Attachment 7: HoustonKemp's Independent Expert Report on Price Differentiation

DAU2 Price differentiation

A Final report for Queensland Rail

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HoustonKemp.com

Report authors

Greg Houston

Dr Tim Kuypers

Martin Chow

Contact Us

Sydney
Level 40
161 Castlereagh Street
Sydney NSW 2000

Phone: +61 2 8880 4800

Singapore
8 Marina View
#15-10 Asia Square Tower 1
Singapore 018960

Phone: +65 6817 5010

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Executive Summary

Queensland Rail's present, Queensland Competition Authority (QCA) approved Access Undertaking (AU1) expires on 30 June 2020. The QCA has requested Queensland Rail submit a draft access undertaking (DAU2) that, if approved. would become AU2, and replace AU1 from 1 July 2020

In both DAU2 and its separately developed Access Framework,[1] Queensland Rail is proposing to adopt the pricing differentiation framework from ARTC's Interstate Access Undertaking. In the DAU2 and Access Framework approach there are a number of factors to which Queensland Rail can have regard to when setting prices; namely the characteristics of the service plus the commercial and logistical impacts on Queensland Rail business. Adoption of the ARTC pricing principles by Queensland Rail would provide an increased ability for price differentiation than the current AU1.

We have assessed the revised price differentiation approach in DAU2 by reference to whether it promotes the objectives of the QCA Act, being the foundational reference point for decisions made by the QCA. These objectives include the promotion of:

- the three dimensions of economic efficiency – allocative efficiency, productive efficiency and dynamic efficiency;
- competition in upstream and downstream markets; and
- protection of the interests of Queensland Rail, existing access holders, and potential access seekers.

Similar criteria apply to decisions made by the ACCC in its reviews of proposed access undertakings. The ACCC has approved ARTC's approach to price differentiation (being adopted by Queensland Rail) as efficiency enhancing.

In our opinion, the proposed price differentiation arrangements under DAU2 and the Access Framework better promote economic efficiency and the QCA's objectives under the QCA Act than AU1. This is because the proposed arrangements:

- improve allocative efficiency by providing more refined pricing signals;
- allow for a more efficient recovery of fixed costs and potentially for increases in network usage;
- allow Queensland Rail more flexibility in negotiations so that, for example, lower access prices can be offered to encourage modal shift from road; and
- competition concerns around price differentiation are not relevant to Queensland Rail since it is not vertically integrated and the floor and ceiling price controls remain in place.

[1] Queensland Rail, draft Access Framework, 18 June 2018, available at: www.qca.org.au/getattachment/d8f71dec-445d-49ab-986d-33bcc30aa668/Queensland-Rail-Proposed-New-Access-Framework.aspx

1. Introduction

The Queensland Competition Authority (the QCA) regulates third party access to certain infrastructure in Queensland, including Queensland Rail's network. Potential access seekers have the right to seek access to Queensland Rail's network under the terms and conditions approved by the QCA.

The access regime for Queensland Rail's network reflects a negotiate-arbitrate framework, under which Queensland Rail and access seekers are encouraged to negotiate on price and non-price terms, with a third-party arbitrator being used to settle disputes when those terms cannot be agreed.

To facilitate the negotiations, Queensland Rail is required to prepare an access undertaking, which sets out, among other things:

- the process for seeking access;
- the pricing rules for determining access charges;
- reporting obligations and dispute resolution; and
- a standard access agreement.

The QCA is responsible for approving the access undertaking. The current access undertaking, Access Undertaking 1(AU1), expires on 30 June 2020. In light of its scheduled expiry, the QCA has issued Queensland Rail with an initial undertaking notice, requiring Queensland Rail to submit Draft Access Undertaking 2 (DAU2). DAU2 is due for submission by 31 July 2018 and, once approved by the QCA will become AU2 and be effective from 1 July 2020.

Queensland Rail is required to follow the pricing rules set out in the access undertaking when setting access charges. A key provision in the existing AU1 pricing rules is the limitations on price differentiation for users in the 'same market', which can be presumed to encompass commodities that are sourced from the same geographic region. Queensland Rail is required to set the same access charge for users in the 'same market', except when the risks or costs of providing the service are different.

Queensland Rail has proposed changes to the price differentiation approach to apply in DAU2. We have been engaged to prepare an expert report setting out the economic implications of the pricing rule provisions and evaluating Queensland Rail's proposed approach in DAU2.

The remainder of this report is structured as follows:

- section 2 describes the context and outlines the current and proposed price differentiation provisions; and
- section 3 provides an economic assessment of the current and proposed provisions.

2. Background and context

2.1 Queensland Rail's network

Queensland Rail's network extends 6500 kilometres across Queensland. The rail network is diverse both in its task and use, and includes:

- intermodal and general freight on the North Coast Line;
- bulk minerals on the Mount Isa Line;
- coal on the West Moreton Line; and
- passenger services predominantly in south east Queensland.

Figure 1: Rail networks in Queensland

2.2 Characteristics of Queensland Rail's market and access framework

In contrast to other regulated infrastructure sectors, such as electricity and gas networks and water services, Queensland Rail does not receive sufficient revenue from access charges to recover its costs. With the exception of the Mt Isa System, Queensland Rail's entire network is supported by Transport Services Payments from the Queensland government. Without these payments, large parts of Queensland Rail's network would be financially unviable.

One of the reasons that Queensland Rail does not generate sufficient revenue is that it competes with road transport for a material proportion of its freight traffic. In other words, road transport is a viable substitute for rail, particularly for trips involving short to medium distances. It follows that Queensland Rail's ability to set access charges is constrained by the cost of road freight – Queensland Rail cannot charge more than the cost to transport the freight by road, since its users would otherwise switch to road transport.

In contrast to Aurizon, Queensland Rail is not vertically integrated, ie, Queensland Rail does not compete with the freight operators for which it is providing access. This means that concerns inj relation to potential anti-competitive conduct (such as margin squeezes, discriminatory access quality and raising competitors' costs), while potentially relevant for Aurizon, are not a relevant consideration for Queensland Rail.

2.3 Pricing arrangements under AU1

We describe below the existing pricing arrangements applying under AU1.

2.3.1 Reference tariffs on West Moreton and Metropolitan Lines for Coal Traffic

The West Moreton System and the Metropolitan System are the only two rail systems on Queensland Rail's network that have a reference tariff. The reference tariff applies to coal haulage services and acts as price cap for a reference service. It is a two-part tariff, comprising:

- a per train path charge; and
- a GTK-based charge.

The reference tariff is calculated so that Queensland Rail can recover the ceiling revenue limit and is the price that is currently paid by coal services.

2.3.2 Pricing rules that apply to non-coal Traffic

Queensland Rail does not have a reference tariff for non-coal services (and coal services on systems other than West Moreton and Metropolitan). Rather, Queensland Rail is required to comply with a set of pricing principles, which we set out below in their order of precedence:

- limits on price differentiation - the prices for train services in the same geographical area transporting the same commodity can only vary as a result of differences in Queensland Rail's costs or risk of providing access (Appendix 1 sets out the actual clause);
- price limits - access revenue needs to fall within:
  - a ceiling limit, which reflects the efficient cost of providing the service; and
  - a floor limit, which reflects the incremental cost of providing access;
- network utilisation - where Queensland Rail may charge different rates for train services serving different markets to maximise commercial viability; and
- revenue adequacy - access charges and transport service payments should generate revenue that is at least enough to meet efficient cost of providing access, including a return on investment.

The limits on price differentiation are to prevent access providers giving an access seeker or access holder an unfair competitive advantage over its competitors by providing it with preferential treatment in its access agreement, ie, when access seekers and access holders are in the same market. As stated in QCA Act Clause 168c, an access provider:[2]

> must not unfairly differentiate between users of the service in a way that has a material adverse effect on the ability of 1 or more of the users to compete with other users.

However, we noted above that since Queensland Rail is not vertically integrated it has no incentive to differentiate between access seekers and holders in order to favour its own services (because it does not offer any other services that depend on its own access service). Rather, Queensland Rail has an incentive to maximise its profitability or, more correctly, to limit the extent to which it is dependent on government subsidy. Given the fixed cost nature of its rail network, this objective will most readily be achieved by maximising traffic on its network and, more generally, by taking all actions within its power to strengthen competition between its users.

2.4 Proposed approach to price differentiation going forward

In DAU2 Queensland Rail has proposed pricing rules that are the same as those currently adopted in the ARTC's interstate rail access undertaking[3]. Appendix A.1 contains the pricing rules contained in ARTC's access undertaking and the identical terms proposed by Queensland Rail in DAU2.

Queensland Rail has also submitted an Access Framework for assessment in the context of the QCA's declaration review.[4] This sets out the terms and conditions that Queensland Rail will adopt if its network was no longer declared. The approach to price differentiation in the Access Framework is substantially similar to the ARTC's interstate approach, with the detailed drafting contained in Appendix 1.

Under the DAU2 and Access Framework approach, there are a number of factors to which Queensland Rail can have regard to when setting prices; namely characteristics of the service, and commercial and logistical effects on Queensland Rail's business.

The characteristics of the service are defined to include axle load, speed wheel diameter, train length, origin and destination (including the number and length of intermediate stops), departure and arrival times and days of the week.

The commercial effects on Queensland Rail, include:

- the term of the agreement;
- the potential for growth of the business;
- the opportunity cost to Queensland Rail;
- the consumption of Queensland Rail's resources, including capacity;
- the credit risk associated with the business;
- market value of the train path sought;
- the segments of the network for which access is being sought; and
- previously negotiated access charges agreed under the framework, where relevant.

The logistical impact on Queensland Rail, includes:

- the impact on other train services and risk of failure of the relevant operator to perform; and
- reduced capacity and system flexibility.

[2] Queensland Competition Authority Act 1997, current as at 1 March 2017, s 168c

[3] ARTC Interstate Access Undertaking available here https://www.artc.com.au/uploads/IAU-SSFL-Variation-2013.pdf

[4] Queensland Rail, Queensland Rail's draft Access Framework, 18 June 2018, available at: www.qca.org.au/getattachment/d8f71dec-445d-49ab-986d-33bcc30aa668/Queensland-Rail-Proposed-New-Access-Framework.aspx

The limitation on price discrimination contained in clause 4.2 are subject to the relevant pricing factors identified as train characteristics or commercial or logistical impacts on Queensland Rail.

A number of the factors identified in DAU2 as reasons for differentiation could be contended to fall under the DAU1 provision recognising 'cost or risk' differences to Queensland Rail. However, in our opinion the revised approach provides an increased ability to price differentiate. By way of comparison, Queensland Rail's proposed new approach:

- broadens the relevant costs since it explicitly includes as relevant the opportunity cost to Queensland Rail[5] and costs to other users, eg, logistical impact;
- specifically includes in the definition of risk the credit risk of the business and risk of an operator's failure to perform; and
- specifically incorporates other commercial considerations, such as the duration of the agreement, contributions from the access seeker, and the cost of additional capacity.

[5] Which would by definition include the market value of the train path.

3. Economic assessment of price differentiation

In this section we provide an economic assessment of the effect of different degrees of price differentiation.

3.1 QCA's assessment framework

The QCA Act is thefoundational reference point for decisions made by Queensland Competition Authority.

The act requires that the QCA make decisions in a manner that is consistent with the QCA Act. In relation to the approval of access undertakings, the QCA's assessment criteria are:[6]

> (a) promote the economically efficient operation of, use of and investment in, significant infrastructure by which services are provided, with the effect of promoting effective competition in upstream and downstream markets.
>
> (b) the legitimate business interests of the owner or operator of the service
>
> (c) if the owner and operator of the service are different entities – the legitimate business interests of the operator of the service are protected
>
> (d) the public interest, including the public interest in having competition in markets (whether or not in Australia)
>
> (e) the interests of persons who may seek access to the service, including whether adequate provision has been made for compensation if the rights of users of the services are adversely affected
>
> (f) the effect of excluding existing assets for pricing purposes
>
> (g) the pricing principles … that the price should:
>
> a. generate expected revenue for the service that is at least enough to meet the efficient costs of providing access to the service and include a return on investment commensurate with the regulatory and commercial risks involved
>
> b. allow for multi-part pricing and price discrimination where it aids efficiency
>
> c. not allow a related access provider to set terms and conditions that discriminate in favour of the downstream operations of the access provider or a related body corporate of access provider or a related body corporate of the access provider, except to the extent the cost of providing access to other operators is higher; and
>
> d. provide incentives to reduce costs or otherwise improve productivity and
>
> (h) any other issues the authority considers relevant

Efficiency is a key concept underpinning the QCA's assessment criteria. 'Efficiency' is a term of art in economics and is widely accepted by economists as having three distinct dimensions, being: [7]

- **productive efficiency**, ie, production using a least-cost combination of inputs;
- **allocative efficiency**, ie, production of an optimal set of goods and services, which is allocated so as to provide the maximum benefit to society; and

[6] QCA, Queensland Rail's Draft Access Undertaking, June 2016, page vii

[7] For further discussion of the dimensions of efficiency and their relation to public policy see Productivity Commission, *On efficiency and effectiveness – some definitions*, May 2013.

- **dynamic efficiency**, ie achieving productive and allocative efficiency over time, in the face of changes in technology and consumer preferences.

Each of these dimensions of efficiency is reflected in the architecture of the QCA's assessment, particularly criteria (a) and (g). By way of explanation:

- the reference to efficient 'operation of' and 'investment in' significant infrastructure refers to the productive dimension of efficiency, ie, this is promoted if decisions made by the QCA promote the supply of infrastructure services using the least cost combination of both capital and operating inputs;
- the reference to efficient 'use of' significant infrastructure refers to the allocative dimension of efficiency, ie, this is promoted if decisions are made that give rise to a level and structure of prices that both recover the cost of making infrastructure services available and maximise the extent to which infrastructure services are allocated to those consumers that derive the greatest benefit from them without discrimination, so as to maximise the benefit to society; and
- dynamic efficiency is the promotion of productive and allocative efficiency over time, ie, this is promoted if decisions are made that balance the pursuit of productive and allocative efficiencies for current consumers with the requirement to invest for productive and allocative efficiency gains in the long term.

Criterion (a) also makes explicit reference to promoting efficient competition in upstream and downstream markets. QCA decisions should therefore avoid outcomes that may have a detrimental effect on competition outcomes in related upstream and downstream markets.

The final relevant part of QCA's assessment criteria is to protect the interests of the owners and operators, and of potential access seekers. We note that these criteria make no distinction between existing access holders or new access seekers.

3.2 Assessment framework

We have assessed Queensland Rail's proposed revised price differentiation approach by reference to whether it promotes the objectives of the QCA Act identified above, ie, whether it promotes:

- the three dimensions of efficiency;
- competition in upstream and downstream markets; and
- protects the interest of Queensland Rail, existing access holders, and potential access seekers.

3.2.1 ACCC has approved ARTC's price differential approach

We noted above that Queensland Rail's proposed arrangements under DAU2 and the Access Framework are adopted from ARTC's existing access undertaking – where not identical, they are substantially the same. The Australian Competition and Consumer Commission (ACCC) is the relevant regulator for ARTC access arrangements. Queensland Rail and ARTC's market positions are similar in that they are regulated, government owned rail track providers neither of whom are vertically integrated in the rail freight transport market.

The ACCC's assessment framework for ARTC's access undertaking is similar to those used by the QCA, with the ACCC required to take into account:[8]

- the objects of Part IIIA, which 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; and

[8] ACCC, Australian Rail Track Corporation Access Undertaking – Interstate Rail Network Final Decision, July 2008, page 15-16

  - provide a framework and guiding principles to encourage a consistent approach to access regulation in each industry.
- The pricing principles, which are
  - that regulated access prices should:
    - be set so as to generate expected revenue for a regulated service or services that is at least sufficient to meet the efficient costs of providing access to the regulated service or services; and
    - include a return on investment commensurate with the regulatory and commercial risks involved; and
  - that the access price structures should:
    - allow multi-part pricing and price discrimination when it aids efficiency; and
    - not allow a vertically integrated access provider to set terms and conditions that discriminate in favour of its downstream operations, except to the extent that the cost of providing access to other operators is higher; and
  - that access pricing regimes should provide incentives to reduce costs or otherwise improve productivity.
- the legitimate business interests of the service provider;
- the public interest, including the public interest in having competition in markets (whether or not in Australia);
- the interests of the persons who might want access to the service;
- whether the undertaking is in accordance with an access code that applies to the service;
- whether access to the service is already the subject of an access regime that the Commonwealth Minister has decided is an effective regime under s.44N; and
- any other matters that the ACCC thinks relevant.

These requirements are aligned with those the QCA is required to consider under the QCA Act. Given that Queensland Rail has adopted ARTC's pricing principles, it is useful to refer to the ACCC's assessment of ARTC's pricing principles. Appendix A.1 contains the ARTC's pricing principles for setting access charges and limitations on price differentiation.

The ARTC's pricing principles provide ARTC with considerable flexibility on how it can set charges for operators with the same end market and operating in the same region. The ACCC considered that this was appropriate because:[9]

- it allows ARTC to apply different prices for services with different characteristics;
- it is consistent with the pricing principles of allowing price discrimination when it aids efficiency;
- that ARTC could not differentiate between applicants where the services are alike and operating in the same end market; and
- there was no evidence that ARTC has excessive flexibility.

[9] bid, page 48.

The ACCC considered that ARTC's pricing principle would promote economic efficiency, while still maintaining the appropriate price differentiation limitation controls.

3.2.2 Access prices can become more refined under the proposed changes, and so promotes allocative efficiency

Under the arrangements in AU1, Queensland Rail can only price differentiate based on differences in costs and risks of the proposed train service.

The DAU2 arrangements allow Queensland Rail to differentiate between access seekers who seek a higher quality of service, eg, higher quality train paths, or certain access conditions unrelated to cost, eg departures at a certain time. There is currently no meaningful way for Queensland Rail to identify which access users value these attributes the most, or for access seekers to signal this.

The proposed arrangements also broaden the definition of costs and risks to include the wider implications of providing access, eg, Queensland Rail will be able to consider the logistical impact on other users and adjust its prices accordingly.

The proposed arrangements allow Queensland Rail to adjust its access charge based on the characteristics of the service provided, and broader costs and risks. It follows that Queensland Rail can provide an improved price signal to access holders and access seekers, thereby promoting allocative efficiency because users who value a higher quality train path or certain departure or arrival times will be allocated those paths.

3.2.3 Increased ability to price differentiate increases efficiency

A key challenge for Queensland Rail is its inability to recover sufficient revenue to cover its costs, a substantial proportion of which are fixed.

In the absence of increasing returns to scale, textbook efficient pricing requires setting marginal prices equal to marginal costs.[10] However, in the presence of fixed costs, such a pricing approach will mean the service provider will not be able to recover its costs. Prices need to be above marginal cost so that the service provider can recover its fixed cost associated with providing the service.

A typical problem for infrastructure businesses is the recovery of fixed costs in a manner that least distorts the efficient outcomes that would arise under marginal cost pricing. Economic theory suggests that Ramsey pricing principles[11] can be used to guide the appropriate price mark-up over marginal cost. Ramsey pricing principles suggest that user groups that are less sensitive to price increases are charged a higher amount, also known as the inverse elasticity pricing.

This is considered the least distortive for allocative efficiency, since users that are less sensitive to price increases are also less likely to reduce their consumption of the service. It follows that pricing such that these user groups contribute a higher amount of fixed costs helps Queensland Rail recover its costs, while also limiting the inefficiency associated with deviating from marginal cost pricing.

For example, in the North West Minerals Province centred around Mt Isa and Cloncurry, a number of smaller scale mineral projects are choosing an intermodal logistics solution where products are containerised rather than adopting a traditional bulk logistics solution. Intermodal logistics is more contestable by road freight and in recent years road has been successful in winning concentrate haulage business on the Mount Isa to Townsville transport corridor. Intermodal rail haulage is less efficient than bulk haulage because the net tonne of product transported per gross tonne is less. However, under the limits on price differentiation in AU1, Queensland Rail is prevented from differentiating train services with the same commodities in the same

[10] For example, see Darryl Beggar, *Access Pricing and Competition*, 2001, page 1

[11] ibid, page 2

geographic region, even though the bulk freight users are likely to be able to pay more and would then benefit by getting more freight onto rail.

The proposed new arrangements provide Queensland Rail with a greater ability to differentiate between different users, thereby making Ramsey-type pricing approaches possible. This will:

- encourage uptake of rail services as user groups that are more price sensitive are allocated a lower proportion of fixed cost; and
- help Queensland Rail recover its costs as it can allocate a higher proportion of its fixed cost to user groups that are less price sensitive.

The current under-recovery of efficient costs by Queensland Rail leads to allocative inefficiency and the broadened ability to price differentiate may improve efficiency by reducing the subsidy requirement.

Broadening of the ability for Queensland Rail to engage in price differentiation does not present any economic concerns given other aspects of DAU2. Under the existing amd proposed future regulatory framework, Queensland Rail cannot collect access charges that exceed a ceiling that reflects the efficient cost of providing the rail network, including a return on investment that is commensurate with the regulatory and commercial risks involved. The purpose of the ceiling limit is to ensure that Queensland Rail is not able to exercise any form of monopoly power by earning more than the efficient cost of providing the service.

3.2.4 Incorporating other commercial considerations increases Queensland Rail's flexibility in negotiations, and should promote allocative efficiency

DAU2 includes a wide range of factors relevant to price setting including the duration of the contract, and potential growth. In our opinion, these are valid economic reasons to support the inclusion of these factors. For example, there could be justification in offering a lower access charge to encourage users to switch from road to rail. Under current arrangements, Queensland Rail does not have the flexibility to adjust its access price to incorporate these commercial decisions. It follows that increased flexibility would make it more likely that Queensland Rail and a potential access seeker can reach a mutually beneficial agreement, thereby promoting allocative efficiency.

3.2.5 Competition concerns around price differentiation are not relevant for Queensland Rail

The potential for price discrimination can lead to competition concerns, such as where it aids monopoly pricing or can be used to harm competition in downstream markets. However, in Queensland Rail's case the floor and ceiling limitations prevent it from earning returns that would be above the economically efficient level.

In any event, as noted above, Queensland Rail recovers significantly below its ceiling revenue and a change in the price differential rules will not reverse this situation. Further, Queensland Rail is not vertically integrated, so it has no incentive to discriminate between users in a manner that would harm competition in downstream markets. Rather, its incentive is to take all actions within its power to strengthen competition between access holders and potential access seekers. It follows that the broadened ability for Queensland Rail to price discriminate will not give rise to any anti-competitive concerns, but rather is likely to promote competition in upstream and downstream markets.

3.2.6 Conclusion

In our opinion, the proposed arrangements under DAU2 better promote economic efficiency and the QCA's objectives under the QCA Act than the arrangements under AU1. The proposed arrangements under DAU2:

- improve allocative efficiency by providing for more refined pricing signals;
- allow for a more efficient recovery of fixed costs and potential increases in network use;

- allow Queensland Rail more flexibility in negotiations, such as by offering lower access prices to encourage modal shift from road; and
- do not raise any competition concerns, since Queensland Rail remains subject to the floor and ceiling revenue controls and has not interests in any vertically related market.

Appendix 1: Limitations on price differentiation

A1.1 Limitations on price differentiation in AU1

Clause 3.3 In AU1 sets out limitations on price differentiation Queensland Rail is required to follow. In situations where there is no applicable reference tariff, Queensland Rail to follow clause 3.3(b)(ii), which states that:

> if there is no applicable Reference Tariff, the methodology, rates and other inputs for calculating Access Charges for other Access Seekers or Access Holders in respect of Train Services for the same commodity in the same geographical area, on a unit rate basis to reasonably reflect, over time:
>
> (A) differences or changes in the cost or risk to Queensland Rail of providing Access to that Access Seeker for that Train Service compared to the relevant Train Services for those other Access Seekers or Access Holders; and
>
> (B) material limitations on Available Capacity in accordance with clause 3.1.2(b)

A1.2 Proposed limitations on price differentiation in AU2

Queensland Rail has proposed to adopt the price differentiation criteria as those used in ARTC's undertaking. ARTC's undertaking states that:

> In formulating its Charges, ARTC will have regard to a range of factors which impact on its business including, but not limited to, the following:
>
> (a) in particular, the Indicative Access Charges for Indicative Services set out in clause 4.6;
>
> (b) the particular characteristics of the relevant Service, which without limitation include axle load, speed, wheel diameter, Train length, origin and destination (including number and length of intermediate stops), departure and arrival times and days of the week;
>
> (c) the commercial impact on ARTC's business, which without limitation includes factors such as:
>
> (i) the term of the Access Agreement;
>
> (ii) the potential for growth of the business;
>
> (iii) the opportunity costs to ARTC;
>
> (iv) the consumption of ARTC's resources, including Capacity;
>
> (v) the credit risk associated with the business;
>
> (vi) the market value of the Train Path sought;
>
> (vii) the Segments of the Network relevant to the Access being sought; and
>
> (viii) previously negotiated Charges agreed under the terms of this Undertaking, where relevant, as published by ARTC as set out in clause 2.7(b);
>
> (d) logistical impacts on ARTC's business which without limitation include:
>
> (i) the impact on other Services and risk of failure of the Operator to perform; and
>
> (ii) reduced Capacity and system flexibility;
>
> (e) capital or other contributions by the Applicant to ARTC's costs; and

(f) the cost of any Additional Capacity.

For the purpose of Clause 4.2 (c)(iv), ARTC will have regard to the predominant usage of the Network being for Indicative Services to which Indicative Access Charges apply. ARTC will also recognise that investment in the development of the Network is primarily to improve utilisation and performance of Indicative Services. As such, Capacity consumption in relation to Trains operating with characteristics other than that of Indicative Services will be determined having regard to the Capacity consumption of Indicative Services on a Network utilised by Indicative Services.

Clause 4.3 in ARTC's undertaking sets outs limitations on price differentiation. It states that:

(a) Subject to Clause 4.2 above, in formulating its Charges, and subject to ARTC having an obligation under Clause 2.3 of the Indicative Access Agreement, ARTC will not have regard to:

(i) the identity of the Applicant; and

(ii) whether or not the Applicant is a Government Authority.

(b) Subject to Clause 4.2 above, in formulating its Charges, ARTC will not differentiate between Applicants in circumstances where:

(i) the characteristics of the Services are alike; and

(ii) the Applicants are operating within the same end market.

For the purposes of this clause, ARTC will determine whether the characteristics of two Services are alike having regard to matters including but without limitation location, duration and quality of the Train Path, nature of Train consist, characteristics of the Service, longevity of Access, arrival and departure times of the day and week.

A1.3 Proposed limitations on price differentiation in the national access framework

Clause 3.3.1 sets out the range of factors that Queensland Rail will have regard to when setting access charges. It states that:

In formulating Access Charges, Queensland Rail will have regard to a range of factors which impact on its business, including the following:

(i) the initial estimate of the Access Charges for the requested Access Rights as included in an Indicative Access Proposal;

(ii) the particular characteristics of the relevant Train Service which include axle load, speed, wheel diameter, Train length, origin and destination (including number and length of intermediate stops), departure and arrival times and days of the week;

(iii) the commercial impact on Queensland Rail's business, which includes factors such as:

(A) the terms of the Access Agreement;

(B) the potential for growth of the business;

(C) the opportunity costs to Queensland Rail;

(D) the consumption of Queensland Rail's resources, including Capacity;

(E) the credit risk associated with the business;

(F) the market value of the Train Path sought;

(G) the part of the Network relevant to the Access being sought; and

(H) previously negotiated Access Charges agreed under the Framework, where relevant;

(iv) logistical impacts on Queensland Rail's business, including:

(A) the impact on other Train Services and risk of failure of the relevant Rolling Stock Operator to perform; and

(B) reduced Capacity and system flexibility;

(v) capital or other contributions by the Access Seeker to Queensland Rail's costs; and

(vi) the cost of any Additional Capacity

Clause 3.3.2 in the draft access framework sets out Queensland Rail's proposed approach to limitations on price differentiation. It states that

(a) Subject to clause 3.3.1 and Queensland Rail's Passenger Priority Obligations, in formulating Access Charges Queensland Rail will not have regard to the identity of the Access Seeker

(b) Subject to clause 3.3.1, in formulating Access Charges Queensland Rail will not differentiate between Access Seekers in circumstances where:

(i) the characteristics of the Train Services are alike; and

(ii) the Access Seekers are operating in the same end market.

(c) For the purpose of clause 3.3.2(b), Queensland Rail will determine whether the characteristics of the Train Services are alike having regard to matters including:

(i) location;

(ii) duration and quality of the Train Path;

(iii) nature of Train consist;

(iv) characteristics of the Train Service;

(v) longevity of Access; and

(vi) arrival and departure times of the day and week.

HOUSTONKEMP
Economists

Sydney
Level 40
161 Castlereagh Street
Sydney NSW 2000

Phone: +61 2 8880 4800

Singapore
8 Marina View
#15-10 Asia Square Tower 1
Singapore 018960

Phone: +65 6817 5010