



27 March 2024

Mike Smart

Chief Economist
Independent Pricing and Regulatory Tribunal
Level 16, 2-24 Rawson Place
Sydney NSW 2000

Email: mike_smart@ipart.nsw.gov.au

Dear Mr Smart

Re: IPART Information Paper on Estimating the Direct Cost of Rail Access

The Transport Asset Holding Entity of New South Wales (TAHE) welcomes the opportunity to provide comment on the Independent Pricing and Regulatory Tribunal's (IPART) January 2024 Information Paper "Estimating the Direct Cost of Rail Access" (**Information Paper**).

The NSW Rail Access Undertaking (**Undertaking**) includes a floor test which sets the minimum rail access price at the direct cost of rail access, where the direct cost is the "efficient forward-looking costs which vary with the use of a single operator within a 12-month period". Establishing direct cost is an important exercise to understand the potential threshold for where cross subsidies would arise. In its regulatory submissions to IPART TAHE seeks to accurately assess its direct costs.

The Information Paper puts forward IPART analysis which estimates the direct costs for coal trains (in dollars per gross tonne kilometre (**gtk**)) based on historical information from Queensland and NSW coal networks. IPART states that this work establishes a plausible range for direct costs (measured in gtk) that could be used for the Undertaking floor test.

TAHE understands the Information Paper is an exercise to benchmark the efficient direct cost of rail access for rail networks subject to the Undertaking. The benchmarks put forward in the Information Paper could potentially be used in future compliance processes. Any additional guidance IPART could provide on how it intends to use this direct cost analysis will assist TAHE in ensuring ongoing compliance with the Undertaking.

TAHE's specific comments on elements of the Information Paper are set out below.

Clarity on terminology

The Information Paper uses the terminology "direct cost" but also uses "incremental cost" and states that the "incremental maintenance cost is the direct cost of usage"¹. These two concepts, while forming the two limbs of the floor test within the Undertaking, have distinct definitions and uses. The

¹ IPART Information Paper Estimating the Direct Cost of Rail Access p 2.



Undertaking requires for revenues to at least meet direct cost. The Undertaking has an objective that full incremental cost to be met.²

TAHE is seeking that “direct cost” and “incremental cost” terminology is used consistently and that this terminology clearly reflects the costs IPART is estimating.

Coal rail network costs are not appropriate benchmarks for passenger networks

The Information Paper has posed the question on the appropriateness of the use of coal networks as a comparator:

5. Is the use of coal railway maintenance costs suitable for estimating the floor price for other types of railways (including lighter axle-load freight trains or passenger trains)?³

The IPART analysis is based on coal network costs (expressed in dollars per gtk). IPART states that this work establishes a plausible range for direct costs (measured in gtk) that could be used for the Undertaking floor test.⁴ This floor test is applied to passenger networks and freight networks that carry grain and general freight. As noted above, it should be clear which limb of the floor test IPART is considering here.

TAHE considers the weaknesses of using coal network costs to estimate non-coal network costs would need to be recognised prior to drawing any conclusions on whether floor tests are met or the efficiency of those direct costs.

Coal rail networks and passenger networks have different service standards and cost drivers. Comparator coal rail networks are a typically linear networks carrying a heavy, inanimate commodity from 40 to 50 origin mines, served by up to several large trains a day, to several port destinations. In contrast, the Sydney metropolitan passenger network carries one million passengers a day to and from approximately 170 passenger stations across a complex network in a built-up area where, in peak times, many of these stations are served by numerous trains an hour. When compared to passenger networks comparator coal networks have lower track standards, less costly signalling. Less costly track inspections and slower response times.⁵

In addition, the use of tonnes as part of the base measure may be problematic. For example, the cost comparator used by IPART, the Queensland coal rail network, is a narrow-gauge network that moves approximately 220 million tonnes of coal a year and is designed and operated to transport tonnes of coal. The Sydney passenger network is a standard-gauge network that transports approximately 253 million passengers a year. This network is designed and operated to move individual passengers safely rather than transport tonnes of a commodity. Using tonnes as a component of the base measure of costs in these comparisons would be expected to skew towards the system designed to move tonnes rather than passengers.

In considering the issue of direct costs in this context it should be recognised that direct costs are defined in the Undertaking⁶ as

efficient, forward-looking costs which vary with the usage of a single operator within a 12 month period, plus a levellised charge for variable MPM costs ...

² NSW Rail Access Undertaking Schedule 3 pricing principles 1 a).

³ IPART Information paper Estimating the direct cost of rail access p 3.

⁴ NSW Rail Access Undertaking Schedule 3 pricing principles 1 a).

⁵ IPART has previously identified these differences. See for example IPART Final Decision on RailCorp Compliance with the Undertaking 2011/12 and 2012/13 p 6.

⁶ NSW Rail Access Undertaking Schedule 3 pricing principles 2.1.

Using this “single operator” concept it seems plausible that if TAHE did not have to provide access to Sydney Trains, then arguably the network’s forward-looking costs and variable MPM would decrease by a greater proportionate amount than if a coal network did not have to provide access to one coal operator.

TAHE’s 2022-23 compliance report uses actual expenditure for direct cost for the Metropolitan Passenger Network and Country Regional Network but uses a benchmark cost for the Hunter Valley Coal Network, Northern Sydney Rail Corridor, and the Metropolitan Rail Network Freight. TAHE is seeking further information on whether IPART is seeking to update the benchmarks for these three freight networks. This information will assist TAHE in ensuring ongoing compliance with the Undertaking.

TAHE notes that the IPART Draft Report on the TAHE Compliance with the NSW Rail Access Undertaking 2022-23 refers to the TAHE direct costs of at \$5.14 per thousand gtk for the Metropolitan Passenger Network as “an apparent over-estimate”.⁷ The direct costs for the Metropolitan Passenger Network were based on TAHE corporate costs and variable major periodic maintenance. This is higher than IPART’s direct cost estimate of \$0.77 to \$1.18 per thousand gtk based on coal railways. However, TAHE considers that the substantial differences between the MPN and the comparators as described above could reasonably explain this difference.

Overall, the differences between passenger networks and coal networks are material, and the safety requirements and complexity of passenger networks mean that costs between the two types of networks are justifiably different. Passenger network costs are not driven by tonnages moved but by safe passenger movements.

The coal networks are, therefore, not ideal comparators of passenger networks and lighter axle load freight networks given their different transport tasks, different locations (regional vs urban), different requirements for safety and different levels of network congestion and complexity.

Additional data studies and sources

The data used in the IPART analysis is sourced from:

- » the Queensland Rail 2000 access undertaking for its central Queensland coal network
- » regulatory reports for the Hunter valley network submitted by Australian Rail Track Corporation (**ARTC**) to the Australian Competition and Consumer commission (**ACCC**)
- » regulatory reports the central Queensland networks submitted by Aurizon networks to the Queensland Competition Authority for years between 2018 and 2021.

The Information Paper has posed two questions on this data:⁸

IPART Question 1. Are there any other studies of rail direct cost that you are aware of that we should take into account?

IPART Question 4. Are you aware of any additional data that could be used to improve the regression analysis?

⁷ IPART Draft Report on the TAHE Compliance with the NSW RAU 2022-23 p 13.

⁸ IPART Information paper Estimating the direct cost of rail access p 2 and p 3.

TAHE notes that several Australian economic regulators have undertaken assessments of floor costs and / or incremental costs of metropolitan and general freight rail networks. These include:

- » Economic Regulation Authority of Western Australia has undertaken determinations of the Perth Public Transport Authority Floor and Ceiling Costs in 2004 and 2009.⁹ (These determinations focus on total cost amounts rather than a cost per usage variable. The submissions include information on train kilometres as a variable)
- » Essential Services Commission of Victoria has undertaken a determination of Metro Trains Melbourne access charges in 2011.¹⁰ and sets freight access prices at incremental costs. A consultancy report attached to this final determination includes calculations of floor prices for freight services per gtk on the metropolitan network.
- » Essential Services Commission of Victoria has undertaken a determination of V/Line (the Victorian regional rail network) access charges in 2012.¹¹ Consultancy reports attached to this final determination includes calculations of incremental operations costs and incremental maintenance costs per gtk for freight services on the regional network.
- » ACCC has undertaken a determination on the ARTC interstate network access charges. This determination contains details of ARTC floor costs¹² (where the ACCC position is that the floor is the costs that would be avoided if the rail segment was removed from the network, not the cost of operating an additional train on the segment).¹³

In this determination there is also a discussion of reference benchmarks for operations and maintenance costs.¹⁴ For example, efficient cost benchmarks for maintenance excluding overheads are \$1.72 to \$3.18 per thousand gtk. This discussion also notes that QCA estimates of costs are lower other benchmark costs as they exclude major periodic maintenance and are costs for narrow gauge lines.

ARTC has also published unit cost calculations for the ARTC interstate network, including a 2014-15 unit infrastructure maintenance cost of \$1.65 per thousand GTK.¹⁵

In addition to the data sources listed above TAHE notes there is further information available on coal rail network costs in Australia. This includes information from regulatory pricing reviews by the Queensland Competition Authority on the Aurizon owned central Queensland coal networks and the Queensland Rail owned West Moreton coal network and by the ACCC on the ARTC Hunter Valley coal network.¹⁶ This

⁹ These ERAWA submissions and determinations can be found at: <https://www.erawa.com.au/rail/rail-access/urban-network/total-and-incremental-costs>

¹⁰ The ESCV Metro Trains Melbourne Final Determination 2011 can be found at: <https://www.esc.vic.gov.au/sites/default/files/documents/77893996-d7c4-44cf-adb3-ccc61b9dfb27.pdf>

¹¹ ESCV V/Line Final Determination 2012 This can be found at: <https://www.esc.vic.gov.au/sites/default/files/documents/0e5205f7-1572-4d0c-8f75-b91b21d3d019.pdf>

¹² ACCC Final Decision ARTC Access Undertaking Interstate Rail Network July 2008 Appendix B Draft Decision pp103-106. This can be found at:

<https://www.accc.gov.au/system/files/ACCC%20final%20decision%20on%20the%20ARTC%20Interstate%20Rail%20Access%20Undertaking.pdf?ref=0&download=y>

¹³ The ACCC rationale for this position is at ACCC Final Decision ARTC Access Undertaking Interstate Rail Network July 2008 Appendix B Draft Decision p xvi, pp. 139-140.

¹⁴ ACCC Final Decision ARTC Access Undertaking Interstate Rail Network July 2008 P Appendix B Draft Decision pp. 172-177.

¹⁵ Information on ARTC interstate KPIs including 2014-15 unit costs are at:

<https://www.artc.com.au/customers/access/access-interstate/performance-indicators/reporting/>

¹⁶ Information on ARTC Hunter Valley KPIs including unit costs from 2012 to 2018 are at:

<https://www.artc.com.au/customers/access/access-hunter-valley/performance-indicators/>

may be relevant given the regression modelling by IPART only uses 2018-2021 data from ARTC and Aurizon coal networks.

TAHE considers these data sources potentially broaden the data set and provide additional cost data for IPART to investigate and consider whether they could be incorporated into the regression analysis. This data and cost information is publicly available and has been subject to scrutiny by economic regulators.

In identifying the data sources above TAHE is not necessarily advocating these as valid comparators to the TAHE networks. Furthermore, TAHE recognises that these sources are not recent examples. TAHE is seeking to bring these data sources to IPART's attention so that IPART analysis is based on a potentially larger sample of data. In bringing this data to IPART's attention TAHE notes that interstate metropolitan networks are more likely than coal networks to share characteristics with the TAHE metropolitan network.

The Information Paper has posed a question on the need to adjust historical data, namely:

IPART Question 2. If we were to use the QCA estimates from 2000, what adjustments should be made for movements in the relevant cost indices and any advances in rail maintenance technology since then?

TAHE notes that this QCA data is now 24 years old and is unlikely to reflect two decades of inflation¹⁷ as well as two decades of changes in technology, regulations, rail operations, network ownership¹⁸ and business practices. TAHE considers that there are substantial risks in using small samples of historical data and then applying the results from this data to current estimates and activities. TAHE considers that using recent data is preferable to using historic data but recognises that there are only a limited number of recent data sources.

IPART regression modelling

In the Information Paper, IPART undertakes regression analysis to derive new estimates of the direct cost rate. This work relied on regulatory reports submitted by ARTC to the ACCC and by Aurizon networks to the QCA for years between 2018 and 2021. There were four different networks in Queensland for the 2021 financial year, and two different networks in the NSW Hunter Valley for each of the calendar years 2018-2020. Each network-year combination was treated as a separate data point. The data consisted of traffic levels (gtk), track length, and maintenance costs including major periodic maintenance.

The Information Paper has posed a question regarding the interpretation of the paper's regression results, namely:

IPART Question 6. Do you agree with our interpretation of the regression results?

The IPART regression analysis methodology appears to be reasonable. TAHE's primary concern with the analysis is the appropriateness of the data for use in costing non-coal networks, the small number of data points, and the fact that an outlier point has been removed, further reducing the number of data points.

¹⁷ The CPI increase from 2000 to 2024 is approximately 85%-90% depending on the dates and indices selected.

¹⁸ The central Queensland coal network was privatised in 2010.

Alternative approaches

The Information Paper has posed the question on whether alternative methods of establishing direct cost exist:¹⁹

IPART Question 3. Can you suggest any alternative methods of establishing the direct cost, apart from the regression approach outlined in this information paper?

TAHE considers that as an alternative to using comparator benchmark costs or derived costs based on regression analysis for the passenger network is to use TAHE's actual direct costs as currently adopted in our compliance submissions. Setting a floor price on benchmark or derived cost estimates based on small or inappropriate sample data could theoretically allow for prices that are below actual direct costs.

The appropriateness of using the passenger network's actual costs may depend on the intended use of the outputs from the Information Paper. If IPART intends to confirm access revenue is above direct costs for the purpose of assessing the floor test, then using actual direct costs should be a reasonable (and low cost) approach to confirming this test is met. However, if IPART is seeking to undertake a broader analysis of TAHE (and TAHE's agents) costs then some form of efficient cost benchmark is required, including efficient direct cost benchmarks which can be compared to TAHE's actual direct costs.

TAHE's contact for this submission is Stuart Ronan, Senior Manager Regulatory, who is available to discuss further on [REDACTED]

Yours sincerely,

[REDACTED]

Chris Stewart

Head of Pricing and Regulation
Transport Asset Holding Entity

¹⁹ IPART Information paper Estimating the direct cost of rail access p 3.