations; and

> major intra-state freight corridors on an agreed case by case basis depending on the costs and benefits of inclusion under a national regime (cl. 3.1).

The COAG Reform Council concluded that following certification of Western Australian Rail Access Regime (**WARAR**) the first limb had largely been satisfied and that a cost benefit analysis would not be required.[7] However, the reform agenda remains largely incomplete with no substantive review of the benefits of implementing the second limb of the agreement in relation to the major intra-state freight corridors. In fact, the COAG Reform Council did not report on the progress of any evaluations of intra-state freight corridors by redefining the objectives to consider only the interstate network.

Aurizon considers that a key deficiency in respect of the CIRA objectives was the specification of the ARTC access undertaking as the preferred model, given that undertaking was not the outcome of broader industry or stakeholder engagement. Nor was the undertaking adequately evaluated as the basis for a common framework for the provision of access to Australian railways. Therefore, achieving regulatory harmonisation requires a more fundamental review of the regulatory institutions and their adopted design to access regulation through the Transport Infrastructure Council (**TIC**) in the same manner as energy market reform was progressed through the Ministerial Council of Energy.

The reforms remain incomplete and poorly evaluated

Clause 2.8 of the CIRA contemplated that Commonwealth and State officials may develop further proposals for the adoption of appropriate additional regulatory principles that may contribute to a simpler and consistent national approach to regulation. However, there appears little progress on implementing or evaluating these principles with the PC's 2013 Inquiry into the NAR consideration of CIRA concluding:

> *the Commission is not in a position to undertake a quantitative evaluation of the effectiveness of the reforms outlined in the CIRA, or of the actions and reforms undertaken by governments to give effect to those reforms.*[8]

At present, the fundamental instrument being relied on to promote national consistency in rail access regulation is the certification process for state-based access regimes. However, certification does not appear to be an effective or sufficient condition for promoting consistency. This is evident in the five submissions to IPART's review Rate of Return and Remaining Mine Life from 1 July 2019 which all address the issue of inconsistency between the NSW Rail Access Undertaking and the NAR.[9]

The material disparity between state regulators and the ACCC in determining inputs, such as cost of capital, that are not state specific is representative of the regulatory risks and uncertainty which arise from

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[7] COAG Reform Council (2011) Seamless National Economy: Report on Performance, Report to the Council of Australian Governments, p. 271-277

[8] Productivity Commission (2013) National Access Regime, Inquiry Report no. 66, Canberra p. 328

[9] https://www.ipart.nsw.gov.au/Home/Industries/Transport/Reviews/Rail-Access/Rate-of-return-and-remaining-mine-life-from-1-July-2019?qDh=3

inconsistent approaches to regulatory methods even where the regimes are subject to the same objects and principles.

There is little objective evidence available to support a conclusion that regulatory outcomes are consistent across regulatory frameworks or even across regulators where the access regimes are practically identical such as Part V of the *Queensland Competition Authority Act 1997* (QLD) (**QCA Act**) and Part IIIA of the *Competition and Consumer Act 2010 (*Cth)(**CCA**).

In part, the problems of inconsistency are largely unidentified and unaddressed as the issue is typically evaluated from the perspective of the regulatory frameworks and not regulatory practices. That is, a substantive independent review of the performance and productivity of the rail industry would be necessary to identify the costs of regulatory inconsistency and the benefits that would be achievable through comprehensive reforms leading to implementation of a nationally consistent approach to access regulation.

Nationally consistent regulatory outcomes are not attainable under the current institutional arrangements

Access regimes have been established to implement the CPA requirements of providing third party access to services provided by means of significant infrastructure facilities where access would be on the basis of terms and conditions as agreed between the owner of the facility and the person seeking access.

A fundamental objective for any access seeker in negotiating access across multiple jurisdictions is its ability to obtain a largely uniform outcome for comparable services provided under similar circumstances from an arbitration process irrespective of jurisdiction. While differences in outcomes would be expected these differences will represent the specific circumstances and value exchange between the parties. This represents a market participants expectation in relation to a nationally consistent approach to access regulation. However, this consistency objective is unlikely to be attainable where:

> regulatory objectives are poorly defined and inconsistent with market structures; and

> the regulatory regime is generic and outcomes are dependent on the exercise of regulatory discretion by multiple regulators.

Since the introduction of State Based Access Regimes and the NAR the rail industry has become increasingly vertically separated in terms of ownership and through the direct contracting of access rights by end-users of below rail services. However, the original policy objectives of these regimes were primarily focused on promoting competition within the functionally distinct rail haulage market.

As the PC is aware from its current inquiry into the Economic Regulation of Airports and from the NCC's preliminary views on revocation of the declared service provided by the Port of Newcastle there is substantial conjecture as to the efficacy of the NAR in regulating structurally separated infrastructure providers. As the object of access regimes is primarily the promotion of competition in an upstream or downstream market[10] this can promote inconsistency where the objectives are not consistent with the market structure and conditions relevant to the service.

In contrast with most regulated monopoly infrastructure where the price of access is determined in accordance with a building block model and revenues are sufficient to recover the full economic costs of providing the service many rail corridors price between a wide band recognising both floor and ceiling concepts. Consistent regulatory outcomes are unlikely to be attainable for these corridors where there is limited guidance to arbitrators on the relevant objective to arbitrating an access price set between these

[10] The CPA requires that access regimes should apply only to those services provided by natural monopoly facilities for which access on reasonable terms from declaration would promote a material increase in competition.

limits when the infrastructure provider is structurally separated. The underlying economic characteristics of the sector and the absence of arbitration guidelines diminishes the efficacy of the negotiate-arbitrate model. Consistency can therefore only be progressed through the establishment of appropriate guidelines or principles relevant to those circumstances.

In relation to the misalignment between the competition policy objectives and regulatory practice, Aurizon observes that the Commonwealth Department of Infrastructure and Transport (**DOIT**) submission to PC's 2013 Inquiry into the National Access Regime which stated:

> *The Department's interest is to achieve effective regulation in this area, which balances the need for the Government to capture a return on its investment in the rail network, while ensuring that pricing does not act as barrier to access the rail network or growth in rail freight volume.*[11]

This suggests that the regulatory objectives are not enough to promote consistency across the rail networks to which they apply. The complexity and difficulty in which both the NCC and the QCA have faced in demonstrating the effects on competition in upstream and downstream markets for services provided by structurally separated infrastructure owners with any degree of empirical validity emphasises the problem of objectives which are misaligned with the regulatory model. There can be little confidence by rail industry participants that a commercial arbitrator would have the ability to evaluate the objects of the regime in an arbitration when regulatory bodies such as the QCA and the NCC are also challenged. The protracted and costly arbitration process between CBH and Arc Infrastructure under the WARAR supports this position[12].

Table 2 lists the matters the QCA and the ACCC are required to have regard in considering an access undertaking under the Queensland Access Regime and the NAR respectively. As the access regimes are generic they afford the regulator substantial discretion in determining how and whether the undertaking promotes the object of the regime. The exercise of regulatory discretion by definition significantly affects the prospects of achieving consistent regulatory outcomes across jurisdictions.

Table 2. Matters relevant to approval of an access undertaking

Assessment Criteria	National Access Regime (s. 44ZZA(3) of the CCA)	Queensland Access Regime (s.138(2) of the QCA Act)
Objective	the objects of [this] Part IIIA;	the objects of [this] Part 5;
Interests of Owner	the legitimate business interests of the provider	the legitimate business interests of the owner or operator of the service
Relevant parties	no relevant provision	if the owner and operator of the service are different entities—the legitimate business interests of the operator of the service are protected
Public Interest	the public interest, including the public interest in having competition in markets (whether or not in Australia)	the public interest, including the public interest in having competition in markets (whether or not in Australia)

[11] Department of Infrastructure and Transport (2013) Submission to the Productivity Commission's National Access Regime Inquiry, March, p. 7

[12] CBH Group (2017) Submission to Western Australian Government, Review of the Western Australian Rail Access Regime Issues Paper, November, pp 15-16.

Assessment Criteria	National Access Regime (s. 44ZZA(3) of the CCA)	Queensland Access Regime (s.138(2) of the QCA Act)
Interests of access seekers	the interests of persons who might want access to the service;	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
Exclusion of Assets	no relevant provision	the effect of excluding existing assets for pricing purposes
Pricing Principles	the pricing principles specified in section 44ZZCA of the CCA	the pricing principles mentioned in section 168A of the QCA Act
Other Matters	any other matters that the Commission thinks are relevant	any other issues the authority considers relevant

Given the similarities between the matters both regulators are required to have regard to in approving and access undertaking and the material difference in the procedures and methods applied by each it is apparent that certification is not sufficient to promote regulatory consistency. This suggests that given the market and economic diversity relevant to significant railways in Australia that consistency may more effectively be achieved through intuitional reforms and implementation of a national land transport regulator. The issue of whether consistency could be achieved through the maintenance of separate regulators under a more cooperative regulatory model was considered by the Parer Review which concluded:

> *Cooperative approaches, under which existing regulators would work together to achieve consistency in regulation and avoidance of duplication, would not achieve a satisfactory outcome.*
>
> *There is little evidence that work on the harmonisation of regulatory requirements would progress as expeditiously as if under the leadership of one agency. Differences, or perceived differences, in the actual application of any 'template' arrangements would remain, and there would be no clear way forward for rectifying that concern.*[13]

These views are consistent with the 2018 review of rail access frameworks commissioned by the Department of Infrastructure, Transport, Cities and Regional Development that concluded:

> *The regulatory frameworks have promoted competition and reduced the ability for RIMs to charge monopoly prices. Most issues arise in relation to the complexity and duplicity of rail access regimes and operational requirements. While the extent that these issues impact rail freight is contested, operators report that they have a role in making rail less competitive as a mode of freight transportation.*

[13] Parer, W. et al. (2002) Towards a truly national and efficient energy market, Independent Review of Energy Market Directions, December, p. 85

> *The solution requires a multifaceted approach that can target areas of inefficiency with an appropriate use of centralised power. Intervention is more likely to be effective if the responsibility of reform is with a centralised entity. However, centralised reform requires widespread stakeholder coordination and consultation, making it a costly delivery mechanism.*[14]

This work was commissioned as an activity under the TIC's National Rail Vision Work Program with a scope including:

- reviewing the costs and benefits of having multiple access regimes for rail operators and customers by early 2017; and
- development of possible options for a national/harmonised rail access regime by the end of 2017 including assessment of approaches against mechanisms for road pricing and against national competition policy.

Aurizon does not consider that the review undertaken by PriceWaterhouseCoopers satisfies these requirements as it does not provide a comprehensive assessment of the costs and benefits. Furthermore, the benefits are strictly limited to the consideration of rail networks that are subject to contestability with road. The exclusion of broader benefits of harmonisation, regulatory consistency and competencies and the efficiency improvements in economies of scale of regulatory arrangements means the conclusions on costs and benefits are a partial analysis at best. These limitations are recognised by the authors who state:

> *Whilst this report qualitatively assesses some possible actions, further work will be required, particularly on the quantitative side, to establish a solid case for implementation*[15]*.*

Aurizon considers that the PC is the appropriate body to undertake this further work.

Consistency does not require the same regulatory outcomes or the same regulatory model

As discussed above consistency should not be considered as achieving the same outcomes under all circumstances. Rather it can be framed as the regulatory certainty and predictability that given a similar set of circumstances and common objectives, principles and methods this would yield comparable outcomes.

Consistency should be evaluated across the following regulatory standards:

- ***Objective Standards***. The regulatory objectives are consistent with the economic problem regulation is intended to address and the objectives provide clear guidance to regulators and stakeholders to inform the how regulation is applied;
- ***Procedural Standards***. The procedures used by the regulator are aligned to achievement of the regulatory objectives and include matters such as evidentiary requirements, transparency, consistency, accountability, performance and statutory requirements; and
- ***Methodological Standards***. The methods employed to give effect to the regulatory objective and includes:
  - regulatory instruments;
  - how the regulator facilitates and promotes either collective or bilateral negotiated settlements; and

[14] PWC (2018) Review of Rail Access Regimes, A Report Commissioned by Department of Infrastructure, Regional Development and Cities, May, p. ix

[15] Ibid, p. ix

– how matters will be resolved where collective of bilateral negotiations are unsuccessful.

Importantly consistency across these standards does not require undertakings to be the same. Rather the regulatory practices in how that undertaking is developed and implemented would be consistent. This reinforces the view that basing the CIRA objectives around the ARTC Access Undertaking did not advance the relevant issues regarding a consistent national approach to rail access regulation.

The discussion above also suggests that the objectives of access regulation may no longer be fit for purpose given the substantial ownership and structural changes that have occurred in the rail sector since the original Hilmer Review. This also extends to circumstances where railways such as the Central Queensland Coal Network, while having common ownership of below and above rail services, has a direct contracting and engagement model with end-users of the service. Thus, the contracting arrangements replicate structural separation and the object of the regime provides little direction to the regulator regarding the broader public interest objectives of access regulation, such as providing appropriate incentives to expand and sustain value-adding export infrastructure.

Similarly, while the access regimes include relatively similar pricing principles this is not a sufficient condition in the context of the negotiate-arbitrate model where a regulator retains the discretion to select point estimates from uncertain and empirically subjective ranges, or the principles are not sufficiently broad to address the range of matters relevant to an arbitration process.

The most significant driver of inconsistency of rail regulatory regimes is the disparity of procedures and methods employed by regulators in the development and approval of access undertakings and also in the operation of the negotiate-arbitrate framework. The rail industry has engineering standards, operating and environmental conditions, legacies and inherited asset conditions which are substantially different across networks in contrast to the more uniform nature of other regulated sectors of the economy. These differences hinder the adoption of credible and effective incentive based regulatory models. The default regulatory practice is to therefore undertake intrusive, time and resource consuming, and subjective prudency or efficiency reviews with limited regard to the consequence of excluding costs from the cost base (largely resulting from regulatory discretion arising without any obvious upstream or downstream competition impacts). As stated by the NCC to the PC Review of Airport Regulation:

> *In line with its objectives to pursue economic efficiency however, if there is no demonstrable improvement to competition or efficiency in any dependent markets, Part IIIA offers no remedy for any distributional concerns; indeed it does not, and is not intended to operate as a mechanism to redistribute economic rents between airports and airlines (or any other third parties).*[16]

In this regard there is a material divergence between what access regulation is intended to achieve and the how access regulation is being practiced with impacts on incentives to invest and innovate. The multitude of state-based regulators ensures these practices occur in isolation with limited regulatory coordination or standardisation of regulatory practices. This increases the uncertainty to investors in regulated infrastructure and to users of regulated rail services across jurisdictions.

In summary, the current objects and principles in the CPA may not be sufficiently defined or comprehensive to promote consistency in objective, procedural and methodological standards for rail access regulation where multiple state-based regulators are retained.

Consistency is more likely to be achieved through negotiated settlements

The rail sector is comprised of relatively few market participants who operate rail services across multiple networks, interfaces and jurisdictions. Similarly, the customer base for coal carrying train services in the

[16] National Competition Council (2018) Submission to the Productivity Commission Inquiry: Economic Regulation of Airports, November, p. 15

Central Queensland Coal Network is largely comparable to the customer base for coal carrying train services in the Hunter Valley. This suggests that regulatory reform which involves appropriate commonly specified objectives, procedural and methodological standards will promote consistency through negotiated settlements. Consistency arises as the counterparties will be involved in negotiated settlements with multiple service providers under consistent regulatory practices. This does not preclude the development and implementation of unique or bespoke arrangements from settlements but rather any divergence in outcomes will be a consequence of the value the parties have created and shared in the negotiation, not from regulatory discretion or variances in regulatory design.

As an example, if the airport sector was subject to a common framework to support the negotiated settlement of common-users airport services, including investment in common infrastructure, then one would expect to see comparable settlements across airports given the counterparties to each negotiation involve the same airlines. However, outcomes will not be standardised as it will reflect the specifics of the service being negotiated with each negotiated settlement providing a benchmark to promote consistency.

Aurizon notes that the application of negotiated settlements under a common regulatory framework is consistent with the recommendation of the Export and Infrastructure Task Force that access frameworks should presume *'that issues to do with export-oriented infrastructure will be resolved by commercial negotiation between the infrastructure provider and users'*.[17]

An independent review of the performance of rail access regulation should evaluate the benefits of regulatory design which places primacy on the negotiated settlement of the access arrangements and promotes effective negotiation practices as an alternative to prescriptive and interventionist regulatory proceedings.

The benefits are sufficiently material to support an independent review of rail access regulation

The benefits from harmonisation of rail access regulation, through the application of common objectives, procedures and methods and establishment of a single national economic regulator, are sufficiently material to support an independent review of the performance and design of access regulation applied to the rail sector.

These benefits extend, but are not limited, to:

- a reduction in regulatory risk from increased consistency and predictability of regulatory decisions;
- increased clarity of regulatory objectives and alignment of regulatory practices and procedures to those objectives;
- improvements in rail industry technical and commercial standardisation leading to enhanced interoperability within and between rail networks;
- increased industry innovation and investment from improvements in incentives and opportunities for value engineering;
- a substantially lower regulatory burden and compliance costs with regulator activities being redirected to promoting effective negotiated settlements; and

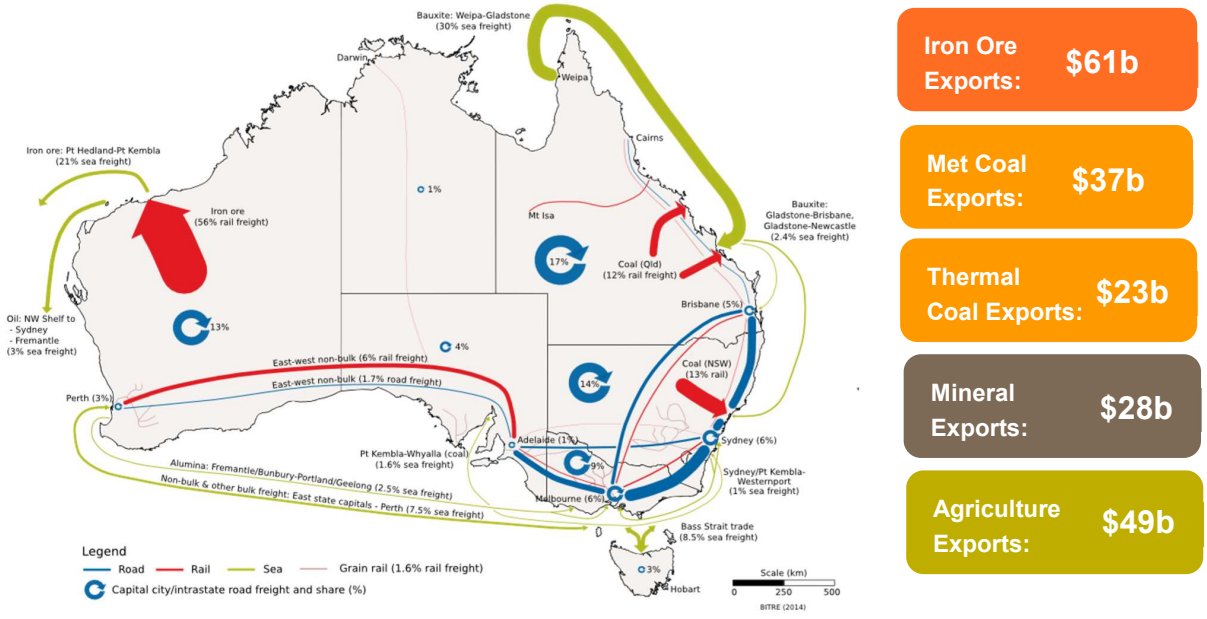
[17] Prime Ministers Export and Infrastructure Taskforce (2005) Australia's Export Infrastructure, Report to the Prime Minister by the Exports and Infrastructure Task Force, May, p. 45.

> improved service quality and reliability through development of a consistent framework for the allocation of risk and application of performance measures and commercial accountability.

The economic contribution of rail to the Australian economy is largely associated with its role in the movement of imports and exports. In this regard the ABS 2016-07 input-input tables estimate the rail transport margin on exports to be in the order of $5.8 billion[18].

This amount is dwarfed by the total value of the export income generated from these supply chains as shown in Figure 1. In this regard, efficient investment and utilisation of significant national transport infrastructure has an import role in Australia's economic performance and improvements in productivity from regulatory harmonisation will promote growth in these export sectors.

Figure 1. Australia's Major Freight Flows[19] and 2017-18 Exports[20]



Iron Ore Exports:	$61b
Met Coal Exports:	$37b
Thermal Coal Exports:	$23b
Mineral Exports:	$28b
Agriculture Exports:	$49b

Aurizon recognises there are potential further productivity and efficiency benefits that could be obtained through complimentary and integrated reforms in respect of broader regulatory harmonisation of significant land transport infrastructure.

Consistency in access regulation of road and rail

The economic costs of distortions between road and rail pricing have been well documented and reviewed by numerous government agencies, including the PC Inquiry into Road and Rail Freight Pricing in 2007. Therefore, it is not necessary for this submission to elaborate on the deficiencies in the current heavy vehicle pricing arrangements. In regard to these issues, the Inquiry's terms of reference note that the PC '*should exclude reform measures being progressed separately, such as cost reflective heavy vehicle pricing, as far as is practicable'*.

The focus of this submission is to identify the issues that are likely to remain unresolved from implementation of cost reflective heavy vehicle pricing if material differences in regulatory models prevail between the road and rail sectors. The costs to the community from distortions in modal choice arising

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18 Australian Bureau of Statistics (2019) 5209.0.55.001 Australian National Accounts: Input-Output Tables, 2016-17, Table 27.

19 BITRE (2014) Freightline 1: Australia freight transport overview, May, p. 3

20 Historical Data from ABARES: Agriculture Overview and DoIIS: Energy and Resources Quarterly

from these models are significant and prior reviews have largely examined the problem through the lens of competitive neutrality.

Competitive neutrality has limitations, through the breadth of its interpretation, that has consequences for policy makers as to what reforms are necessary to promote the economically efficient use of, and investment in, our national transport infrastructure. Therefore, the regulatory reform agenda should be developed with the goal of achieving a consistent approach between the two modes from the perspective of the objectives, principles and methods applied in the respective regulatory arrangements.

The current and prospective lack of consistency of objectives, principles and methods used in pricing and evaluating investment in the two modes has resulted in the inefficient allocation of resources from investment and utilisation of both modes. The overarching transport policy goal where publicly funded roads compete directly with government owned freight rail corridors should be to optimise total public investment and benefits from the use of transport and supply chain infrastructure.

The current geographic averaging approach to heavy vehicle road pricing and its inconsistency with rail access pricing regimes significantly contributes to distortionary modal choices. The shift of long-distance freight from rail to road on competing rail corridors has complimentary cost impacts on both modes. First, the increased heavy vehicle freight movements result in additional road maintenance costs where the marginal revenue from heavy vehicle prices is unlikely to cover the social marginal costs imposed on the community. Second, the reduction in utilisation of the rail corridor increases the budgetary pressure on rail infrastructure managers to raise rail access prices to recover fixed costs. The net effect is an overall increase in costs, lower capital productivity and lower economic welfare.

These effects are apparent on transport corridors such as Mt Isa to Townsville where an increasing proportion of bulk and durable products have shifted from rail to road with differing consequences for the respective road and rail managers. In this regard, Aurizon welcomes the recent decision by the Queensland Government to lower rail access charges to promote the increased utilisation of the rail corridor with consequential benefits to the community.[21] However, these pricing adjustments represent an adhoc non-systematic approach to mitigate the distortions associated with an absence of locational and cost-based prices for heavy vehicles. The material discrepancies in regulatory arrangements remain if a consistent regulatory approach between the two modes is not adopted the underlying problem of mis-pricing between competing modes will not be addressed.

These material differences are demonstrated in the alternate approaches to pricing presented in Figure 2 below. A key difference between road and rail freight pricing is that long-distance rail transport corridors are primarily freight based and pricing is negotiated between floor and ceiling limits where the floor and ceiling limits represents the avoidable and full economic cost of providing the service respectively.

In contrast, road infrastructure is provided on the basis of a shared network with passenger and heavy vehicles where road capacity is largely a function of passenger vehicle movements. The Australian Bureau of Statistics (**ABS**) Survey of Motor Vehicle Use indicates that heavy articulated vehicles account for approximately 6.1% of total vehicle kilometres in non-urban corridors.[22] The joint costs of providing this shared network are then allocated between traffic types with price discrimination between heavy vehicle classes promoting higher productivity vehicles.

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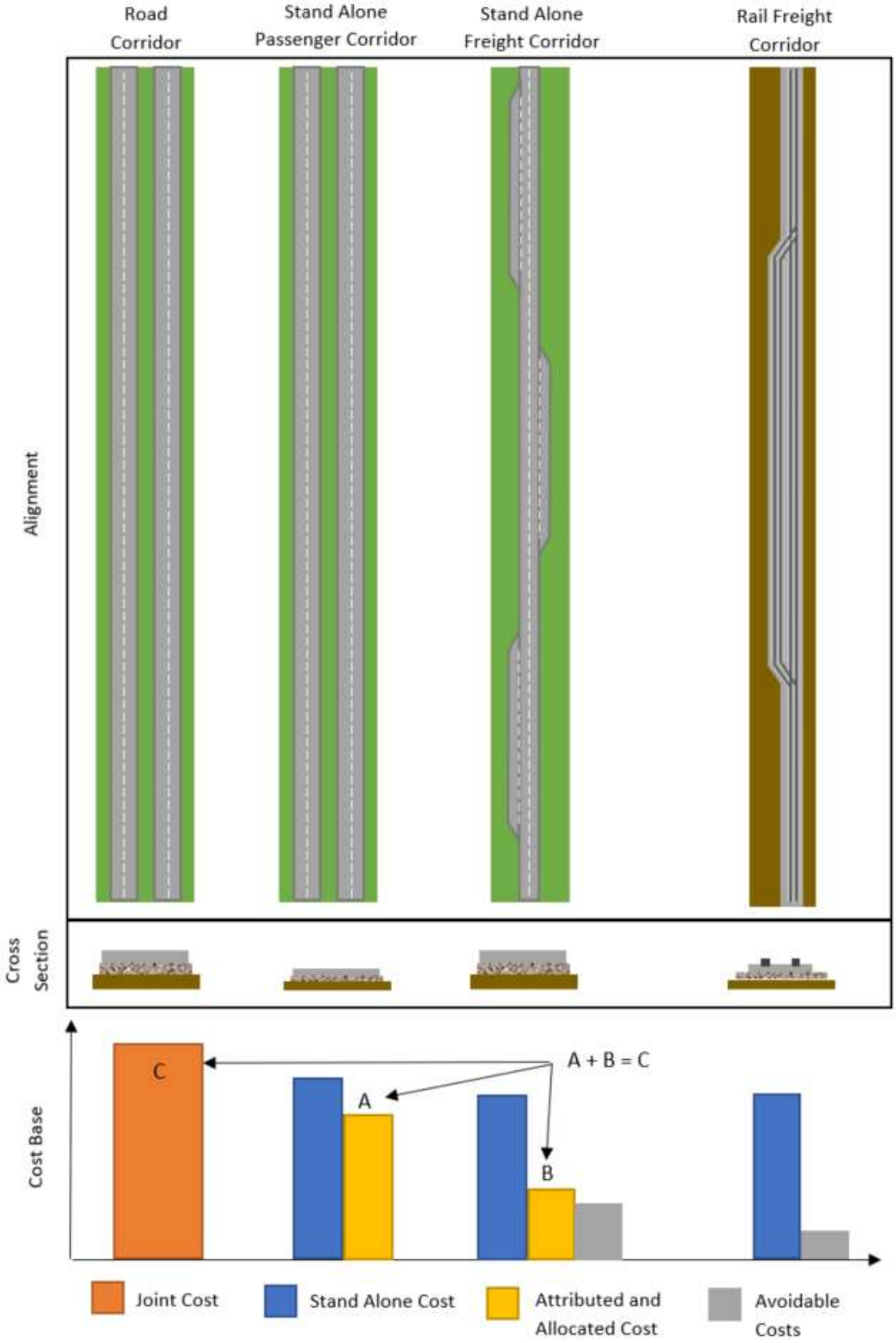
[21] Queensland Government (2019) Mount Isa Line plan puts North West minerals freight on fast track, Joint Statement by the Deputy Premier, Treasurer and Minister for Aboriginal and Torres Strait Islander Partnerships and Minister for Transport and Main Roads, 9 June. http://statements.qld.gov.au/Statement/2019/6/9/mount-isa-line-plan-puts-north-west-minerals-freight-on-fast-track

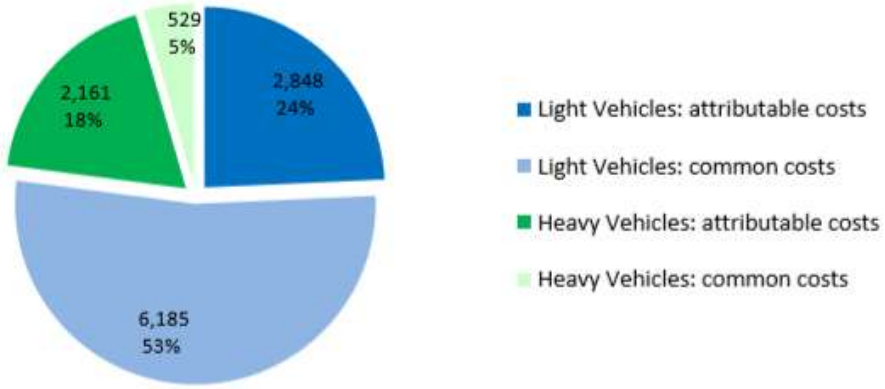
[22] ABS Catalogue 9208.0 Table 7.

Figure 2. Road and Rail Cost Allocation Approaches



Heavy vehicle prices are determined on the basis of attributable and allocated costs between heavy and light vehicles. The National Transport Commission (**NTC**) 2013 review of the allocation of road costs to heavy vehicles showed that heavy vehicles make a relatively modest contribution to the common costs of road provision above their attributable costs.

Figure 3. NTC Road Cost Allocations[23]



The comparable approach to rail pricing would require the assessment of the stand-alone costs of providing the road transport corridor for difference traffic types. This would require specification of an optimised road network which reflects the capacity and pavement construction standards for the respective vehicles. In the example provided in Figure 2 a light vehicle network may require the same road configuration with substantially lower pavement depth. Therefore, the costs of servicing this class of road users is substantially less than the current total road cost base. In contrast, a heavy vehicle network would require less capacity but the maintenance of a higher pavement depth.

In most rail regulatory frameworks, any allocation of costs between the two traffic classes would be economically feasible provided neither traffic paid more than its stand-alone costs and no less than its avoidable costs. However, outside of the coal and iron ore rail networks, rail access prices are set between these floor and ceiling bands. The inconsistency in the objectives, principles and methods of regulatory arrangements between road and rail means there is no coordinating mechanism in access pricing which guides the market in making optimal modal choices to maximise allocation efficiency.

The productivity impacts from modal shift are not directly observable

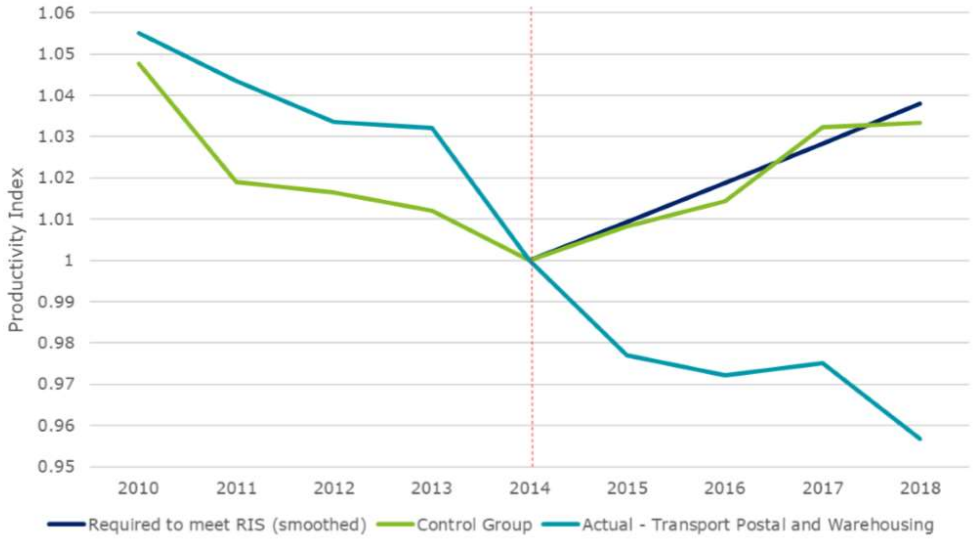
The lack of transparency of the costs of providing rail transport services precludes meaningful assessment of the productivity impacts of modal shift and over investment in the road network. In this regard, Aurizon notes that the rail sector has not been subject to a detailed scrutiny of productivity and specifically productivity drivers since the Industry Commission' 1991 Inquiry into Rail Transport. This is partly attributable to privatisation and the challenges with the disclosure of commercially sensitive information. While the NTC undertook a Freight Rail Productivity Review in 2008/09 and made a number of recommendations on removing impediments to productivity this has not been subject to further review on whether those recommendations have been implemented.[24]

The challenges of measuring productivity to evaluate the economic benefits of regulatory harmonisation are apparent in the modelling undertaken by Deloitte Access Economics on behalf of the Australian

[23] National Transport Commission (2013) Heavy Vehicle Charges Review, Policy Paper, May, p 50
[24] National Transport Commission (2009) Freight Rail Productivity Review, Draft Position Paper, March

Trucking Association on the economic benefits of improved regulation in the Australian trucking industry.[25] The report, considering only capital productivity, hypothesises that the National Heavy Vehicle Reforms implemented in 2014 have not contributed to an improvement in productivity.

Figure 4. Deloitte Productivity Index



Source: Deloitte

The productivity declines prior to 2014 reported by Deloitte and shown in Figure 3 have been previously considered by BITRE whom concluded:

> *For Transport, Postal and Warehousing, the reduction in multi-factor productivity growth rates since 2002–03 can be largely attributed to capital deepening (Figure 6), and the post-Global Financial Crisis increase in multi-factor productivity since 2008–09 can be attributed to significant increases in labour productivity.*
>
> *The decline in the capital productivity index for Transport, Postal and Warehousing has accelerated since the start of the global financial crisis, coinciding with large increases in public road and rail investments.*[26]

There are a range of obvious problems with Deloitte's hypothesis and the analysis that supports its conclusions, including:

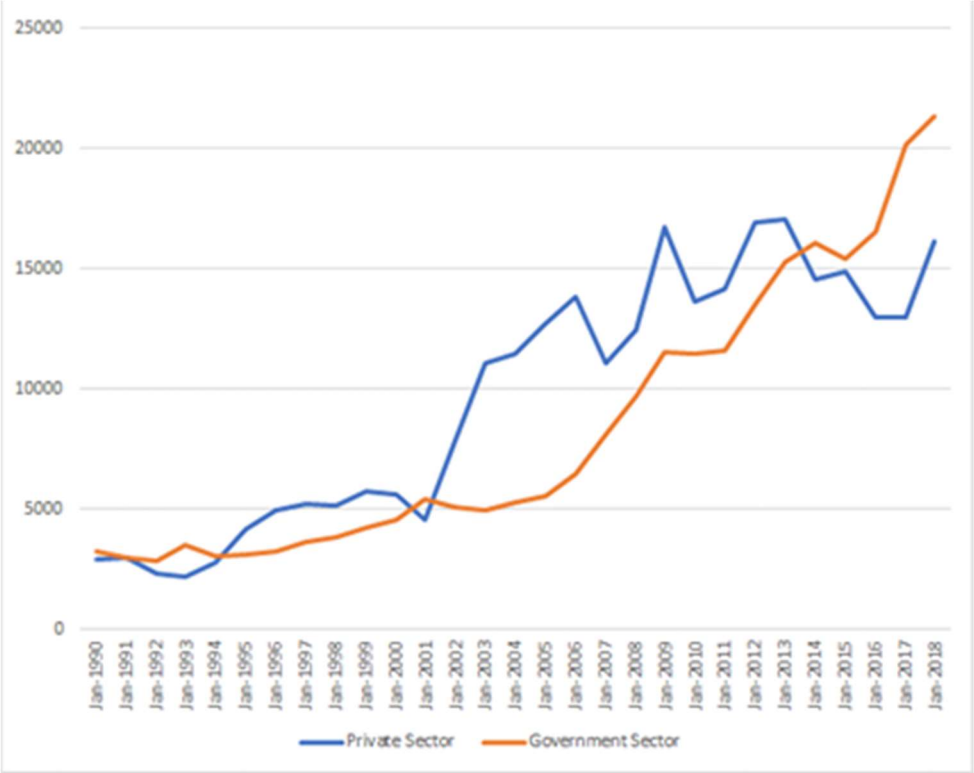
- the analysis is based on the Transport, Postal and Warehousing industry classification which comprises a range of sectors and therefore it would not be reasonable to draw inferences from this classification with respect to a single sector;
- the results are strongly influenced by the significant investment in road infrastructure which is reflected in the ABS data on Transport Capital Formation which shows a significant uplift in Government sector investment since 2014 (see Figure 5);
- it is equally plausible that the decline in capital productivity is associated with changes in rail utilisation from modal shift where capital inputs do not change with reductions in net tonne kilometres;

[25] The Issues Paper makes reference to this report in discussing ex-ante reform assessments.

[26] BITRE (2014) Infrastructure, Transport and Productivity, Information Sheet 55. https://www.bitre.gov.au/publications/2014/files/is_055.pdf

- the analysis does not consider labour productivity which is expected to be more directly affected through higher mass limit vehicles and the NHVR reforms; and
- the report provides no analysis of changes or any reduction in heavy vehicle configurations and their proportional of the freight task to support a reduction in productivity. Nor does the report consider changes to freight movements from changes in retail purchasing behaviours.

Figure 5. ABS Data on Transport Capital Formation



Source: ABS 5204.0 Tables 52 and 53

Assessing the benefits of regulatory reforms which improve the productivity of heavy vehicles must also evaluate the costs in terms of the modal shift and the increased social costs associated with any resultant reduction in capital productivity arising from lower rail infrastructure utilisation.

The Deloitte report demonstrates the problems associated with estimating productivity gains from regulatory reforms where there is limited data captured to support the relevant economic analysis. These problems are compounded in the rail sector where there is limited publicly available information on prior productivity or efficiency reviews to be relied upon. This presents a challenge in establishing the baseline and then quantifying the incremental benefits from such reforms.

Improved transparency of strategic freight corridors is required to promote efficient utilisation and investment of transport infrastructure

The demand and productivity interdependencies between road and rail infrastructure pricing and investment supports more granular and locational specific public reporting of the performance of Australia's strategic freight transport corridors. This increased transparency would identify trends across the transport industry and facilitate development of transport policy which optimises investment in and use of all transport infrastructure. This transport corridor specific reporting, where there is direct modal competition and substitution, should evaluate productivity performance of the transport task and would include details on:

- direct costs in the provision of road and rail infrastructure services;
- volumes and infrastructure revenue data;

> investment in road and rail infrastructure; and

> relevant service quality metrics.

This reporting would benefit policy makers and support more targeted investment by road agencies, rail infrastructure managers and supply chain stakeholders having regard to the actual costs of infrastructure provision.

Aurizon recommends that the PC evaluate the reporting arrangements that would support the broader public interest objectives of maximising the benefits to the community from investment in, and utilisation of road and rail infrastructure.

Consistency in the regulation of nationally significant transport infrastructure

The Final Report of the Competition Policy Review recommended that the Government transfer the pricing and access related functions from the ACCC/AER/NCC to a new single national Access and Pricing Regulator.[27] The government response to this recommendation stated that:

> *The Government will continue discussions with states and territories on how a new national framework could be developed between the Commonwealth, states and territories to promote economic growth including the most appropriate institutional architecture to support reform.*[28]

While Aurizon supports this reform proposal in principle it does not consider that there should be a single national access and pricing regulator for all regulated sectors. This submission has discussed whether a single regulator would be the most effective approach of achieving consistency in access regulation. The establishment of a single national rail access regulator would also raise concerns around regulatory capture as described by the Monash Business Policy Forum:

> *Colocation by industry increases the likelihood of capture. It creates regulatory inflexibility as 'industry specialists' rather than 'analytical generalists' dominate regulators. It risks the creation of a regulatory culture that views the particular industry that is the focus of regulation as 'special' and 'separate' from broader economic and social considerations*[29]*.*

These problems are also likely to be present in established independent bodies such as the NHVR and the ONRSR. The merging of these two regulatory functions could promote a greater degree of consistency in regulatory oversight of the two modes, including in the areas of fatigue management. These points were identified in the ARA submission to the NTC in relation to A Risk Based Approach to Regulating Heavy Vehicles:

> *The freight rail industry currently operates under an inconsistent approach to fatigue management legislated at the state and federal levels. Outer limits of service apply for train drivers in NSW and Queensland to manage fatigue, despite there being no evidence that safety outcomes are improved by imposing prescribed hours.*
>
> *Under the current regulatory arrangements, a heavy vehicle operator operating under Advanced Fatigue Management can effectively propose their own work and rest hours based on their*

[27] Competition Policy Review Panel (2015) Competition Policy Review: Final Report, March, Recommendation 50

[28] Australian Government (2015) Australian Government Response to the Competition Policy Review, https://treasury.gov.au/sites/default/files/2019-03/Govt_response_CPR.pdf

[29] Monash Business Policy Forum (2014) Rationalising Rustic Regulators, How should Australia's national economic regulators be reorganised?, July, p.17, http://competitionpolicyreview.gov.au/files/2014/07/MBPF.pdf

individual needs rather than using the hours stated by Standard Hours or Basic Fatigue Management.

In contrast, outer limits imposed on rail drivers in Queensland and NSW can lead to adverse safety outcomes through road use externalities and create costs and efficiencies for rail operators due to the need to manage compliance with different regulations in different jurisdictions. This is despite the fact that rail largely operates in a controlled and isolated environment, compared to the relatively uncontrolled public road system.[30]

Rather than establish a single national regulator for all access and pricing related functions as recommended in the Competition Policy Review Final Report, aggregation of economic regulation should occur where there is relative uniformity in the objects, principles and methods relevant to that regulation. Aurizon considers there are material differences between price regulation which is largely intended to protect the interests of consumers which have no direct contractual relationship with the regulated service provider (such as energy and bulk water) and that of access regulation which involves the commercial negotiation of access agreements between the provider and the user of the service. The latter is primarily relevant to Australia's export supply chain and land transport infrastructure, including railways, ports and airports.

Aurizon Network's submission to the PC's Inquiry into the Economic Regulation of Airports identified a common feature of the provision of services across these sectors, and more broadly the provision of common infrastructure that is subject to negotiate-arbitrate arrangements, where there is:

opportunity and a clear need for a broader review of negotiating frameworks for access to infrastructure involving common services as an alternative to welfare reducing and productivity constraining economic regulation.[31]

While the cost of establishing a single national rail access regulator may exceed the benefits there may be broader benefits and efficiencies that could be realised through the establishment of an access and pricing regulator for the transport sectors (rail, road, ports and airports). This emphasises the problem faced by the PC when it undertakes industry specific inquires, particularly where there are clear issues and reform options that could be implemented across multiple industries but are not evaluated under an industry specific review.

Notwithstanding Aurizon's recognition of the benefits from transport economic regulation being performed under a single national body Aurizon also supports the conclusions of the Competition Policy Review Final Report that the ACCC is not the appropriate body to undertake access price regulation. This is likely to be particularly the case where the objectives of the regulatory framework are broader than competition and the ACCC's functions are primarily enforcement of competition law. As noted by the expert panel:

The Panel considers that, although synergies between the competition and consumer functions are strong, synergies between competition enforcement and access and pricing regulation are weaker synergies between competition enforcement and access and pricing regulation are weaker.

[30] ARA (2019) A Risk Based Approach to Regulating Heavy Vehicles, Submission to the National Transport Commission, 3 June.
[31] Aurizon Network (2019) Inquiry into the Economic Regulation of Airports, Submission to the Productivity Commission, March

> *The culture and analytical approach required to regulate an industry differ from those typically characteristic of a competition law enforcement agency. For example, the former is required to have an ongoing and collaborative relationship with the industry it regulates, while the latter is more likely to involve adversarial interactions.*[32]

As previously discussed, the competition policy frameworks were developed in a period where nationally significant export infrastructure was publicly owned and in the case of railways, vertically integrated. The significant changes that have occurred in the land transport sector and how these sectors will be transformed into the future suggests that the objects and regulatory practices may not be fit for purpose. This has also been identified by the ACCC in its response to the NCC's draft preliminary view to revoke the declaration of the declared services provided by the Port of Newcastle:

> *The ACCC has noted in the past that, if the Part IIIA access regime does not apply to an unregulated monopolist, there may be an increased need for alternative industry-specific access regimes to address specific instances of market failure. If regulation was removed from the Port of Newcastle, the ACCC notes that consideration may need to be given to the need for such a regime at the Port of Newcastle.*[33]

This suggests that any future review of the regulatory frameworks for transport and export infrastructure should also review the institutional and governance arrangements relevant to those frameworks.

In addition to the harmonisation benefits that would be obtained from a national rail regulatory reform program to implement a nationally consistent approach to rail access regulation identified above Aurizon considers there are broader efficiency and productivity benefits from the establishment of a transport access and pricing regulator, including:

- increased level of technical and industry competencies improving the quality of regulatory decision making and the timeframes required for the making of those decisions;
- targeted fit-for-purpose regulation with increased focus on market-based outcomes and a reduction in regulatory and administrative burden;
- improved stakeholder representation promoting balanced regulatory processes and regulatory decision making with reduced prospects of industry or user capture of the regulator;
- increased alignment of regulation across the supply chain promoting increased transparency and consistency of regulatory decision making;
- increased knowledge base and regulatory diversity improves industry insights, fosters innovation and establishes best practices which promotes more effective incentive-based regulation;
- increased prospects of technical, commercial and operational harmonisation and improved interoperability across networks;
- improved regulatory accountability and lower regulatory discretion from ability to benchmark and broader public interest and scrutiny of regulatory decisions;
- improved consistency of pricing and investment frameworks to promote both complimentary investment in and optimised utilisation of road and rail infrastructure; and

[32] Competition Policy Review Panel (2015) Competition Policy Review: Final Report, March, p. 470

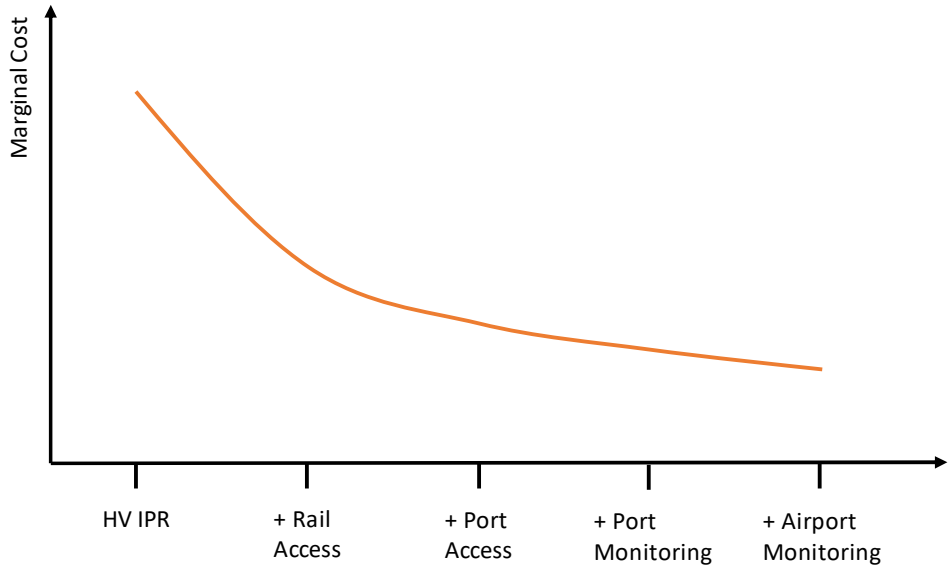
[33] Australian Competition and Consumer Commission (2019) NCC preliminary view to recommend to revoke declaration at the Port of Newcastle, Submission to the National Competition Council, 6 February,

> consistent financial and regulatory reporting supports industry performance and productivity analysis (and state of the sector reporting).

Aurizon notes that recent work undertaken in relation to modelling the costs and benefits of introducing independent price regulation (**IPR**) of heavy vehicle charges suggests that even under the most modest price reforms would require minimal investment of 1.3% of the expected end state benefit of $5.8 billion.[34] This work also considered the benefits of further reforms in addition to independent price regulation and a forward-looking cost base and noted that additional reforms (commensurate with infrastructure regulation) '*provides a more definitive result, in that the benefits are likely to be greater than costs under both reform options*'.

Aurizon considers that the benefits of expanding the scope of the IPR to a national transport access and pricing regulator would facilitate additional economic benefits at increasingly lower marginal costs as additional transport responsibilities and accountabilities are added as indicatively shown in Figure 6. There would also be cost savings associated with the consolidation of existing regulatory functions and resources.

Figure 6. Marginal Costs of Expanding the Scope of the IPR



Importantly, implementation of a national transport access and pricing regulator would facilitate matters relevant to enhanced productivity, such as consistent progression of automation and harmonisation of the standard of infrastructure across the freight transport sector to improve interoperability. Presently the remit of the ONSR does not permit a research-based approach to safety regulation with the objective of improving the productivity of the rail industry. This can be contrasted with bodies such as the Federal Railroad Authority in the United States which undertakes substantial research and development in improving not just the safety performance of the rail sector but its performance and productivity.

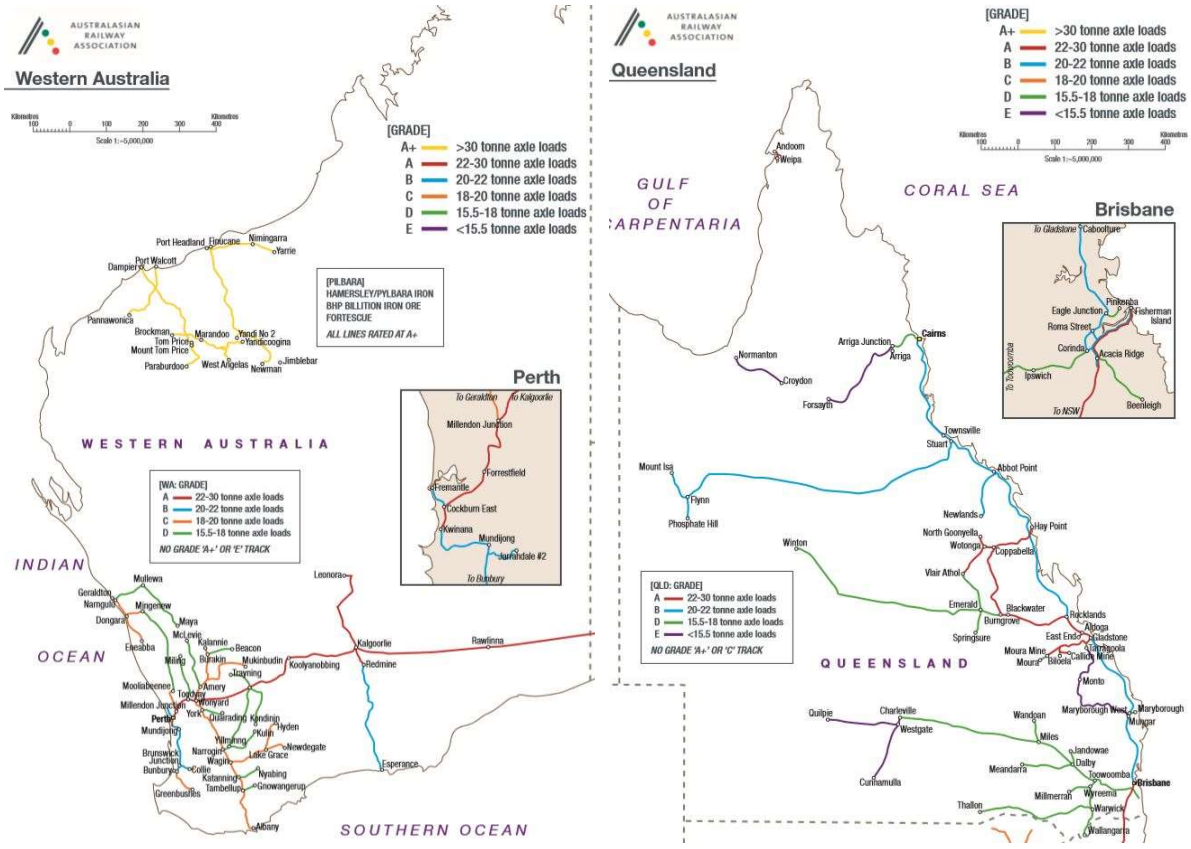
To promote performance and productivity improvements it is recommended that a coordinated approach with engagement from industry be applied to progress consistency and harmonisation of operations and infrastructure across networks with the objective of improved interoperability. There are a range of operating constraints being experienced by rail operators that do or will limit operability within and between networks, including (but not limited to):

[34] Marsden Jacob Associates (2018) Consultation Paper, Regulation Impact Statement: HVRR Phase 2 Independent Price Regulation of Heavy Vehicle Charges, July, pp. es(iii)-(iv)

- different signalling and radio communication systems between network providers (for example European Train Control System (ETCS) v Advanced Train Management System (ATMS));
- lack of standardisation of wayside equipment (e.g. Wheel Impact and Load Detector (WILD)) and accessibility to data;
- diversity of infrastructure capability limiting higher mass operations and operational flexibility with underutilisation of rollingstock;
- operating performance requirements not aligning between adjoining network providers; and
- different wheel profile standards across network providers (e.g. transferring locomotives from WA to NSW requires wheels to be turned to a different profile).

The following map of railway networks in Western Australia and Queensland demonstrates the diversity of infrastructure standards for narrow gauge railway operations.

Figure 7. Narrow Gauge Rail Infrastructure Capabilities



Source: Australasian Railway Association

These inconsistencies result in higher input costs, reduced operational efficiency, lower inherent safety and higher training costs to the rail operators. A national approach to access and pricing regulation would promote coordination of infrastructure, operating and interface standards where there are clear economic benefits from doing so and harmonisation is also commercially, economically and technically feasible. In summary, a national transport access and pricing regulator would seek to coordinate and promote harmonisation as part of its regulatory functions but would not have harmonisation as an objective. This avoids the risk of regulatory prescription which may reduce productivity and innovation.

Presently, the policy responsibilities for productivity of the rail sector preside with the NTC. Aurizon considers that these current arrangements have a strong policy bias towards improving the productivity of heavy vehicles. This is evidenced by the last substantive work undertaken by the NTC on the rail sector being completed in 2010 with the preparation of the discussion paper on The Role of Government in Rail

Freight Investment. While the NTC recently considered the rail sector in the preparation for more automated road and rail vehicles the analysis concluded in relation to regulatory barriers to automation for the rail sector:

> *The rail sector has adopted a safety management system approach to manage risks – the regulatory framework does not necessitate prescriptive rules and there are unlikely to be any significant regulatory barriers to introducing more automated trains in Australia.*[35]

While the NTC conclusions are correct, it does not capture the broader technical, commercial and economic issues that will need to be addressed to promote the development, harmonisation and coordinated investment in increased automation of Australian railroads. These issues might therefore be better progressed by a transport regulator with relevant industry information and data.

In particular, the potential for an autonomous train solution would require harmonisation of infrastructure standards across networks to ensure interoperability. Without alignment, the potential for the deployment of different infrastructure technology and systems across network boundaries could compromise the safety and interoperability for rail operators.

An independent review of the institutional arrangements and access and pricing frameworks for the transport sector

Aurizon recommends that the PC considers the prospective productivity and efficiency benefits from a more holistic reform agenda to improve the institutional and regulatory arrangements to Australia's transport infrastructure. This reform agenda would:

- take account of the work previously undertaken in relation to road, rail, ports and airports and identify the synergies of consolidating these reforms;
- review the institutional arrangements relevant to regulation of the transport sector;
- evaluate the regulatory objectives and performance of access and pricing regulation of road, rail, ports and airports;
- evaluate the procedural and methodological standards relevant to access and pricing regulation in the transport sector; and
- evaluate the various regulatory models that would be relevant to the different components of the transport sector (including, price monitoring, information and disclosure regimes, codes and negotiation frameworks).

At a minimum, Aurizon would recommend an independent review of the performance of rail access regulation to identify areas for removing barriers to productivity and lifting the productivity and performance of the sector.

[35] National Transport Commission (2016) Regulatory barriers to more automated road and rail vehicles. Issues Paper, February, pp. 50-51