



Issues Paper

The regulatory framework for ARTC's Interstate network

25 August 2021

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1. Introduction

1.1. Purpose and scope of this paper

The purpose of this paper is to seek stakeholders' views on the competitive environment the Interstate network faces – now and in the future; the specific need for regulation of the Interstate network; and where it is required, the most appropriate regulatory approach.

This paper is focused on the regulatory framework for the Interstate network. However, we recognise there are different regulatory regimes for rail across Australia and that there may be a case for wider reform.

Depending on the nature of any new approach, changes may be achieved within the existing voluntary framework, or they may require longer term legislative/policy changes.

We seek feedback on the observations and questions outlined in this Issues Paper and on any other matter related to the regulatory framework for the Interstate network. We will develop a second paper for further consultation following stakeholder feedback to this Issues Paper.

1.2. Request for submissions

Invitation to make a submission

Stakeholders should address their submissions to:

Matthew Schroder
General Manager
Infrastructure & Transport – Access & Pricing Branch
Australian Competition and Consumer Commission
GPO Box 520
Melbourne VIC 3001

Email: transport@acc.gov.au

When submitting in PDF format, please ensure the text of the submission is searchable.

Attachment A contains an extract of the questions listed throughout this paper.

Due date for submissions

Submissions on this Issues Paper are due by **5:00pm (AEST) on 6 October 2021**.

Confidentiality

The ACCC strongly encourages stakeholders to make public submissions. The ACCC will publish submissions on its website (unless a submission, or part of a submission, is marked confidential), and may make submissions available to any person or organisation upon request. If stakeholders wish to provide a confidential submission, the ACCC asks stakeholders to provide a confidential version with the confidential sections clearly identified, and a public version with the confidential information redacted and marked as '[confidential]' for publication on the ACCC website.

The submitting party must justify any claim for confidentiality and the ACCC will consider each claim of confidentiality on a case-by-case basis. If the ACCC refuses a request for

confidentiality, the ACCC will give the submitting party the opportunity to withdraw the submission in whole or in part.

For further information about the collection, use and disclosure of information provided to the ACCC, please refer to our [Information Policy](#).

Further information

- [GHD Advisory's Depreciated Optimised Replacement Cost \(DORC\) valuation of the Interstate network](#)
- [The extension of the 2008 Interstate Access Undertaking, to 30 June 2023](#)
- [Other material relating to ARTC's Interstate Access Undertaking](#)

If stakeholders have queries about any matters raised in this Issues Paper, please contact:

Justin Martyn
Director, Regulated Access – Rail
Infrastructure & Transport – Access & Pricing Branch
Phone: 08 8456 3536
Email: justin.martyn@acc.gov.au

2. The Interstate network

In this section, we provide an overview of the Interstate network and the competitive conditions it faces.

2.1. Overview of the network

The Australian Rail Track Corporation (ARTC) was established in 1998 as a result of an Inter-Governmental Agreement between Australian and State governments to have one consolidated rail track owner to manage and develop Australia's interstate track infrastructure.¹

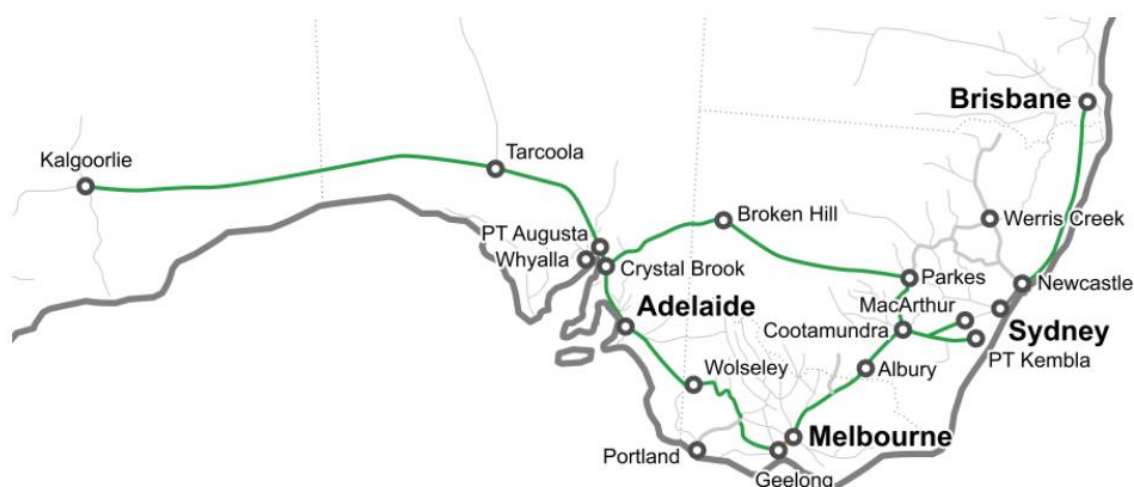
The Interstate network extends from Kalgoorlie in Western Australia to Acacia Ridge in southern Brisbane, via South Australia, Victoria and New South Wales. ARTC is responsible for below-rail operation of the network which comprises the track and related infrastructure.

Users of above-rail services primarily transport intermodal freight, non-bulk freight, and passengers on the Interstate network. The Interstate network supports the movement of freight by rail on 2 key corridors:

- the North-South corridor connects Melbourne, Sydney and Brisbane
- the East-West corridor connects Melbourne, Sydney, Brisbane and Adelaide to Perth.

ARTC owns and operates the majority of the East-West corridor infrastructure, with Arc Infrastructure providing the track infrastructure between Kalgoorlie and Perth.

Figure 1: ARTC's Interstate network



Source: ARTC, [Defined Interstate Rail Network](#), accessed 11 June 2021

2.2. The competitive environment of the Interstate network

ARTC has a natural monopoly over the below-rail infrastructure of the Interstate network as it owns the only interstate rail infrastructure, and it would not be economic for another operator to duplicate it. As such, above-rail operators providing these rail services on the Interstate network rely on ARTC to supply a critical business input.

However, unlike many monopoly infrastructures, users of these rail services often have alternatives, such as road (particularly for shorter haul freight) and coastal shipping.

¹ ARTC, [2018 Interstate Network Access Undertaking – Explanatory Guide](#), 6 March 2018, p 8.

Accordingly, rail can face competition on parts of the network where these alternatives are available to use. Some of the participants in the Interstate rail transport market are set out in Table 1.

Table 1: Interstate network participants

	Infrastructure owner	Above-rail operator	Network users
Examples of network participants	ARTC Arc Infrastructure	Freight: Pacific National, SCT Logistics, Southern Shorthaul Rail Passenger: Metro Trains Melbourne, V/line, NSW Trainlink, The Ghan	Freight forwarders: DHL, Mainfreight Supermarkets: Coles, Woolworths Intermodal freight hubs: Moorebank, Parkes Steel mills: Liberty Primary Steel - Whyalla
Alternative transport modes	n/a	No	Road and air transport, coastal shipping
Is rail critical to the transport of freight for the network participant?	n/a	Yes	Dependent on availability and commercial viability of alternatives

The following overview of current market dynamics on the Interstate network provides an understanding of the extent of competition ARTC faces today on which we welcome stakeholder views.

2.2.1. Short-haul freight

Road competes strongly with rail in the short-haul market (transport of freight up to a distance of 1,000 km). The Bureau of Infrastructure and Transport Research Economics contends that road transport can be better suited to shorter haul distances compared to rail, particularly where:

- it can leverage the use of higher productivity vehicles (for example, A-doubles; B-triples)
- the time and cost of pickup and delivery for freight on rail is high
- the freight task requires flexibility and timely delivery.²

The Freight on Rail Group cites the North-South corridor as an example of road freight's successful capture of a higher share of the freight market over shorter distances.³ This is likely due to the increased time and cost of local pickup and delivery of freight movements between rail terminals and customer facilities (for example, distribution centres), and the introduction of and improved access for larger, higher productivity vehicles.⁴

² Bureau of Infrastructure and Transport Research Economics (BITRE), [Road and rail freight: competitors or complements?](#), 2 July 2009, p 9.

³ The Freight on Rail Group of Australia is a freight rail industry group that engages with government and key stakeholders on major public policy issues and consists of nine major below and above rail operators and freight forwarders.

⁴ Freight on Rail Group of Australia, [Submission to: Inquiry into the Inland Rail project and regional NSW](#), February 2021, p 3, accessed 1 July 2021.

Despite this, road congestion and limitations on the use of higher productivity road vehicles increase the time and cost of road transportation to and from port terminals. Accordingly, road transport's competitive advantage declines relative to rail for port shuttle services.

On the two largest markets supported by the North-South corridor (Sydney–Melbourne and Sydney–Brisbane), rail's share of the freight market is less than 10%.⁵ Pacific National contends that the share of the freight market held by rail is as low as 3% in the largest market (Sydney–Melbourne).⁶

2.2.2. Long-distance freight

Rail and road transport are also competitive in the long-distance market (transport of freight in excess of 1,000 km), but rail transport's competitiveness tends to increase with distance.⁷ According to the Freight on Rail Group, rail can be better suited to longer haul distances, as it tends to have a lower cost for door-to-door freight hauls above 1,000 km compared to road.⁸ This is largely due to the reduced effect of pick-up and delivery costs as freight volumes and distances increase. However, the average cost of road transportation remains relatively constant.⁹

Rail's share of the freight market is highest in the long-distance freight market on the East-West corridor (Melbourne/Sydney–Perth and Adelaide–Perth). We estimate rail's share of the land-based East-West freight market to be in the order of 60–80%.¹⁰ We understand rail holds approximately 25% of the freight market on the Melbourne–Brisbane route.¹¹

Similar to rail, coastal shipping has a lower cost for long-distance hauls compared to road. Coastal shipping offers a competitive alternative to rail and road for non-time sensitive freight and certain bulk commodities, such as petroleum and cement.¹²

Question:

1. Do stakeholders agree with, or have any comments on, the observations set out in sections 2.2.1 and 2.2.2 on the competitive conditions for short and long haul freight?

2.2.3. Passenger carriage

Rail passenger services on the Interstate network provide an alternative to buses, private vehicles and in some cases aeroplanes. ARTC's Interstate network is used to provide conventional passenger services for intercity, regional connections (for example, NSW Trainlink and V/Line) in addition to long-distance tourist services (for example, The Ghan and the Indian Pacific) and heritage services. However, due to a lack of data, we are not clear on the extent passenger services are constrained by alternative transport modes nor their respective market shares.

⁵ BITRE, *Road and rail freight: competitors or complements?*, 2 July 2009, p 6.

⁶ Pacific National, *Initial submission to: the Productivity Commission's National Transport Regulatory Reform*, 28 June 2019.

⁷ BITRE, *Trainline 8*, Statistical Report, 2021, p 3.

⁸ Freight on Rail Group of Australia, *Submission to: Inquiry into the Inland Rail project and regional NSW*, February 2021, p 3, accessed 1 July 2021.

⁹ BITRE, *Road and rail freight: competitors or complements?*, 2 July 2009, p 8.

¹⁰ Historically, we note in BITRE's 2009 report '*Road and rail freight: competitors or complements?*' rail's share of the land-based East-West market was 80%, or 57% including sea freight.

¹¹ ARTC, *Inland Rail Program Business Case 2015*, 11 September 2015, p 16.

¹² Department of Infrastructure, Transport, Regional Development and Communications, *North-South Rail Corridor Study, 2006*, p 3, accessed 23 June 2021.

Question:

2. To what extent are passenger services on the Interstate network constrained by competition or effective transport substitutes? Why?

3. Current regulation under the Competition and Consumer Act

We currently regulate the Interstate network under Part IIIA of the *Competition and Consumer Act 2010* (Cth). Part IIIA establishes a legal regime to facilitate third party access to services provided through facilities with natural monopoly characteristics.¹³ The objects of Part IIIA are:

- to promote the economically efficient operation of, use of, and investment in the infrastructure by which services are provided, thereby promoting effective competition in upstream and downstream markets
- to provide a framework and guiding principles to encourage a consistent approach to access regulation in each industry.

One way the terms and conditions of access to a service may be determined under Part IIIA is by declaration. A person may apply to the National Competition Council for a recommendation that a service be declared. After considering the National Competition Council's recommendation, the relevant Minister may declare the service.

Another way to determine the terms and conditions of access to services under Part IIIA is for the owner of a facility to voluntarily give an access undertaking to the ACCC, as is the case with the Interstate network. The ACCC may accept an undertaking if it considers it appropriate to do so, having regard to a range of factors including the objects and pricing principles of Part IIIA.¹⁴ While an access undertaking is in operation, neither the Minister nor any other person may apply to the National Competition Council asking it to recommend the declaration of the service that is the subject of the undertaking.¹⁵

While the Competition and Consumer Act does not set specific requirements, a Part IIIA access undertaking may include provisions for the terms and conditions of access, pricing, dispute resolution processes, information disclosure and regulatory oversight.¹⁶

Under Part IIIA, the ACCC does not have the power to:

- mandate the provision of an undertaking or specify its terms
- set enforceable deadlines regarding the submission of an undertaking application
- require changes to an access undertaking (it can only accept or reject an undertaking application).

3.1. The regulatory framework under the Interstate Access Undertaking

As the monopoly owner of the interstate rail infrastructure, there was a concern that ARTC would be able to raise prices and/or reduce competition in the provision of rail freight services. This is one of the reasons why the 1997 Inter-Governmental Agreement required

¹³ Part IIIA provides mechanisms by which access to services (such as railway tracks) may be determined, including declaration/arbitration, and access undertakings. ACCC, [Part IIIA access undertaking guidelines](#), August 2016, p 2, 5–7.

¹⁴ Section 44ZZA(3) of the *Competition and Consumer Act 2010* (Cth).

¹⁵ Section 44F(1)(b) of the *Competition and Consumer Act 2010* (Cth).

¹⁶ Section 44ZZA(1) of the *Competition and Consumer Act 2010* (Cth) provides some examples of the kinds of things that might be dealt with in a Part IIIA access undertaking.

ARTC to provide its first Interstate Access Undertaking (IAU) to the ACCC for assessment in 2001. ARTC has voluntarily submitted subsequent replacement undertakings and varied its undertakings several times since then.

3.1.1. 2008 Interstate Access Undertaking

On 30 July 2008, the ACCC accepted ARTC's current IAU under Part IIIA of the then *Trade Practices Act 1974*.¹⁷ The 2008 IAU (due to expire on 30 June 2023)¹⁸ contains a number of provisions, including:

- access terms and conditions for all rail services on the Interstate network owned or leased by ARTC
- prices for indicative services
- dispute resolution processes
- information disclosure.

The 2008 IAU dictates that the revenue ARTC makes from access charges will not be lower than the floor limit¹⁹ or higher than the ceiling limit.²⁰ These limits determine the bounds within which ARTC must set access charges.

In order to calculate the ceiling limit, the current regulatory framework requires setting the regulatory asset base (RAB). The RAB is the value of all assets required for ARTC to provide below-rail services, including the rail, sleepers, ballast, signalling and communication assets.

ARTC set the opening RAB value of the Interstate network in its 2002 IAU using the Depreciated Optimised Replacement Cost (DORC) methodology. Over time, the RAB value needs to be updated. This is typically done by rolling forward the RAB to reflect new prudent capital expenditure, disposals and depreciation.²¹ Additionally, if ARTC seeks to incorporate new Segments into the IAU, the 2008 IAU requires ARTC to value the initial RAB for new Segments using the DORC methodology.²²

In contrast to the ceiling limit, the DORC-derived RAB does not impact the floor limit. Under the 2008 IAU, the floor limit is set by calculating the revenue ARTC requires to recover efficient costs deemed to be 'incremental'. Incremental costs are the costs that could be avoided if a Segment was removed from the Interstate network.

3.1.2. 2018 Interstate Access Undertaking

On 6 March 2018, ARTC submitted its proposed 2018 IAU to the ACCC for assessment under Part IIIA of the Competition and Consumer Act. The 2018 IAU was intended to replace the 2008 IAU.

On 20 December 2018, the ACCC released a draft decision to not accept the 2018 IAU. The ACCC identified a number of issues in the 2018 IAU, including with ARTC's proposed roll

¹⁷ Division 6 of Part IIIA of the then *Trade Practices Act 1974* provided that the ACCC may accept an undertaking from a person who is, or expects to be, the provider of a service, in connection with provision of access to the service.

¹⁸ ARTC's recent extension application sought to extend the expiry of the 2008 IAU to 30 June 2023. The ACCC accepted the application on 15 June 2021.

¹⁹ Unless ARTC agrees to earn revenue less than the floor limit.

²⁰ See Glossary for definitions of floor and ceiling limits.

²¹ Clause 4.4(d)(ii) of the 2008 IAU.

²² Clause 4.4(d)(i).

forward of the RAB.²³ ARTC subsequently withdrew the 2018 IAU application from the ACCC's consideration and later proposed the Interstate network be revalued using the DORC methodology.

3.1.3. Depreciated Optimised Replacement Cost

In April 2020, the ACCC engaged GHD Advisory to conduct a DORC revaluation of the Interstate network to determine the RAB value. The ACCC published GHD Advisory's draft DORC report for consultation on 15 June 2021.²⁴ We are currently considering stakeholder responses to the consultation and will publish the final DORC report later this year.

Our preliminary analysis of the valuation indicated the ceiling limits that would be established using the DORC are high compared to the revenue ARTC is likely to earn. This is primarily because it is likely to include historical non-commercial assets (assets that an efficient commercial operator would not have invested in).²⁵ Inefficiently high ceiling limits could increase the potential for ARTC to earn a return on non-commercial assets included in the valuation and allow ARTC to significantly increase prices in the future.

We note that some stakeholders have made proposals for reforming the regulatory framework for the Interstate network in their response to the draft DORC consultation. We will consider these proposals together with all submissions received from stakeholders in response to this paper.

Question:

3. Do stakeholders have any views on the current regulatory framework for the Interstate network and its effectiveness?

4. The need for regulation on the Interstate network

Regulation is necessary to prevent the exercise of market power in the absence of competition. Accordingly, to determine whether regulation is necessary, it is relevant to consider whether ARTC is capable of exercising market power on the Interstate network.

This section first considers whether ARTC currently has this ability. It then considers whether it would have this ability if it were unregulated. Finally, we discuss future considerations that could impact the competitive environment on the Interstate network and ARTC's ability to exercise market power and hence the need for regulation.

4.1. Current ability to exercise market power

In the near term, we consider the risk of ARTC exercising its market power to raise prices on the Interstate network to be low. This is due partly to the continuation of annual CPI price limits for a further 2 years, as a result of the ACCC accepting ARTC's extension of the 2008 IAU to 30 June 2023. Further, we have observed that ARTC does not currently set prices close to the ceiling limit established by the current regulatory approach. This is likely due to various factors, including the competition it faces on some parts of the Interstate network,

²³ ACCC, [Draft decision: Australian Rail Track Corporation's 2018 Interstate Access Undertaking](#), 20 December 2019.

²⁴ GHD Advisory, 'Developing a Regulatory Asset Base value for the Australian Rail Track Corporation Interstate Network, using the Depreciated Optimised Replacement Cost method', [Draft Public Report](#), 15 June 2021.

²⁵ Although DORC represents the cost of a network that has been optimised, it includes all assets necessary to provide the existing service, regardless of its commercial prudence. ACCC, [ACCC Consultation paper – DORC valuation of ARTC's Interstate network](#), 15 June 2021.

government policies, and the obligations required of government business enterprises (see section 4.3).²⁶

Question:

4. Is ARTC currently able to exercise market power? Why and how, or why not?

4.2. ARTC's potential ability to exercise market power if regulation is removed

We now seek to understand whether ARTC could have the ability to exercise market power in the absence of regulation (irrespective of its ownership). This includes looking at the current level of competition on the Interstate network and identifying areas or services on the network where alternative modes of transport are not effective substitutes.

Different levels of competition across the network

Currently, we regulate ARTC across the entire Interstate network. However, our analysis in section 2 indicates that ARTC does not face the same level of competition across the entire Interstate network. In areas where rail holds a high share of the freight market, the competitive constraint from alternative modes of transport may not be as strong (such as on the East-West corridor) and ARTC may have the ability to exercise market power.

Conversely, in areas where users may have effective substitutes (such as on the Sydney–Melbourne and Sydney–Brisbane routes) it is not clear if ARTC can exercise this power. For example, if ARTC significantly raised charges to above-rail operators and they passed these on to their customers, users may switch to alternative transport modes, thereby reducing rail volumes and therefore revenue to ARTC.

Given this, it is unclear whether regulation is necessary across the entire Interstate network. If there is a need for regulation on the Interstate network, it is important to consider where on the network regulation is required. For areas where ARTC faces limited competition, heavier regulatory oversight of ARTC may be required, while in other areas the level of regulation, if any, may be lighter.

We seek stakeholders' views on whether, based on the current competitive conditions, ARTC is able to exercise market power on its network, and if so, in which geographical areas.

Question:

5. In the absence of regulation, could ARTC exercise market power on the Interstate network (for example, due to the lack of competitive alternatives)? If so, in which geographic areas is ARTC able, or unable, to exercise its market power?

Captive customers

We have identified that ARTC's ability to exercise market power may differ between different geographic areas above. However, we note that within broad geographic areas (including areas where ARTC's ability to exercise market power may be limited), there will be

²⁶ ARTC is a government business enterprise and is expected to comply with the key principles and objectives its Shareholder Ministers have mandated. Australian Government Department of Finance, [Commonwealth Government Business Enterprises – Governance and Oversight Guidelines. Resource management Guide No. 126](#), January 2018, p 7–8.

customers that are 'captive' to rail. As such, rail 'captive customers' refer to users who do not have road or coastal shipping services as an effective substitute for rail in the event that rail prices increase significantly.²⁷

We firstly note that in general terms, it may be economically efficient for ARTC to set different prices for different types of customers. We would be concerned, however, if ARTC were to do so as an exercise of market power over captive customers. We consider that, in the absence of an effective regulatory framework, ARTC may be able to raise the prices (or reduce the terms and conditions of trade) for these services. This would be to the detriment of investment incentives and service quality in downstream markets, including above-rail services and freight forwarding.

Captive customers may be protected from ARTC's market power if ARTC cannot, or in practice, does not set terms, conditions or charges for its below-rail services that are less favourable to captive customers than those it charges for all users of the network.

It appears to be the case that ARTC does not engage in such price discrimination now. However, there does not appear to be an explicit constraint on ARTC doing so, if in practical terms it is able to identify captive customers and charge accordingly.

Questions:

6. Who are the captive customers or services on the Interstate network?
7. In the absence of regulation, what is the likelihood of ARTC being able to exercise market power in relation to captive customers or services on the Interstate network?

4.3. Future considerations

When reviewing the regulatory framework for the Interstate network, it is also important to consider changes that may occur in the medium term (5–10 years). Any future changes that alter the competitiveness of the Interstate network could alter the ability and/or incentive for ARTC to exercise market power. Future considerations include:

- the introduction of Inland Rail to the Interstate network
- a change in ARTC's ownership
- policy changes.

4.3.1. Inland Rail

The Australian Government is currently developing the Inland Rail project which will create a 1,700 km freight rail network connecting Melbourne and Brisbane. The project is intended to make rail more competitive on the North-South corridor by reducing the time taken to travel between the major east coast cities, while also allowing for the introduction of double stack trains to increase efficiency.²⁸

If Inland Rail can reduce the time it takes for freight movement, this could make rail a more attractive option for some customers compared to road. This could result in road becoming less of an effective substitute constraining ARTC. It may therefore allow ARTC to exercise market power on this corridor.

²⁷ [Australian Competition and Consumer Commission v Pacific National Pty Limited](#) [2020] FCAFC 77 [10], para 107–109.

²⁸ Department of Infrastructure, Transport, Regional Development and Communications, [Inland Rail, building and planning](#), accessed 1 July 2021.

ARTC's own estimates support rail becoming significantly more attractive on the corridor. In its 2015 Inland Rail Business Case, ARTC projected that Inland Rail would increase rail's share of the Melbourne to Brisbane market from 26% to 62% by 2050.²⁹ We note this is similar to its estimated market share on the East-West corridor.

Question:

8. Will the introduction of Inland Rail potentially allow ARTC to exercise market power on the Melbourne–Brisbane route?

4.3.2. Ownership of ARTC

As a government business enterprise, ARTC has mandates and objectives that may limit its ability to exercise market power. In particular, the government may impose price conditions or community service obligations.³⁰ Even in absence of these, ARTC's government ownership may also implicitly constrain ARTC's prices, by limiting the magnitude of price increases or incentive to price discriminate (charge different customers differently).

We recognise that a different owner may face different incentives to exercise market power in areas where ARTC does not face competition. We consider that regulation should ensure ARTC is adequately constrained from exercising market power, irrespective of ownership structure.

4.3.3. Policy changes

Changes in policy that affect the cost of competing modes of freight transport, such as road and coastal shipping (or their ability to compete), could affect the relative competitiveness of rail and therefore ARTC's ability to increase prices for existing customers.

Generally speaking, we consider that prices for transport services should reflect the costs of the service. This will help to ensure freight owners' choices about which transport mode to use are not distorted.

Reforms introduced by Commonwealth, State and/or Territory governments that impact road users, such as road user pricing, fuel taxes, congestion or pollution charges, could alter the competitive dynamic between road and rail. Given the strong competition from road, this could affect the relative competitiveness of rail, particularly on the North-South corridor.

Any changes to coastal shipping policy are more likely to alter the competitive dynamic on the East-West corridor. For example, changes in policy on coastal shipping by non-Australian ships could change the level of competition rail faces. State governments seeking to co-invest with ports to improve rail infrastructure (for instance, the 'Port Botany Rail Line Duplication' project) can also impact market dynamics. These projects encourage the use of rail to transport bulk freight to reduce truck movements and traffic congestion.

Overall, it is unclear if, and when, any such policy changes will be made and thus their impact on the competitive dynamic on the Interstate network.

Question:

9. Would any of the policy changes set out in section 4.3.3 significantly alter the competitive environment of the Interstate network? Are there any other changes that are likely to do so?

²⁹ ARTC, *ARTC 2015 Inland Rail Programme Business Case*, 2015, p 16.

³⁰ Australian Government Department of Finance, *Commonwealth Government Business Enterprises – Governance and Oversight Guidelines*, 'Resource management Guide No. 126', January 2018, p 7.

4.4. Preliminary view

The case for regulating ARTC's Interstate network appears to be stronger today in areas where there do not appear to be strong or effective substitutes (potentially on the East-West corridor) and where there are customers that are captive to the Interstate network.

Conversely, the case for regulation appears to be weaker where ARTC faces strong constraints, particularly on the Sydney–Brisbane and Melbourne–Sydney routes (except, as noted above, for captive customers that use these routes).

In the future, if alternative transport modes become less of a constraint (in general or on certain routes such as Inland Rail), then the relative case for regulation may strengthen as the risk of ARTC exercising market power increases.

Question:

10. Do stakeholders agree with our preliminary view on the case for regulation (as set out in section 4.4)?

5. Approaches to regulation

If it is necessary to regulate all or part of the Interstate network, then we need to consider what approaches to regulation would be suitable.

We recognise there may not be a 'one-size-fits-all' approach to regulating the network – there may be one or more, or even a combination of approaches that could work. However, we note that if different parts of the network have different approaches, there could be additional complexities.

Further, as we have identified above, the ability of ARTC to exercise its market power may change over time. It is therefore important that the regulatory framework is capable of adapting to accommodate these changes.

5.1. Uniform or targeted regulation

Currently, the regulatory framework applies across the entire Interstate network. One option is to limit the scope for regulation based on the route or service.

Given the extent of competition ARTC faces on the Interstate network varies, ARTC could be regulated only in areas where there is an enduring risk of it exercising its market power. This could include the East-West corridor (where ARTC has a larger share of the freight market)³¹ and perhaps in the future, the Inland Rail route.

Additionally, or alternatively to geographic-based regulation, a regulatory framework could involve regulating to protect captive customers. For the services that require regulation, we could adopt one of the alternative approaches set out in this paper that is most suitable to the circumstances of those services.

Targeted regulation is flexible and could adapt to changing market conditions. We could use a market power test to determine whether an area/service has become competitive or uncompetitive and apply or remove regulation as needed over time. However, such an approach may increase uncertainty and reduce efficiency. It may also be unable to prevent ARTC from leveraging its market power into non-monopoly services. In this case, an

³¹ We note concerns about the below-rail operator in Western Australia, Arc, exercising market power to increase charges on the Kalgoorlie-Perth segment (ARTC's network terminates in Kalgoorlie, where Arc then operates the final segment of the East-West corridor to Perth).

approach that offers a uniform level of regulation across the entire network may be more attractive to users.

Question:

11. Would a uniform level of regulation be appropriate for the Interstate network, or would a targeted regulatory framework be more suitable?

5.2. Approaches to regulating the Interstate network

We now outline a range of different regulatory approaches that could be used to establish key elements such as terms and conditions of access, prices, information disclosure and dispute resolution.³²

5.2.1. Regulatory price determination

Under this approach, we focus on how the regulator would set prices.

Regulatory price determination is more appropriate where the service provider has considerable market power. There are many options available that we could use to set a regulatory price and these may be either cost-based or not cost-based.

Cost-based approaches are generally designed to allow the service provider to earn revenue up to a ceiling which allows the provider to recover its costs, including operating and capital costs. It also requires determining an initial RAB when the assets are first regulated, followed by rolling forward the RAB in subsequent years. We note that with any RAB based approach, we would still need information to determine if capital expenditure was prudent and efficient.

We recognise that different RAB valuation approaches can produce different values and impose different levels of regulatory burden. We set out some valuation methodologies for the RAB below.

DORC-based RAB valuation

Under this cost-based approach, regulated assets are valued by first calculating the replacement cost of an 'optimised' network.³³ Second, the cost of the optimised network is reduced to account for accumulated depreciation.

The original IAU required ARTC to value the opening RAB and any subsequent new Segments using the DORC valuation methodology.³⁴ However, we have concerns that the DORC methodology may be unsuitable for the Interstate network.

This is primarily because the DORC value is likely to include non-commercial assets (assets that an efficient commercial operator would not have invested in), resulting in high ceiling limits. These could allow ARTC to significantly increase prices and increase the potential for ARTC to earn a return on non-commercial assets included in the valuation.

³² These are all features of an effective access regime that satisfies the Competition Principles Agreement and efficiency objectives of Part IIIA, as set out in the 2017 National Competition Council's guide to certification of State and Territory regimes under Part IIIA of the *Competition and Consumer Act 2010* (Cth).

³³ Optimisation involves redesigning the network based on the cost of constructing the network today using current technology and assuming the same service capability.

³⁴ See section 3.1.1 of this paper.

Discounted cash flow

Under this approach, we would start from a deemed acceptable set of prices (based on the current and forecast prices). As such, it reflects the competitive or other constraints imposed on ARTC. Based on these prices we would forecast the future cash flows. We would then discount the expected cash flows to determine their present value and use this as the initial RAB. Prices in later years would reflect the roll forward of the RAB, in line with new capital expenditure and depreciation.³⁵

This approach requires less information than a DORC valuation and avoids any unexpected price changes. It is likely to exclude the recovery of historical costs that the regulator considers imprudent.³⁶

On the other hand, this approach imposes tighter regulatory constraints on ARTC than a DORC-based RAB, leaving ARTC less flexibility to adjust prices to reflect market conditions and costs in the future.

Price controls without a RAB

The regulator may set prices without determining a RAB and cost base. For example, ARTC could include a specific set of pricing in its undertaking, instead of a floor and ceiling. We would then determine whether this pricing proposal is reasonable in our assessment of the undertaking.

The initial prices could be set directly at current prices,³⁷ or by using a market benchmark of an efficient provider of a similar service.³⁸ To set prices in subsequent years, one approach is CPI-X – that is, prices are adjusted for inflation (using CPI or a producer cost index) minus a factor X reflecting potential increases in efficiency or technological progress.

Price controls without a RAB are uncommon in Australia. CPI-X controls were used in the United Kingdom after privatising several infrastructure providers, with challenging X factors to encourage productivity improvement.

Price controls of this type avoid complex cost assessments, and the fixed prices provide strong incentives for the provider to reduce costs to increase profits. However, there remains a risk that the prices will lose touch with efficient costs and market conditions over time.

5.2.2. Other approaches

There are other approaches available that do not involve the regulator determining the terms, conditions and charges upfront. We now set out two of these, while noting there may be other approaches that could be appropriate.

³⁵ Discounted cash flow is sometimes referred to as the 'line in the sand' approach as the RAB would only include assets that can be recovered at present prices. It effectively draws a line to exclude other assets. 'Line in the sand' has also been used to describe approaches where assets existing before a given date are excluded from the RAB; for example, IPART's exclusion of assets put in place before 1 July 1997 from NSW State Water's asset base.

³⁶ The discounted cash flow method is similar to the deprival method of asset valuation (Steering Committee on national performance monitoring of government trading enterprises, [Guidelines on Accounting Policy for Valuation of Assets of Government Trading Enterprises Using Current Valuation Methods](#), October 1994). It is used by ARTC in its 'fair value' revaluation of assets for its financial statements.

³⁷ This would result in initial prices similar to the discounted cash flow approach to RAB setting, but prices may later diverge between those approaches.

³⁸ This may be in a different region or country in which case environmental differences would have to be allowed for.

Negotiate-arbitrate

A negotiate-arbitrate model is a lighter touch approach to regulation that encourages commercial negotiations and minimises regulatory intervention. A negotiate-arbitrate model for the Interstate network would involve ARTC and its rail users negotiating terms, conditions and charges. Relevant parties could seek arbitration if they were not able to reach agreement. The arbitrator could be a regulator or a commercial arbitrator. We note that ARTC and its customers already negotiate charges through individual track access agreements, which a negotiate-arbitrate model could build on.

The negotiation and arbitration elements of this model are flexible and can be tailored to address the specific regulatory problems facing the Interstate network, such as targeting information asymmetry (by requiring each party to provide certain types of information).

Parties to the negotiation would have an in-depth understanding of the industry and periodic negotiations could take into account future changes such as Inland Rail, changes to market dynamics and government policy changes as they arise. Similarly, arbitration could take into account current market conditions, as well as the particular circumstances of any dispute that arises.

However, for areas/services where there are no effective substitutes to rail, commercial negotiations may be less meaningful as ARTC may be able to use its market power to extract more favourable terms or increase prices.

Some of the other difficulties with this model include information asymmetry and the possibility of one party delaying the other from seeking arbitration by artificially extending the negotiation phase. Separately, parties may resort to arbitration too quickly, without making a real effort to resolve the dispute between themselves. The model could require mandatory information sharing and include appropriate timeframes for each phase to alleviate these issues.

Monitoring

The regulator could use monitoring of prices, costs and profits in areas considered to not currently require regulation.³⁹ Monitoring could also include activity levels, performance and quality of service. It would be designed to provide the regulator with visibility of whether ARTC has become capable of exercising market power in a certain area and thus requiring regulation. It would not be appropriate in areas where ARTC is capable of exercising market power.

A critical component of any such framework would be a clear and direct pathway to regulation where the monitoring indicates that ARTC has become capable of exercising monopoly power. This threat of regulation would be designed to constrain the provider exercising market power. A monitoring regime is unlikely to be effective if legislation was required to invoke regulation.

A monitoring approach could be part of an access undertaking given by ARTC and accepted by the ACCC. Such a framework could include a price determination or negotiate-arbitrate approach for areas where ARTC is capable of exercising market power and monitoring of areas where it is currently not capable of doing so.

Other regulatory frameworks

We note that each State government has a different regulatory regime for railways. We outline their key features in Appendix A. They all have a framework to facilitate access and

³⁹ The ACCC currently monitors airports, airlines, stevedoring and irrigation infrastructure operators.

generally provide for resolution of disputes through negotiation and arbitration, as well as regulatory determination of revenue ceilings.

We note that there may be other approaches not mentioned in this paper that could be appropriate for the Interstate network.

Questions:

12. Do stakeholders think any of the regulatory approaches set out in section 5.2 are suitable for the Interstate network?
13. Are there other approaches (not mentioned in section 5.2 or drawing on State regimes) that could be appropriate for regulating the Interstate network?

5.3. Implementing a new framework

It is possible that the approaches above could be implemented within the existing regulatory framework by ARTC submitting an amended undertaking, even if the approach diverges considerably from the present undertaking. It is feasible that ARTC could submit such an undertaking, and the ACCC approve it, before the expiry of the current undertaking in June 2023.

However, as the current regime is based on a voluntary undertaking, ARTC must agree to both implement the change and to submit future replacement undertakings on the same basis. Accordingly, there may be a case for specific legislation because:

- Legislation that requires ARTC to submit and maintain an undertaking would address the issue of ARTC not agreeing to the revised approach or withdrawing its support in future.
- Legislation could provide greater and longer term certainty by codifying the regulatory framework in law.
- Legislation could address the uncertainty and potential opportunity for gaming under the current system. That is where, if ARTC does not lodge a replacement IAU, parts of the network revert to regulation by the relevant State or in some cases, it would become unregulated.

Any change to the framework that relies on legislative change would take longer to implement than adopting a new regulatory approach through the current voluntary framework. However, it may be possible to implement the preferred regulatory approach initially through the voluntary framework and then incorporate it into a legislative framework.

We note the ACCC has been advocating and engaging with the government on a new “Part IIIB” to address monopoly pricing by non-vertically integrated infrastructure. ARTC is an example of a non-vertically integrated monopoly (as are most airports and ports) as it does not operate in adjacent markets. This would supplement the current declaration process under the Part IIIA access regime where the test is of harm to upstream or downstream competition. If this reform were implemented, depending on the timeframe, it could be an option to consider for regulating the Interstate network.

Question:

14. Do stakeholders support changes to the regulatory framework being made through a revised voluntary access undertaking, or do stakeholders consider legislative change is required?

5.4. Broader changes to rail regulation

While we have limited the scope of this paper to the Interstate network, we note stakeholders have raised concerns that that different regulatory regimes for rail across Australia can create additional burden for freight operators.⁴⁰

In respect of the Interstate network, this includes above-rail operators needing to interact with two or three different operators, regimes and regulators on certain routes such as from the east coast to Perth and Sydney to Brisbane.

Consideration could also be given to a more consistent or uniform national approach to rail regulation. This would require the agreement of the States, either to transfer responsibility to the Commonwealth, or at least to amend their regimes to mirror a national approach.

Question:

15. Are there any other issues that stakeholders would like to raise?

⁴⁰ PwC Consulting canvassed the idea of a National Rail Access Regime (in a 2018 review of rail regimes for the Department of Infrastructure, Regional Development and Cities), while recognising it would be challenging and politically difficult. PwC Consulting, [Department of Infrastructure, Regional Development and Cities: Review of rail access regimes](#), May 2018; Petersen, Bull & Dermody, *Access Regulation in Australia*, Lawbook Co, 2016.

Glossary

ACCC	Australian Competition and Consumer Commission
Above-rail	Trains and rolling stock
ARTC	Australian Rail Track Corporation
Below-rail	Rail track infrastructure
Bulk freight	Freight that generally involves large quantities of homogenous product (such as oil, gas, mineral ores, cement and sand) and is relatively non-perishable. It is usually transported as a whole, and without packaging
Ceiling limit	The ceiling limit is set by calculating how much revenue is required for ARTC to recover the Economic Cost of one or a group of its Segments ⁴¹
CPI	Consumer Price Index
DORC	Depreciated Optimised Replacement Cost method of valuing assets
Floor limit	The floor limit is set by calculating how much revenue is required for ARTC to recover costs that are deemed to be 'incremental', meaning costs that could be avoided if a Segment was removed from the Interstate network ⁴²
Intermodal freight	Freight that is transferred between modes of transport (such as road, rail and/or coastal shipping). For example, road transport provides local pickup and delivery to and from a rail terminal
Non-bulk freight	Freight that is generally packed in containers or other units. These vary in density, perishability and fragility (such as live animals, motor vehicles and trailers)
RAB	Regulatory asset base
Segment	A component of the Interstate network as defined in Schedule I of the 2008 Interstate Access Undertaking. ⁴³ It is distinguished for the purposes of applying charges to the services carried out on the track segments within the East-West and North-South corridors

⁴¹ Clause 4.4(c) and 4.4(d) of ARTC's 2008 IAU.

⁴² Clause 4.4(b) of ARTC's 2008 IAU.

⁴³ ARTC, *Interstate Access Undertaking*, 15 July 2008 (as varied on 18 April 2012, 10 April 2013, 25 July 2018, 12 December 2018, 28 February 2019, 26 September 2019, 19 June 2020 and 15 June 2021), p 47.

Appendix A: Comparison of State jurisdictional rail access regimes⁴⁴

	<i>National</i>	<i>South Australia</i>	<i>Western Australia</i>	<i>New South Wales</i>	<i>Queensland</i>	<i>Victoria</i>
Management of below-rail	Australian government – ARTC	Private – One Rail	Private – Arc Infrastructure (South-West freight) Private –TPI/FMG & Roy Hill in Pilbara	NSW government – Transport Asset Holding Entity Australian government – ARTC	Private – Aurizon Queensland government – Queensland Rail	Victorian government – V/Line
Legislation	<i>Competition and Consumer Act 2010</i> (Cth)	<i>Railways (Operations and Access) Act 1997</i> (SA) for intrastate <i>AustralAsia Railway (Third Party Access) Act 1999</i> for Tarcoola–Darwin	<i>Railways (Access) Act 1998</i> (WA)	<i>Transport Administration Act 1988</i> (NSW)	<i>Queensland Competition Authority Act 1997</i>	<i>Rail Management Act 1996</i> (Vic)
Certification⁴⁵	n/a	Yes	No	No	Yes	No
Regulatory approach	ARTC offers voluntary undertakings under the National Access Regime (NAR) for its interstate and Hunter Valley networks. ARTC’s undertakings may reflect negotiation with users. The ACCC may approve an undertaking if it meets criteria in NAR.	No undertakings. Negotiate/arbitrate model with access agreements for determining terms of access to declared services. Access agreements are negotiated under a framework set by Act or Code, with a legal obligation to negotiate	Negotiate/arbitrate framework with all terms of access agreements negotiated between parties. Disputes in negotiations are subject to commercial arbitration. Regulatory documents are established under a Code and must be approved by the regulator (ERA) based on a set of broad criteria.	Parties make access agreements which must be consistent with NSW Rail Access Undertaking (RAU). IPART assesses each arrangement for compliance with RAU and conducts annual assessments to ensure compliance.	Negotiate/arbitrate framework with both voluntary and mandatory undertakings. Declared services (that satisfy the relevant criteria) can be required to participate in a mandatory undertaking process for consideration and approval.	Declared rail managers must have access arrangements assessed and approved by the ESCV. Arrangements must be consistent with the ESCV’s pricing methodology, account keeping rules, ring fencing rules, capacity use rules,

⁴⁴ Sources: PwC Consulting, [Review of rail access regimes for Department of Infrastructure, Regional Development and Cities](#), May 2018, Figure 3; and Petersen, Bull & Dermody, *Access Regulation in Australia*, Lawbook Co, 2016.

⁴⁵ Certified as effective State regime under Part IIIA of the *Competition and Consumer Act 2010* (Cth) which requires consistency with principles set out in clause 6 of the Competition Principles Agreement; and objects of Part IIIA.

	National	South Australia	Western Australia	New South Wales	Queensland	Victoria
	Undertakings can cover terms of access, capacity management, dispute resolution, pricing, and so on.	with access seekers and provide information. ESCOSA guidelines shape access agreements and arbitration. ESCOSA is responsible for monitoring and enforcing the regime.		RAU provides for right of access; method of negotiation for access; matters to be addressed in access agreements; pricing principles; arbitration of disputes; and information requirements.	QCA approves undertakings and enforces compliance. The regime provides for a negotiating framework, information requirements, pricing principles, capacity management rules and network planning provisions. QCA may arbitrate disputes and make access determination.	network management rules, negotiation guidelines information requirements, and the passenger priority principle. ⁴⁶ The regime has a dispute resolution mechanism in which the ESCV is a last-resort arbitrator.
Access charges	ARTC's undertakings set floor and ceiling revenue limits, and prices for reference services. The ACCC checks that these are consistent with pricing principles in NAR. For the Interstate network, actual prices are between floor and ceiling. For the Hunter Valley network, actual prices are at ceiling, with process to reimburse any under/ or over recovery after end of year.	Charges are determined by commercial negotiation. Access charges are only set (within floor and ceiling limits based on costs) in the event of an arbitrated dispute. DORC is used to value the initial asset base. Tarcoola–Darwin regime may base the ceiling on 'competitive sustainable price' if there is a competitive alternative to rail.	Charges are determined by commercial negotiation, within floor and ceiling limits set by ERA. ERA is not required to establish a reference tariff. Ceiling cost is based on Gross Replacement Value (GRV) method of valuing the rail assets (currently under review, possible change to more prescriptive DORC-based approach). GRV sets the widest reasonable range for floor and ceiling costs.	Pricing principles in RAU provide for floor and ceiling revenue, with initial asset base using DORC, then rolled forward.	Charges are determined by commercial negotiation within pricing principles set out in an undertaking. Access undertakings can include reference tariffs, which assists in negotiation of access charges. More detailed principles are in undertaking.	Access charges are subject to revenue cap regulation. Access arrangements must conform to a Government Pricing Order, which prescribes the pricing principles

⁴⁶ ESCV reviewed the regime in February 2010, and recommended a lighter-handed regime with negotiate/arbitrate approach. Responsibility was transferred from ESCV to the Victorian Department of Transport in 2018 but we have no information on any change in approach.