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# Does Queensland Rail's network satisfy criterion (a)?

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A report for Queensland Rail

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## Executive Summary

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The Queensland Competition Authority's (QCA) draft recommendations in its review of the declaration of Queensland Rail's network services recommended that three services on Queensland Rail's network be declared for a period of 15 years – namely, the North Coast line and Metropolitan system services, the Mount Isa line service, and the West Moreton and Metropolitan systems services.

We have been asked by Queensland Rail:

- to review the QCA's criterion (a) assessment of the rail services it has recommended should be declared; and
- to reassess whether these rail services satisfy criterion (a).

The QCA Act defines criterion (a) as:<sup>1</sup>

access (or increased access) to the service, on reasonable terms and conditions, as a result of a declaration of the service would promote a material increase in competition in at least 1 market (whether or not in Australia), other than the market for the service

An assessment of criterion (a) requires a comparison of two states of the world, being those with and without declaration.

In order to assess the QCA conclusions on criterion (a) it is useful to explore three economic concepts that are integral to the QCA's conclusions on whether the individual systems meet criterion (a).

### Queensland Rail and market power

Queensland Rail is not vertically integrated and has spare capacity. An important consequence of this spare capacity, in combination with competitive constraints imposed by road haulage charges, is that Queensland Rail has strong economic incentives (irrespective of its declaration status) to maximise utilisation on its network. This is because any user that can be charged a positive margin over the incremental cost of using the network represents a contribution to Queensland Rail's substantial fixed cost base, even if it remains untenable to charge the long run economic cost of use to any access seekers.

Queensland Rail lacks market power. This is evident because:

- its revenue is far below its total cost for all of its systems, other than the West Moreton system;
- it requires significant government funding to remain financially viable; and
- it has been losing market share to competition from road transport.

Queensland Rail does not gain market power by virtue of becoming undeclared. In other words, Queensland Rail would not earn a level of revenue that is anywhere close to its cost of providing the service with or without declaration. The access prices Queensland Rail charge will remain essentially the same with or without declaration because its charges are not constrained by regulation. It follows that it is market factors – such as competition from road, countervailing power and customers' ability to pay – that constrain Queensland Rail's ability to charge for services and these factors do not change, with or without declaration.

The same market factors that restrict Queensland Rail's ability to increase prices would also restrict its ability to impose unreasonable terms and conditions. Put another way, Queensland Rail has an incentive to provide reasonable terms and conditions to its customers because to do so would help retain existing customers and

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<sup>1</sup> Queensland Competition Authority Act 1997, Part 5, Section 76(2)(a)

attract new customers, thereby reducing the economic loss it would make, regardless of Queensland Rail's declaration status.

### Hold-up problem

The so called hold-up problem is a key reason cited by the QCA for some of Queensland Rail's systems being said to satisfy criterion (a). The QCA notes that Queensland Rail has an incentive to encourage use of its network, given that there is significant spare capacity. However, it contends that once Queensland Rail has attracted access seekers to use its network, it then has an incentive and ability (absent declaration) to raise its access prices significantly.

The QCA's assessment of the hold-up problem implicitly assumes that there are only ever two rounds of engagement between Queensland Rail and its customers, ie, a 'first round' where an access seeker decides whether to invest and a 'second round' where Queensland Rail would then increase access prices. In practice, rail networks very have long asset lives and, over life of any of its assets, there will be multiple rounds of negotiations with multiple different customers. Queensland Rail is involved in multiple round interactions with its customers, and has no incentive to engage in hold-up activity.

If Queensland Rail did hold up its customers, existing and future customers would rightly expect this to be repeated in any subsequent negotiations and, as the QCA notes, would likely reduce entry of new users and undermine investment incentives of existing users. This would then put the long run sustainability of the network at significant risk as access seekers are discouraged from using Queensland Rail's network. It is in Queensland Rail interests, particularly in the situation where Queensland Rail has significant spare capacity, to maximise network usage and avoid the hold-up problem.

It is also important to note that the existing regulatory framework does not prevent Queensland Rail from increasing prices in the 'second round' of interaction with its customers. Since the revenue Queensland Rail collects is not at the ceiling, the existing pricing principles do not stop it from increasing access prices when contracts are renegotiated.

### Reverse cellophane fallacy

The process of market definition is vulnerable to incorrect conclusions whenever a small but significant non-transitory increase in price (SSNIP) analysis is at risk of the reverse cellophane fallacy (or, alternatively, the cellophane fallacy in its usual form). The reverse cellophane fallacy arises whenever a SSNIP test is applied to subsidised or regulated prices, rather than prices that would occur in a workably competitive market. The reverse cellophane fallacy causes a market definition in such circumstances to be too narrow, ie, it underestimates the competitive constraint imposed by road.

### Our assessment of criterion (a) – without considering Queensland Rail's Access Framework

We set out below our assessment of whether Queensland Rail's network satisfies criterion (a) without considering Queensland Rail's Access Framework. In other words, we assess Queensland Rail's incentive and ability to exercise market power without declaration, and whether this would have a material effect on competition in a related market.

#### Mount Isa Service

There are a number of problems with the QCA's analysis that concludes criterion (a) is satisfied, namely:

- the QCA underestimates the constraints placed on the Mount Isa system by road transport;
- the QCA relies on a flawed interpretation of the hold-up problem; and
- the QCA claims that freight costs are a material component of the overall decision-making process for a firm seeking to enter into a dependent mineral market – below rail access prices are less than one per cent of commodity prices for many bulk products such as copper, zinc and lead.

Our analysis shows that the volumes and access prices on the Mount Isa system will be the same with or without declaration. This is because Queensland Rail has the incentive to maximise volume due to spare capacity and that access prices are not constrained by regulation. There is no basis on which to expect access prices to change without declaration.

Given no change in access prices or change in the volumes transported on the Mount Isa system, the structure and conduct of firms in the dependent markets would not be affected by declaration. For example, the likelihood of entry in any of these commodity markets is not affected by declaration. We conclude that criterion (a) is not satisfied, even without considering the impact of Queensland Rail's Access Framework.

#### North Coast line Service

There are a number of problems with the QCA's analysis that determining criterion (a) is satisfied, namely:

- the QCA underestimates the constraints placed on rail by road on the North Coast line, and
- the QCA relies on a flawed interpretation of the hold-up problem.

Our analysis shows that the volumes and access prices on the North Coast line will be the same with or without declaration. This is because Queensland Rail has the incentive to maximise volume due to spare capacity and that the access prices are not constrained by regulation. Again, there is not basis on which to expect access prices to change without regulation.

Given no change in access prices or in the volumes transported on the North Coast line, the structure and conduct of firms in the dependent markets would not be affected by declaration. For example, the likelihood of entry in any of these commodity markets is not affected by declaration. We conclude that criterion (a) is not satisfied, even without considering the impact of Queensland Rail's Access Framework.

#### West Moreton and Metropolitan Line Service

There is significant uncertainty in relation to the tonnage of coal haulage that will use the West Moreton system over the next five years, ranging from 2 million tonnes per annum (mtpa) if New Acland stage 3 does not proceed to 9 mtpa if it does.

In the low tonnage scenario, there will be significant spare capacity on the West Moreton line and so Queensland Rail will have strong incentives:

- to negotiate a price that results in maximum usage of its network;
- to recover the largest possible proportion of its total economic costs, given the circumstances; and
- to promote competition in dependent markets by any means possible.

In this circumstance, we conclude that the volumes and access prices on the West Moreton system will be the same in the low tonnage scenario with or without declaration. Given no change in access prices or change in the volumes transported, the structure and conduct of firms in the dependent markets would not be affected by declaration. For example, the likelihood of entry in any of these commodity markets is not affected by declaration. It follows that criterion (a) is not satisfied, even without taking account the impact of Queensland Rail's Access Framework.

In the high tonnage scenario, Queensland Rail would most likely be able to earn a level of revenue that is above the regulated ceiling, if it was to become undeclared. Whether this means the West Moreton system would satisfy criterion (a) is unclear – for example would any price increase be enough to affect the volume of coal output in the region? However, any such uncertainty is resolved by the application of the price controls in the Access Framework so that, as discussed below, criterion (a) is not satisfied.

### Our assessment of criterion (a) – with Queensland Rail's Access Framework

In its draft decision the QCA considered that the Access Framework was not an appropriate alternative scenario, ie, the QCA did not consider it relevant when considering the world without declaration. The QCA stated that the Access Framework had not been executed and there was no evidence that it would come into force on the expiry of declaration. We have been asked to assume that the deed poll that gives effect to the Access Framework will be executed in March 2019. The Access Framework will therefore apply from 9 September 2020 and continue to apply to access for the purpose of operating a train service on one or more of the North Coast line, Mount Isa system, West Moreton system and/or Metropolitan system, where that train service is not a declared service.

It follows that, absent declaration Queensland Rail will put in place a legally binding, enforceable Access Framework that is substantially similar to the current access undertaking, AU1. We conclude that, given the similarities between the Access Framework and current regulation, there will be no difference in market outcomes with and without declaration. As such, criterion (a) will not be satisfied for any of the Queensland Rail services.

### Conclusions

Even without the Access Framework, Queensland Rail does not have the ability or incentive to increase access prices or impose unreasonable terms and conditions on all of its rail systems, except perhaps for West Moreton under the high tonnage scenario. It follows that access charges and access terms and conditions will not change if Queensland Rail becomes undeclared, and so criterion (a) is not satisfied.

The similarities between the Access Framework and the current regulatory arrangements mean that there will be no difference in market outcomes between the world with and without declaration. Criterion (a) will therefore not be satisfied for any of the Queensland Rail services, including the West Moreton system.

# 1. Introduction

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The QCA released its draft recommendations in relation to declaration of the Aurizon Network service, the Queensland Rail service and the DBCT service on 18 December 2018.

When deciding whether to recommend declaration of a service, the QCA is required to consider whether four criteria are met, ie:

- criterion (a) – that declaration would promote a material increase in competition in at least one dependent market;
- criterion (b) – that the facility for the service would meet total foreseeable demand at least cost;
- criterion (c) – that the facility for the service is of state significance; and
- criterion (d) – that declaration would promote the public interest.

Queensland Rail's network is comprised of eight individual systems. The QCA has concluded that only parts of the Queensland Rail network meet the declaration criteria, and recommended that four services be declared for a period of 15 years, namely:

- the North Coast Line service;
- the Mount Isa Line service;
- the West Moreton system service; and
- Metropolitan systems service.<sup>2</sup>

The QCA's draft recommendation for Queensland Rail's other systems (the South Western, Western, Central Western System and Tablelands system) is that these services not to be declared on the basis that they do not meet criterion (a) or criterion (d).

We have been asked by Queensland Rail:

- to review the QCA's criterion (a) assessment of the rail services it has recommended should be declared; and
- to reassess whether these rail services satisfy criterion (a).

Our report is structured as follows:

- section 2 describes the QCA's economic analysis of criterion (a);
- section 3 discusses three key economic concepts relevant to the assessment of criterion (a);
- section 4 assesses whether Queensland Rail's rail systems satisfy criterion (a) without assessing the relevance of Queensland Rail's Access Framework; and
- section 5 discusses the impact of Queensland Rail's Access Framework.

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<sup>2</sup> The QCA has declared the Metropolitan system because it provides a link to the Port of Brisbane and Intermodal terminals, and so is an important part of the freight service on the West Moreton system and North Coast line. We note that there is a lack of clarity regarding whether the QCA intends to declare: the entire Metropolitan system; or only the portion of the Metropolitan system that is required by above rail operators in the West Moreton System and the North Coast Line.

## 2. Economic analysis of criterion (a)

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In this section we describe the QCA's economic analysis of criterion (a).

### 2.1 Overview of criterion (a)

The QCA Acts defines criterion (a) as:<sup>3</sup>

access (or increased access) to the service, on reasonable terms and conditions, as a result of a declaration of the service would promote a material increase in competition in at least 1 market (whether or not in Australia), other than the market for the service

Criterion (a) compares two states of the world, ie:

- a state where access to the service is declared; and
- a state with access to the services on terms that would apply if the service was not declared.

Criterion (a) is satisfied if the declared state of the world, relative to the undeclared state of the world, results in a material increase in competition in at least one dependent market.

According to the National Competition Council, the term material increase involves:

an improvement in the opportunities and environment for competition such that competitive outcomes are materially more likely to occur.

The meaning of this being that there is a material increase if the declaration materially promotes competition.

Assessment of criterion (a) requires the QCA's to assess the following key factors:

- the length of the declaration;
- the definition of the market and identification of the relevant dependent markets;
- an assessment of the situation with and without declaration; and
- whether declaration would promote a material increase in competition in another market.

We discuss these factors, the QCA's position, and our assessment in further detail below.

### 2.2 Declaration length

#### 2.2.1 QCA approach

The QCA considers that a declaration period of 15 years is appropriate since it:<sup>4</sup>

provides an opportunity for review and adequately balances the legitimate business interests of Queensland Rail (to have future developments taken into account against the access criteria), while providing certainty for access seekers and holders in the context of industries which require large sunk investments.

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<sup>3</sup> Queensland Competition Authority Act 1997, Part 5, Section 76(2)(a)

<sup>4</sup> Queensland Competition Authority, *Part B: Queensland Rail Declaration Review*, December 2018, p 22.

Glencore and The South West Producers advocated for a declaration period of 15 years.<sup>5</sup> To support its argument that a 15 year period of declaration is appropriate, the QCA states that:<sup>6</sup>

it is not evident that there would be substantial changes in the market in which the service is provided over the next 10 to 15 years, which would affect whether the service provided by Queensland Rail would continue to satisfy the declaration criteria.

In other words, the QCA appears to believe that market circumstances, eg, competition between road and rail or the below rail network, will not change materially, and so Queensland Rail would continue to meet the declaration criteria over the 15 year period. The QCA notes that the Inland Rail project as a possible exception to this view but does not consider this a relevant factor because of uncertainties regarding final route, its operational characteristics (eg, operating in conjunction with, or in competition with, Queensland Rail systems), and the expected date of completion.

In addition, the QCA supports its contention that a declaration period of 15 years is appropriate through reference to the long life nature of sunk investments made by access seekers (eg, investments in rollingstock typically have a useable life of between 20 and 30 years) and that at the time of declaration, assets across the industry will on average have around half their remaining life left.

### 2.2.2 Our assessment

Queensland Rail's market circumstances have changed significantly in the past five years and will likely change even more in the next five years. For example:

- the West Moreton system is subject to significant uncertainty going forward:
  - forecast coal volume may be as low as two million or as high as nine million tonnes per annum;<sup>7</sup> and
  - Inland Rail is expected to be operational in 2024-25<sup>8</sup> and is expected to carry significant rail freight, including up to 19.5 million tonnes of coal;<sup>9</sup>
- the Mount Isa system has lost significant freight to road: <sup>10</sup>
  - Aurizon, which carried around ██████████ of freight in 2016, ceased its intermodal services in February 2017 – around 40 per cent of this freight shifted to road and has not moved back since;
  - Queensland Rail lost around 0.4 million tonnes of west bound fuel task to road in 2013-14; and
  - Some mineral concentrate previously moved by rail are now being moved in half-height containers as a 'back load' via road. eg, Cudeco is moving 170,000 tonnes per year of mineral concentrate by road, traditionally viewed as a rail task; and
- rail freight volumes on the North Coast line have been stagnant or in slight decline in the past eight or nine years, eg, rail freight has gone from around seven billion gross tonne kilometres of intermodal freight in 2011-12 to around 6.5 billion in 2017-18.<sup>11</sup>

<sup>5</sup> Queensland Competition Authority, *Part B: Queensland Rail Declaration Review*, December 2018, p 8.

<sup>6</sup> Queensland Competition Authority, *Part B: Queensland Rail Declaration Review*, December 2018, p 21.

<sup>7</sup> This is based on Queensland Rail's internal forecasts.

<sup>8</sup> The ARTC website suggests that the first train is expected to operate in 2024-25. See <https://inlandrail.artc.com.au/faqs/faqs#question25997> for more information.

<sup>9</sup> ARTC, *Inland Rail Programme Business Case*, 2015, p 119.

<sup>10</sup> This information has been provided by Queensland Rail.

<sup>11</sup> This information has been provided by Queensland Rail.

Similarly, a Queensland parliament committee report noted that there is a trend of moving away from using rail by the agriculture sector in Queensland.<sup>12</sup> The report also quotes a submission from Port of Brisbane, which noted that:<sup>13</sup>

In the past ten years the Port of Brisbane has seen the movement of agricultural commodities [using rail] through the port shift from 15% and declining while container mode shift has declined from 15% to less than 5%.

We also note that heavy vehicle productivity has been growing as operators are increasingly able to use more productive heavy vehicles, such as A-doubles and A-triples. This further reinforces that competition from the road sector will likely intensify in the future.

Given the dynamic nature of the competitive environment faced by Queensland Rail, if any of Queensland Rail's services were to be declared, in our view, the appropriate declaration period should be much shorter than the 15 years proposed by the QCA.

A shorter declaration period – say, of five or at most ten years – would also be consistent with the approach taken in most other rail access regimes in Australia. For example:

- both the South Australian and Western Australian rail access regimes require their respective state economic regulators to review the applicable access regimes every five years, with this review having the ability to consider:
  - in the case of South Australia, whether the regime should continue to apply;<sup>14</sup> and
  - for Western Australia, the lines that should be covered by the access code, as specified at schedule 1;<sup>15</sup> and
- the Tasmania Rail Network was declared for a period of ten years upon recommendation by the National Competition Council in August 2007<sup>16</sup> – a declaration period that has now expired.

The only rail line in Australia that has been subject to a declaration decision for a period equal or greater than the 15 years proposed in the QCA's draft recommendation is the Goldsworthy rail line, which was declared for a period of 20 years following a decision by the Australia Competition Tribunal in June 2010. However, given its status as part of the vertically integrated iron ore mining and export operations of BHP, the circumstances of the Goldsworthy rail line are sufficiently different from that of Queensland Rail that no guidance as to an appropriate declaration period can be taken from this example.

## 2.3 Dependent markets

The QCA focused on a single dependent market for each of the systems. The QCA's analysis for the Mount Isa system and West Moreton system was on the geographically relevant mining tenement market. For the North Coast line, the QCA focused on the above rail haulage market.

We do not comment on the appropriateness of the QCA's identified dependent markets since our analysis is not contingent on any specific dependent markets. Instead, our analysis focuses on whether Queensland Rail has the incentive or ability to change its 'conduct', (ie, whether Queensland Rail has the incentive or ability to increase prices or impose unreasonable terms and conditions) if it became undeclared. If Queensland Rail does not have an incentive or ability to change its conduct, then declaration cannot promote a material increase in another market irrespective of the specific dependent market focussed upon.

<sup>12</sup> Transport, Housing and Local Government Committee, *Rail Freight use by the Agriculture and Livestock Industries*, June 2014, p 6.

<sup>13</sup> *Ibid.*

<sup>14</sup> South Australia, Railways (Operations and Access) Act 1997, section 7A.

<sup>15</sup> Western Australia, Railways (Access) Act 1998, section 12.

<sup>16</sup> See: [http://ncc.gov.au/application/tasmanian\\_railway\\_network\\_closed](http://ncc.gov.au/application/tasmanian_railway_network_closed), accessed 10 March 2019

## 2.4 Future state with and without declaration

The QCA considers that the current terms of access provide guidance as to the regime that access seekers and users are likely to face in a future with declaration.

We have been instructed to assume that in March 2019, Queensland Rail will execute a deed poll that gives effect to an access framework ("Access Framework") that will apply to access for the purpose of operating a train service on one or more of the relevant systems where that train service does not constitute a declared service. The Access Framework is similar to the current regulatory framework under AU1. A further discussion of the Access Framework is provided in section 4.

The QCA does not consider the Access Framework to be representative of the state of the market in a future without declaration. The QCA pointed out two main concerns with the Access Framework:<sup>17</sup>

- it has not been executed and so it is unclear when it would come into effect or if it would be subject to change; and
- uncertainty in its application in the future, as Queensland Rail could amend the Access Framework at any time after the execution,<sup>18</sup> and that access seekers and users will have limited recourse to challenge such amendments.

Our assessment of criterion (a) considers:

- the effects of existing regulatory arrangements to inform the situation with declaration; and
- for the world without declaration, both:
  - Queensland Rail's incentive and ability to exercise market power absent the Queensland Rail Access Framework in Section 4 (equivalent to the QCA's approach); and
  - Queensland Rail's incentive and ability to exercise market power with the Queensland Rail Access Framework in place in Section 5.

We have separated the world without declaration into two scenarios so that our conclusions are clear even if the Access Framework is deemed not relevant for the world without declaration. Given that we are to assume that the deed poll will be executed in March 2019, it follows that, absent declaration, the Access Framework will come into effect on 9 September 2020. In our opinion, it is therefore appropriate that the world without declaration includes an assessment of the impact of the Access Framework.

## 2.5 Material increase in competition in another market

### 2.5.1 QCA's approach to 'material increase in competition'

In the QCA's determination of whether a material increase in competition occurs it describes a material increase as:<sup>19</sup>

...the possibility that more efficient firms would be discouraged from entering a dependent market in a future without declaration. That is, if efficient entry is likely to be promoted in a future with declaration, the QCA considers that this would indicate that access as a result of declaration would promote an increase in competition that is material.

<sup>17</sup> Queensland Competition Authority, *Part B: Queensland Rail Declaration Review*, December 2018, pp 29 – 30.

<sup>18</sup> For example, QCA points out that "under the current terms, Queensland Rail can amend the access framework at any time, even after it has been executed, on the grounds that the amendments are 'not inconsistent with' the framework's objective, as long as the amendments are made 'having regard to' a number of factors under the deed poll."

<sup>19</sup> Queensland Competition Authority, *Part B: Queensland Rail Declaration Review*, December 2018, p 28.

The QCA describes a material increase as one whereby a future with declaration would promote efficient entry, ie, more efficient firms would be discouraged from entering a dependent market in a future without declaration.

### 2.5.2 Our assessment

In our opinion, declaration of a service promotes a material increase in competition in a dependent market if it is likely to result in a material increase in competition outcomes, as compared to without declaration.

In contrast, the QCA's definition is too narrow since it does not consider the state of competition in the dependent market. For example, if a dependent market is highly competitive, and so delivering competitive outcomes without declaration, then it is very unlikely that an increase in entry will have a material impact on prices, output or quality. Thus, it is unlikely that declaration would result in a material increase in competition.

However, although we disagree with the QCA's approach on materiality, we do not discuss this further since this difference does not affect conclusions.

## 3. Concepts integral to QCA's reasoning

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In order to assess the QCA conclusions on criterion (a) it is useful to explore three economic concepts that are integral to the QCA's conclusions on whether the individual systems meet criterion (a). These concepts are:

- incentive and ability for Queensland Rail to exercise market power;
- the hold-up problem; and
- the reverse cellophane fallacy.

We discuss these concepts within the Queensland Rail context below.

### 3.1 Queensland Rail's incentive and ability to exercise market power

#### 3.1.1 Arrangements if Queensland Rail remains declared

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 covers:

- 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, Queensland Rail has submitted its Draft Access Undertaking 2 (DAU2). DAU2 will become AU2 once approved by the QCA and be effective from 1 July 2020.

#### Reference tariffs on West Moreton and Metropolitan systems 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 under AU1. 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.

For West Moreton there is uncertainty regarding coal tonnage going forward. Based on information from Queensland Rail, we understand there are two likely future scenarios, the first being that the volumes may increase to a high tonne scenario of around nine mtpa (across two mines) and the second being that the

volumes may decrease to a low tonne scenario of two mtpa (from one mine) within the next five years. In particular:

- Yancoal has one active mine, Cameby Downs, which is expected to continue to be active throughout the period; and
- New Hope's existing production is nearing exhaustion and is expected to be closed in 2020, although it is seeking approval to extend its production at New Acland. The necessary approvals for this extension have not yet been granted and so there is no certainty that this extension will proceed.

Queensland Rail has proposed to continue existing arrangements under the high tonne scenario. In the low tonne scenario Queensland Rail believes the remaining mine will not be able to pay the ceiling revenue, and so intends to negotiate an access charge with the remaining mine. It follows that in a low tonne scenario, the West Moreton system would have a pricing arrangement similar to those that apply to other systems.

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). Under AU1 and the proposed DAU2, 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 – to prevent Queensland Rail from giving an access seeker or access holder an unfair competitive advantage over its competitors in the same market;
- 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.

### 3.1.2 Our assessment of Queensland Rail's incentive and ability to increase price

We assess Queensland Rail's market power below. Our assessment focuses on, whether Queensland Rail would, if undeclared, have the ability or incentive:

- to increase prices when compared to existing arrangements; and/or
- to set unreasonable terms and conditions.

Queensland Rail has significant spare capacity and so an incentive to increase use of its network

The incentives of a monopoly do not always dictate a movement away from competition in the dependent market(s). In the case of a service provider that is facing excess capacity and is not vertically integrated, it may face incentives to encourage competition in dependent markets. This notion has been confirmed by the National Competition Council (NCC) which states that:<sup>20</sup>

...[if] a service provider has no vertical interests in a dependent market(s), and its facility has excess capacity, then it may be profit maximising for the service provider to promote competition in the dependent market(s), reduce margins and prices in the dependent market(s), and increase incremental demand for the services provided by the facility.

<sup>20</sup> NCC, *Declaration of Services - A guide to Declaration under Part IIIA of the Competition and Consumer Act 2010*, December 2017, para 3.31, p 35.

Queensland Rail is not vertically integrated and has spare capacity. An important consequence of this spare capacity, in combination with competitive constraints imposed by road haulage charges, is that Queensland Rail has strong economic incentives (irrespective of declaration status) to maximise utilisation on its network. This is because any user that can be charged any positive margin over incremental cost of using the network represents a contribution to Queensland Rail's substantial fixed cost base, even if it remains untenable to charge the long run economic cost of use to any access seekers.

Consistent with this incentive, and with the circumstances of any vertically separate provider of infrastructure services, Queensland Rail has a strong incentive to promote competition in upstream and downstream markets, irrespective of its declaration status.

Queensland Rail has not ability to increase prices without declaration on most of its systems

Economic regulation of infrastructure-based services is generally established under a framework that allows third party access seekers to access infrastructure services owned and operated by others. The need for regulation of the terms and conditions of access arises when the relevant services tend towards natural monopoly, ie, it is more efficient for there to be just one service provider, principally arising from the scale economies associated with provision of the service.

The rationale for economic regulation is that absent this, the sole service provider would have the incentive and ability to exercise monopoly power, so that prices exceed the long run economic cost of providing the service. This leads to higher prices and lower levels of output, thereby giving rise to allocative inefficiency. The objectives of access regulation are to mitigate the negative efficiency consequences of enduring market power, ie, to promote more efficient outcomes in markets, as compared with the circumstances that are likely to prevail absent an industry-specific form of regulatory intervention.

As stated in Productivity Commission's 2013 review of the national access regime:<sup>21</sup>

The only economic problem that access regulation should address is an enduring lack of effective competition, due to natural monopoly, in markets for infrastructure services where access is required for third parties to compete effectively in dependent markets.

The main regulatory constraint is the revenue ceiling. The revenue ceiling represents the estimated efficient cost of providing the service, including a reasonable return, and so is the long run economic cost of providing the service. Put another way, market power is not a concern if a service provider has no prospect of earning a revenue that is above the ceiling.

We note that Queensland Rail's ability to collect access revenue is constrained by two key factors:

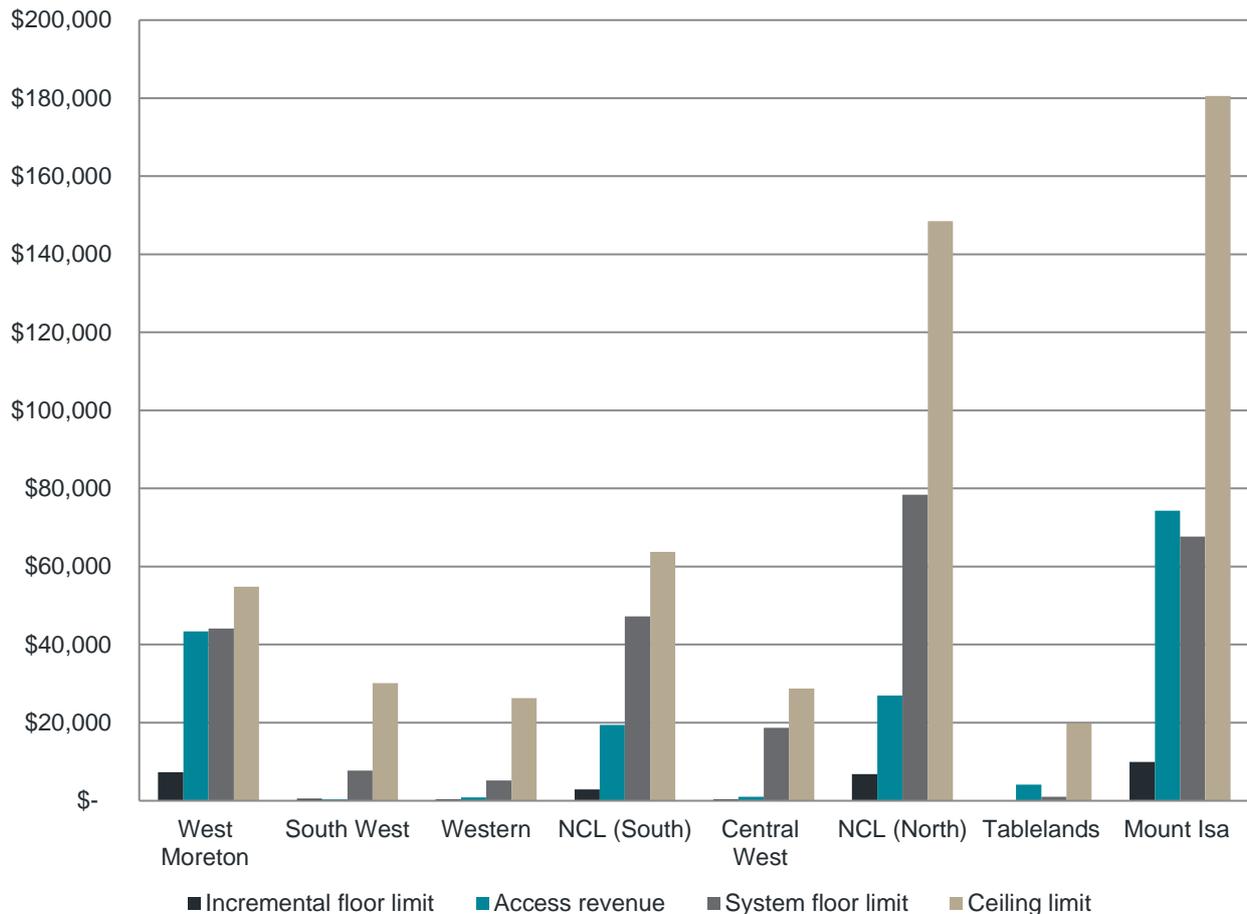
- regulatory constraints on pricing, ie, access revenue cannot exceed the price ceiling; and
- market factors, such as competition from road, users' countervailing power and willingness to pay.

For all systems, Queensland Rail's revenue is below the ceiling – Figure 3.1. It follows that regulatory constraints are not binding since they do not limit Queensland Rail's ability to increase its access price and it is market factors that restrict what Queensland Rail can charge. This suggests that removing the price ceiling would not change Queensland Rail's ability to set access prices, since it is not currently binding.

Figure 3.1: 2017-18 access revenue, floor and ceiling limits by system (\$'000)<sup>22</sup>

<sup>21</sup> Productivity Commission, *National Access Regime Inquiry Report*, 25 October 2013, p 7.

<sup>22</sup> This information has been provided by Queensland Rail



In Figure 3.1:<sup>23</sup>

- the incremental floor limit refers to the estimate of the incremental cost of providing an individual train service;
- the system floor limit refers to the estimate of the incremental cost of providing all train services on the system;
- access revenue excludes government Transport Service Contract (TSC) payments and other revenue;<sup>24</sup>
- the revenue ceiling limit is calculated for the West Moreton system and Mount Isa system, and is an indicative ceiling revenue limited based upon the written down value of assets for the remaining systems;<sup>25</sup> and
- the service floor limit and system floor limit are as estimated at January 2017.

<sup>23</sup> This information has been provided by Queensland Rail

<sup>24</sup> For all systems excluding West Moreton, system revenue is access revenue for 2016-17 (excluding Queensland Government TSC payments for all systems and Kuranda Scenic Rail revenue for Tablelands). For the West Moreton system, forecast revenue for 2018-19 is used, and expense forecasts are obtained from the *2017-18 Below Rail Product Report*.

<sup>25</sup> A DORC methodology is applied to determine the asset value for all systems excluding the West Moreton system and Mount Isa system, whilst ceiling limits for all systems excluding the West Moreton system and Mount Isa system are based on book values as at 30 June 2017. The Mount Isa system asset valuation is based on a 'modified' DORC as at 30 October 2016, and the West Moreton system asset valuation reflects QCA approved regulatory asset base (pre coal adjustments). A pre-tax WACC (6.34 per cent) has been applied to calculate the ceiling price, in the absence of a separate estimate for a tax allowance.

The diagram above highlights the challenge faced by Queensland Rail in cost recovery. Access revenue is below the system floor limit for all systems except for the Mount Isa system. It follows that Queensland Rail's cost saving from closing these systems is greater than the access revenue collected.

In summary, Queensland Rail's lack of market power is evident though the fact that:

- its revenue is far below its total cost for all of its systems, except for West Moreton;
- it requires significant government funding to remain financially viable; and
- it has been losing market share to road on the Mount Isa system and rail task on the North Coast line has experienced stagnant growth.

Queensland Rail does not gain market power by virtue of becoming undeclared. In other words, Queensland Rail would not earn a revenue that is close to its cost of providing the service with or without declaration. By way of summary, the access prices Queensland Rail charge will remain materially the same with or without declaration because:

- the main pricing constraint Queensland Rail faces under existing arrangements is the price ceiling – the access revenue it collects cannot exceed the price ceiling;
- as access revenue is far below the price ceiling for all lines except West Moreton, the current regulatory arrangements do not prevent Queensland rail from increasing access prices;
- it follows that the main reason why Queensland Rail does not charge higher access prices is because of market factors, such as competition from road, or end consumer's ability to pay/countervailing power; and
- removing regulatory pricing constraints would not lead to access price changes, as Queensland Rail's ability to charge higher prices is constrained by market factors, not regulatory arrangements.

Queensland Rail has an incentive to provide reasonable terms and conditions with or without declaration

Service providers can exercise their market power by imposing unreasonable terms and conditions on access holders. For example, it could provide an access holder with an unreasonably low level of service, so that it could, say, save costs or affect downstream market competition.

Our discussion above suggests that Queensland Rail's ability to increase prices is constrained by market factors (eg, competition with road, users' countervailing power and willingness to pay) rather than regulatory factors. It follows that becoming undeclared would not result in a material change in prices.

In our opinion, the same factors that restrict Queensland Rail's ability to increase prices would also restrict its ability to impose unreasonable terms and conditions. Put another way, Queensland Rail has an incentive to provide reasonable terms and conditions to its customers because it would help retain existing customers and attract new customers, thereby reducing the economic loss it would make, regardless of Queensland Rail's declaration status.

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 strengthen competition between access holders and potential access seekers, since it has spare capacity on its network.

## 3.2 The hold-up problem

### 3.2.1 The QCA's assessment of the hold-up problem

The hold-up problem is a key reason why the QCA believes that some of Queensland Rail's systems satisfy criterion (a).

The QCA notes that Queensland Rail has an incentive to encourage use of its network, given that there is significant spare capacity. However, it contends that once Queensland Rail has attracted access seekers to use its network, it then has an incentive and ability (absent declaration) to raise its access prices significantly. In summary, the QCA's assessment of the hold-up problem is as follows:

1. Queensland Rail would have an incentive to provide access to an access seeker in the first round, in order to promote utilisation of its assets and increase its revenues.
2. In the second period, when the below-rail access agreement is due for renewal, the access seeker would be in a less favourable bargaining position than Queensland Rail, as it has made significant sunk investments so that it can use Queensland Rail's network.
3. Realising this, Queensland Rail would have the ability and incentive to increase access charges and that the access seeker would have no choice but to pay the increase in charges.
4. Access seekers can foresee the risk of Queensland Rail increasing prices in the second round, thereby deterring them from entering the market in the first place.

### 3.2.2 The economic theory of hold-up - a problem of imperfect contracts

The hold-up problem, as originally described by Klein, Crawford and Alchian (1978),<sup>26</sup> Goldberg (1976)<sup>27</sup> and Williamson (1979),<sup>28</sup> is recognised as a fundamental contract problem. As described in Rogerson (1992),<sup>29</sup> the hold-up problem occurs when two factors are present:

1. Parties to a future transaction must make non-contractible specific investments prior to the transaction in order to prepare for it.
2. The exact form of the optimal transaction (eg, how many units, if any, what quality level, the time of delivery) cannot be specified with certainty in advance.

Put simply, the hold-up problem arises because a 'perfect' contract cannot be developed ex-ante in the first round, leaving the party with a weaker bargaining position exposed when the contract needs to be amended or renegotiated in the second round.

One example mentioned in literature is the alleged hold-up of General Motors (GM) by Fisher Body, a car body parts supplier in the 1920s. The alleged hold-up in this case was as follows:

- in the first round, Fisher Body entered a contract with GM to become its only supplier of car body parts; and
- in the second round;
  - there was an unforeseen increase in demand for automobiles, which was not covered in the contract;
  - Fisher Body was in a strong bargaining position, as GM did not have alternative suppliers; and
  - Fisher Body increased the price it charged for the additional parts.

We note that the hold-up problem could also occur in other non-infrastructure sectors. For example, businesses, such as restaurants, can also be subject to the investment hold-up problem when signing a commercial lease with a landlord. Businesses are likely to face a significant cost of moving locations, eg, need to renovate a new location and loss of customers by moving locations, putting landowners in a favourable bargaining position.

<sup>26</sup> Klein, Benjamin, Crawford, Robert, and Alchian, Armen. *Vertical Integration, Appropriable Rents, and the Competitive Contracting Process*, *The Journal of Law and Economics*, v 21(2), 1978, pp.297-326.

<sup>27</sup> Goldberg, Victor, *Regulation and Administered Contracts* *The Bell Journal of Economics*, v 7(2), 1976.

<sup>28</sup> Williamson, Oliver, *Transaction Cost Economics: The Governance of Contractual Relations*, *Journal of Law and Economics*, v 22, 1979, pp 233-261.

<sup>29</sup> Rogerson, William, *Contractual Solutions to the Hold-Up Problem*, *The Review of Economic Studies*, v 59(4), 1992.

### 3.2.3 Our assessment of the hold-up problem

There is a mutual incentive for Queensland Rail and access seeker to agree to a contract

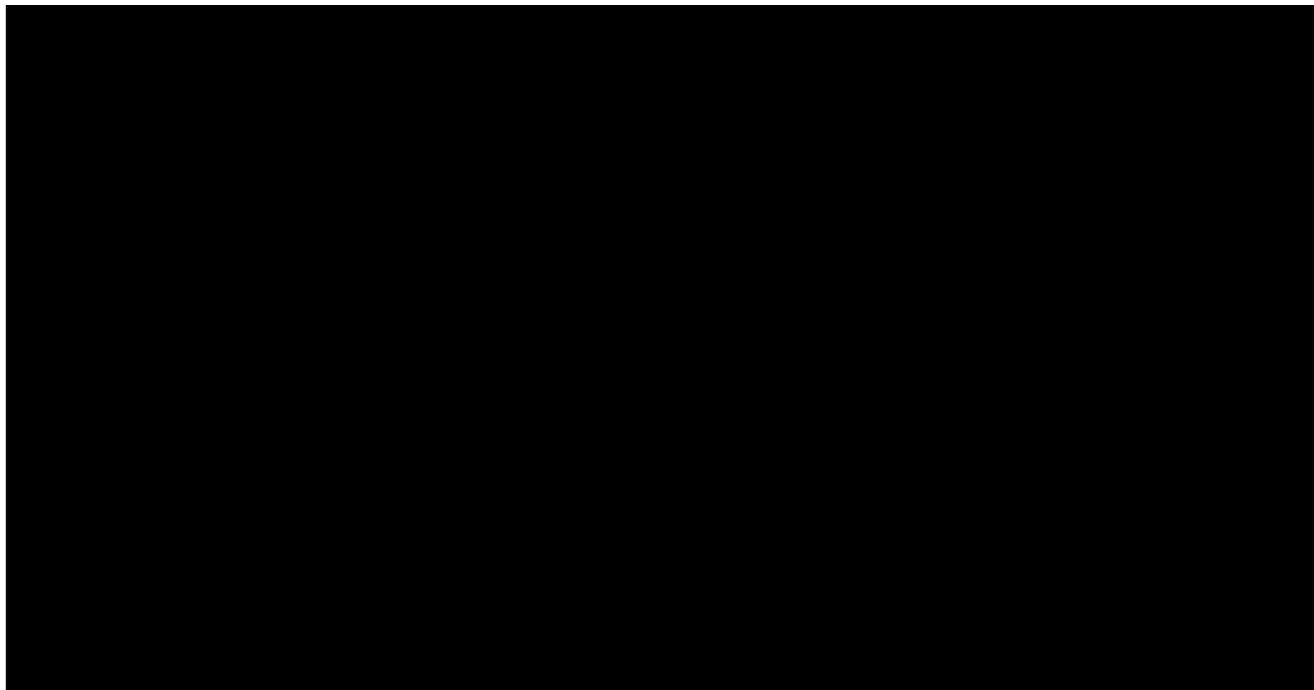
One obvious solution to the hold-up problem would be to sign contracts with terms and conditions that meet the needs of the access seeker, eg, duration of the contract and options for renewal.

As discussed above, Queensland Rail has a strong incentive to maximise throughput, and so increase the volume on its network, given that it has spare capacity. Put another way, Queensland Rail has an incentive to avoid the hold-up problem. Similarly, access seekers that believe there could be a hold-up problem also have an incentive to mitigate the hold-up problem.

It follows that there is a mutual incentive for Queensland Rail and the access holder to negotiate an access agreement that is acceptable to both parties, regardless of Queensland Rail's declaration status. [REDACTED]

[REDACTED]

[REDACTED]



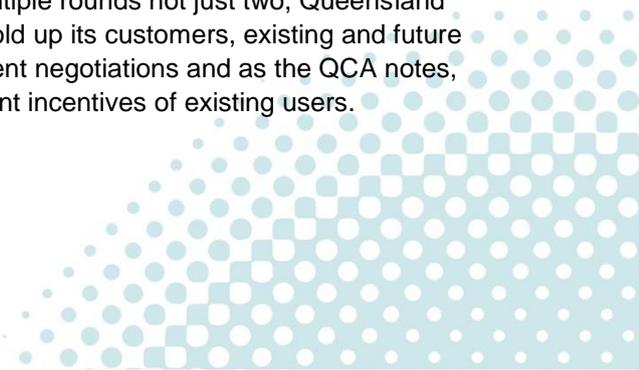
Queensland Rail does not have the incentive take advantage of market power in the second round

The QCA assessment of the hold-up problem implicitly assumes that there are only two rounds, ie, the 'first round' where an access seeker decides whether to invest and a 'second round' where Queensland Rail would then increase access prices.

In practice, rail networks have long asset lives and over its life there will be multiple rounds of negotiations with multiple different customers. Given that this is an issue with multiple rounds not just two, Queensland Rail does not have the incentive to hold-up its customers. If it did hold up its customers, existing and future customers would expect that they would be held up in any subsequent negotiations and as the QCA notes, this would likely reduce entry of new users and undermine investment incentives of existing users.

<sup>30</sup> This information has been provided by Queensland Rail

<sup>31</sup> This information has been provided by Queensland Rail



This would then put the long run sustainability of the network at risk as access seekers are discouraged from using Queensland Rail's network. It is in Queensland Rail's interests, particularly in the situation where Queensland Rail has significant spare capacity, to maximise network usage.

The notion that expropriating sunk costs can damage an access provider financially is supported by the Productivity Commission (PC) in its inquiry report into the Electricity Network Regulatory Framework.<sup>32</sup> The PC states that:<sup>33</sup>

It is in the interest of a network business not to expropriate the sunk costs of early purchasers because this would signal that it would expropriate the sunk costs of later purchasers, with forgone revenue from transporting less power. The hold-up problem would vanish.

In other words, by developing a 'bad brand image' through expropriating the sunk costs of small users, a network business risks losing future revenue. As a result, it is in the best interest of a network business to maintain a 'positive image' and not seek to expropriate sunk costs.

This logic can be applied to the situation faced by Queensland Rail. If Queensland Rail chose to expropriate the sunk costs of access seekers or access holders, its reputation would be damaged and thus future access seekers or users would be less willing to sign a contract with Queensland Rail. Given the long-lived nature of Queensland Rail's network, this could result in stranded assets where access revenue no longer covers the incremental cost of keeping the system open.

Existing regulatory arrangements provide limited protection against the hold-up problem

We also note that existing regulatory arrangements provide limited protection against the hold-up problem, since Queensland Rail is currently allowed to increase prices in the 'second round' because its revenue is below the regulatory ceiling limit. Put another way, Queensland Rail can already impose significant increases in access charges under current arrangements, since the revenue it currently collects is far below the cost of providing rail services.

The PC inquiry points out that economic regulation is not a definitively effective means to prevent the hold-up problem:<sup>34</sup>

It is also not clear that even were a dominant business to ex post exploit a customer making sunk investments that the solution would be price regulation.

Put another way, even if there is a hold-up problem, it is not clear that price regulation would be an efficient or effective means of resolving it.

Conclusion

In summary:

- contracting is a solution to the hold-up problem – Queensland Rail has a strong financial incentive to negotiate contracts that are acceptable to access seekers;
- Queensland Rail is in a 'multi-round' negotiation – extorting access seekers/holders would likely damage Queensland Rail's reputation, thereby reducing its long run financial viability; and
- even if the hold-up problem does exist, existing regulation provides limited protection to consumers and it is not clear if price regulation is an effective or efficient solution.

<sup>32</sup> PC, *Electricity Network Regulatory Framework Inquiry report*, Appendix B: The hold-up problem, June 2013, p 3.

<sup>33</sup> PC, *Electricity Network Regulatory Framework Inquiry report*, Appendix B: The hold-up problem, June 2013, p 3.

<sup>34</sup> PC, *Electricity Network Regulatory Framework Inquiry report*, Appendix B: The hold-up problem, June 2013, p 6.

### 3.3 The reverse cellophane fallacy

#### 3.3.1 QCA's assessment of whether road and rail are in the same market

To undertake the criterion (a) assessment, the market in which Queensland Rail operates must be defined. The key question is what, if any, competitive constraint does road represent to Queensland Rail's service.

The approach employed by the QCA is to consider the following question:<sup>35</sup>

...if the cost of rail infrastructure increased relative to road (for example, if Queensland Rail imposed a SSNIP for the use of its rail infrastructure), would above-rail operators switch from using rail infrastructure to using road infrastructure instead?

That is, if the cost of transporting via rail increased relative to the cost of transporting via road, ie, if a small but significant non-transitory increase in price (SSNIP) test was applied to Queensland Rail's services, would customers switch to road?

#### 3.3.2 The cellophane fallacy

The cellophane fallacy refers to a situation in which, due to the market power of the incumbents, the prevailing market prices are above what they *would have been* in a workably competitive market, leading to an erroneously wide market definition when the SSNIP is applied to the prevailing (above competitive levels) prices.

Prominent competition economist Massimo Motta notes:<sup>36</sup>

... the appropriate market definition test should not ask whether the hypothetical monopolist can increase prices in a small but significant way relative to *current* prices, but rather relative to *competitive* prices.

#### 3.3.3 The reverse cellophane fallacy

Froeb and Werden extend the concept of the cellophane fallacy in the context of competition analysis to what they coin the reverse cellophane fallacy, for which the relevant market is defined too narrowly on the basis of prevailing market conditions as prevailing prices are less than the competitive price:<sup>37</sup>

... markets delineated on the basis of prevailing demand elasticities are likely to be too small and the potential for the exercise of market power is likely to be overstated. This is precisely the opposite of the error in the Cellophane case, so we term it the reverse Cellophane fallacy.

The risk of defining a market that is narrower than appropriate is particularly relevant in the case of regulated businesses. In their 2010 paper *Regulatory Policy and the Reverse Cellophane Fallacy*, Debra Aron and David Burnstein explore this very possibility. They find that the reverse cellophane fallacy leads to an incorrectly narrow market definition, with the potential exclusion of what might have been substitutes in a competitive market; and that this leads to the self-perpetuation of regulatory oversight:

... applying the "small but significant non-transitory increase in price" (SSNIP) test for market power that is defined in the Horizontal Merger Guidelines to firms in regulated industries can lead to the reverse of what is referred to in the antitrust literature as the "cellophane fallacy".<sup>38</sup> ...

<sup>35</sup> Queensland Competition Authority, *Part B: Queensland Rail Declaration Review*, December 2018, p 16. Although not key to our analysis, the appropriate test is not whether above rail operators switch to road rather whether end customers (ie owners of the freight) switch to road.

<sup>36</sup> Massimo Motta, *Competition Policy: Theory and Practice*, Cambridge University Press, Cambridge, 2004, p 105.

<sup>37</sup> Froeb, Luke and Werden, Gregory, "The Reverse Cellophane Fallacy in Market Delineation", *Review of Industrial Organization*, v 7, 1992, p 241.

<sup>38</sup> Aron, Debra and Burnstein, David, "Regulatory Policy and the Reverse Cellophane Fallacy", *Journal of Competition Law and Economics*, v 6(4), 2010, p 975.

The uneconomically low prices cause other services to appear to be weaker substitutes than they would be at compensatory prices and therefore lead to improperly narrow market definitions and erroneous inferences of market power. This in turn leads to the self-perpetuation of regulation, in which regulators insist on finding that the incumbent lacks market power before deregulating prices, whereas the artificially restricted prices lead to an erroneous inference of market power.<sup>39</sup>

The implication of this is that much caution should be exercised when defining markets, ie, it is erroneous to apply a SSNIP test without being aware of the fact that subsidised prices will be significantly lower than those dictated by a competitive market, and the competitive impact of road-based substitution will be underestimated.

### 3.3.4 Our assessment whether road and rail are in the same market

The cellophane fallacy and the reverse cellophane fallacy indicate the importance of applying the SSNIP framework using prices that would apply under a workably competitive market, rather than other pricing points.

We note that under workably competitive outcomes, price outcomes should at least reflect the long run cost of providing services, which would be the revenue ceiling. In the case of Queensland Rail, the revenue from access charges are significantly lower than the revenue ceiling. It follows that current prices are significantly below those that would be observed under workably competitive outcomes, and so applying the SNNIP test using realised prices is highly likely to cause error.

The consequence of applying the SSNIP framework to prevailing prices thus has the potential to be significant. This is especially the case if the disparity between prevailing prices and the ceiling is large, as is the case for Queensland Rail's systems. Prevailing prices are approximately 60 per cent lower than the price ceiling on the Mount Isa system, and approximately 78 per cent lower on the North Coast line. Put another way, applying a SSNIP test with reference to current prices would lead to a definition of market that is narrower than it should be.

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<sup>39</sup> Aron, Debra and Burnstein, David, "Regulatory Policy and the Reverse Cellophane Fallacy", *Journal of Competition Law and Economics*, v 6(4), 2010, p 973.

## 4. System by system analysis

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In this section we analyse whether criterion (a) is met for the Mount Isa, North Coast and West Moreton and Metropolitan system services. Our analysis does not take account of the Access Framework in assessing whether criterion (a) is met – rather, we discuss the Access Framework and its effect in section 5.

We discuss the potential competition consequences of Queensland Rail's services no longer being declared and conclude that there would be no material effect on competition. We find that the current declared status of Queensland Rail's network does not result in a promotion of competition in any market. Our findings are based on:

- the service provider has no market power – Queensland Rail has neither the ability nor the incentive to cause any adverse effect on competition in either its own or dependent markets, irrespective of its declaration status; and
- Queensland Rail has strong incentives to maximise demand for its services, and so to promote competition in dependent markets.

Accordingly, declaration would not promote a material increase in competition, and so criterion (a) is not satisfied. The remainder of this section explains the reasoning underpinning each of these conclusions on a system by system basis.

### 4.1 Mount Isa system

#### 4.1.1 QCA Approach and conclusions<sup>40</sup>

In its analysis, the QCA focuses on the dependent market of North West Queensland minerals tenement market.

QCA argues that the products carried on the Mount Isa system are bulk, and so are not suitable for carrying by road (ie, the freight is heavy and is a long distance away from port). Thus, the QCA concludes that Queensland Rail has the ability to exercise market power on the Mount Isa system service as there is no competition from road.

The QCA considers that this would affect competition in another market via what it terms as the hold-up problem. The QCA accepts that Queensland Rail is likely to have an incentive to offer access to a potential entrant miner in order to promote utilisation of its below rail infrastructure and increase its revenues. However, it claims that in the second period (ie, at the time of contract renewal), Queensland Rail will raise its prices or impose less favourable non-price access terms.

The QCA claims that freight costs are likely to be a material component of the overall decision-making process for a firm seeking to enter the North West Queensland minerals tenement market. As a result, the QCA concludes that declaration of the Mount Isa service will deliver a material increase in competition in the North West Queensland minerals tenement market when compared with the counterfactual of no declaration.

#### 4.1.2 Increasing competition from road

Products carried on the Mount Isa system services are more diverse than just bulk products. The products transported includes mineral and metal concentrates, mining inputs, industrial products and fertiliser, fuel and livestock, as well as passengers.

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<sup>40</sup>Queensland Competition Authority, *Part B: Queensland Rail Declaration Review*, December 2018, pp 57-58.

Road freight provides an increasing constraint on rail freight along the Mount Isa system. Although the constraint from road haulage is less likely to bite for heavier, bulky items for which rail is most suited, road freight is becoming a viable option for some bulk items. In particular:<sup>41</sup>

- several new, smaller scale mines along the Mount Isa system are opting for intermodal solutions such as half-height containers, reducing the up-front capital costs necessary for new mine sites to put in place transport and logistics arrangements – this is often a preferred solution, even where the total cost is lower under traditional, bulk rail wagons, and makes road a closer constraint for bulk items;
- there are multiple recent examples of bulk and general freight items that have shifted to road, including:
  - lead ingots;
  - fuel, which is increasingly utilising road freight to Mount Isa;
  - sulphur, due to a lack of intermodal rail capacity in early 2017, with the consequence that these volumes have not switched back to rail; and
  - copper concentrates; and
- backhaul options on road improve the value proposition relative to rail freight:
  - for example, cement volumes going west to serve Glencore mines from Townsville to Mount Isa, has made road freight contestable with rail.

The recent examples of substitutions from rail freight to road highlight the increasing constraint that Queensland Rail faces from road.

#### 4.1.3 Significant spare capacity on Mount Isa

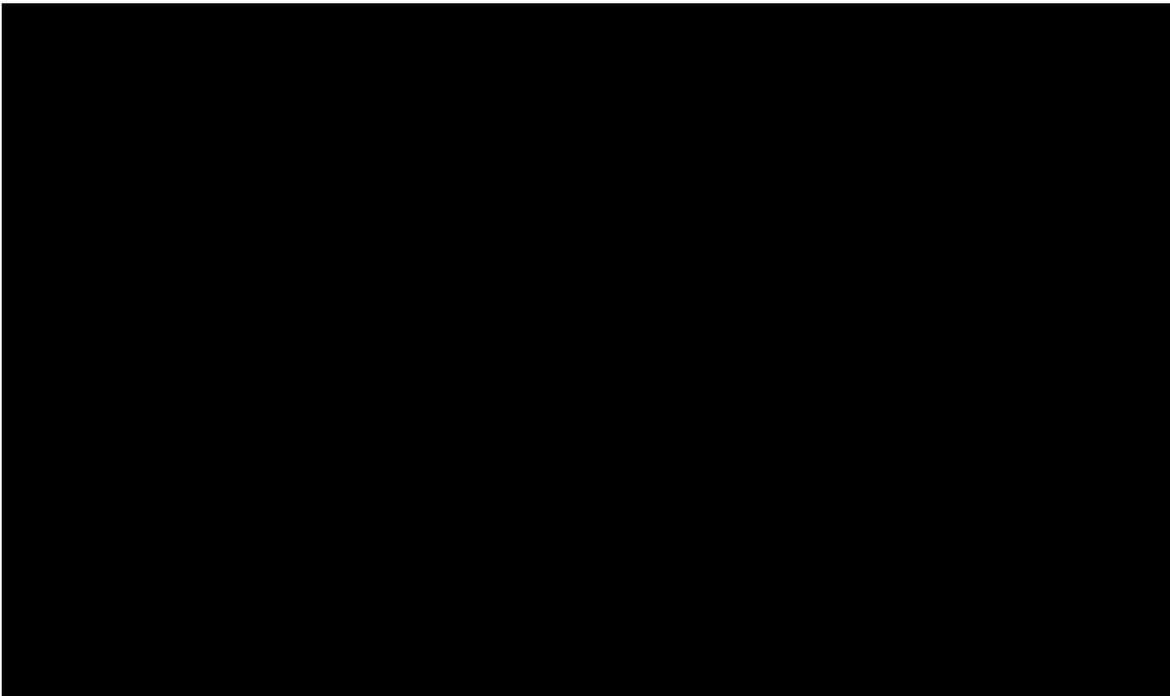
As described in section 3.1.2, where there is excess capacity and no vertical integration, Queensland Rail has an incentive to maximise utilisation on its network and maximise competition in dependent markets. This is because any user that can be charged any positive margin over incremental cost of using the network represents a contribution to Queensland Rail's substantial fixed cost base.

The QCA recognised that there is existing spare capacity on the Mount Isa system but did not discuss the extent of the spare capacity.<sup>42</sup> Figure 4.1 illustrates the significant available capacity on the Mount Isa system. The available spare capacity ranges from 45 per cent on the Surat to Hughenden and Hughenden to Cloncurry sections, up to 73 per cent on the Flynn to Phosphate Hill section.

The QCA also recognises that Queensland Rail is likely to have an incentive to offer access to a potential entrant miner in order to promote utilisation of its below-rail infrastructure. However, it does not consider this as a relevant consideration in its two-period, static view of the hold-up problem. We set out in section 3 why the QCA's conclusions based on hold-up problem are erroneous.

<sup>41</sup> This information has been provided by Queensland Rail

<sup>42</sup> Queensland Competition Authority, *Part B: Queensland Rail Declaration Review*, December 2018, p 57.



#### 4.1.4 Charges are below the regulated ceiling

Revenue collected from access prices on the Mount Isa system (\$74 million in 2017-18) is significantly below the revenue ceiling limit (\$181 million in the same year), and prices will not change materially if Queensland Rail became undeclared.<sup>43</sup> This is because the current regulatory arrangements do not prevent Queensland Rail from increasing access prices.

It follows that the binding constraints on Queensland Rail's price setting are non-regulatory factors such as competition from road, end consumer's ability to pay and countervailing power. These factors will not change with removal of declaration and thus removing declaration, and its associated regulatory pricing constraint, would not lead to access price changes.

#### 4.1.5 Impact on dependent markets

There are a number of issues with the QCA's analysis that result in its determining that criterion (a) is satisfied, namely:

- the QCA underestimates the constraints placed on rail by road on the Mount Isa system;
- the QCA relies on a flawed interpretation of the hold-up problem; and
- the QCA claims that freight costs are a material component of the overall decision making process for a firm seeking to enter the market.

On the last point, we note that the analysis of materiality of cost should focus on below rail costs only. Estimates provided by Queensland Rail suggest that the importance of below rail costs varies depending on commodity. For example, Queensland Rail's analysis suggests that in 2017-18, below rail costs represent around:

<sup>43</sup> This is estimated access revenue and excludes TSC and other revenue. The ceiling limit value is estimated through the application of a modified DORC valuation and is calculated using revenue and expense forecasts from Queensland Rail Below Rail Product forecasts, which reflect 2017-18 Corporate Plan estimates. These values are generated by Queensland Rail.

- 0.3 per cent of estimated commodity price for copper;
- 0.8 per cent of estimated commodity price for zinc;
- 0.9 per cent of estimated commodity price for lead; and
- 5 per cent of estimated commodity price for fertiliser.

In summary, below rail costs are an immaterial input costs for many of the bulk products on the Mount Isa system.

Our conclusion is that with or without declaration, the volumes and access prices on the Mount Isa system will be the same. This is because Queensland Rail has the incentive to maximise volume due to spare capacity, and that the access prices are not constrained by regulation, and as such would not be expected to change without regulation.

Given no change in access prices or change in the volumes transported on the Mount Isa system, the structure and conduct of firms in the dependent markets would not be affected by declaration. For example, the likelihood of entry in any of these commodity markets is not affected by declaration.

We conclude that declaration could not promote a material increase in competition in any dependent market on the Mount Isa system, given that declaration will not affect:

- the structure of the markets, or conduct of firms in any dependent market, in a way that enhances the competitive process; or
- the volume or quality of output in any dependent market.

We conclude that criterion (a) is not satisfied, even without taking account the impact of the Queensland Rail Access Framework which is discussed in section 5.

## 4.2 North Coast line

### 4.2.1 QCA Approach and conclusions<sup>44</sup>

The QCA considers the services provided by the North Coast line and Metropolitan system together. In its analysis, the QCA focuses on the dependent above rail haulage market on the North Coast (and Metropolitan) system.

The QCA argues that there are subsets in the rail haulage market namely:

- bulk products, where rail is the preferred transport mode;
- non bulk travelling less than 600km, where road is the preferred transport mode;
- non bulk freight for a medium distance (between 600-1000km), in which rail competes with road; and
- non bulk freight travelling greater than 1000km, where rail is preferred.

The QCA concludes that road and rail compete only for certain segments on the North Coast transport corridors. The QCA's conclusions are based on the current operation of the market and current road and rail prices.

The QCA accepts that Queensland Rail is not vertically integrated into freight services and considers it unlikely that Queensland Rail would enter the above-rail freight market in the foreseeable future.

The QCA places significant weight on what it describes as the hold-up problem. The QCA concludes that in a future without declaration, market participants will face material uncertainties relating to price and non-price

<sup>44</sup> Queensland Competition Authority, *Part B: Queensland Rail Declaration Review*, December 2018, Section 3.7.

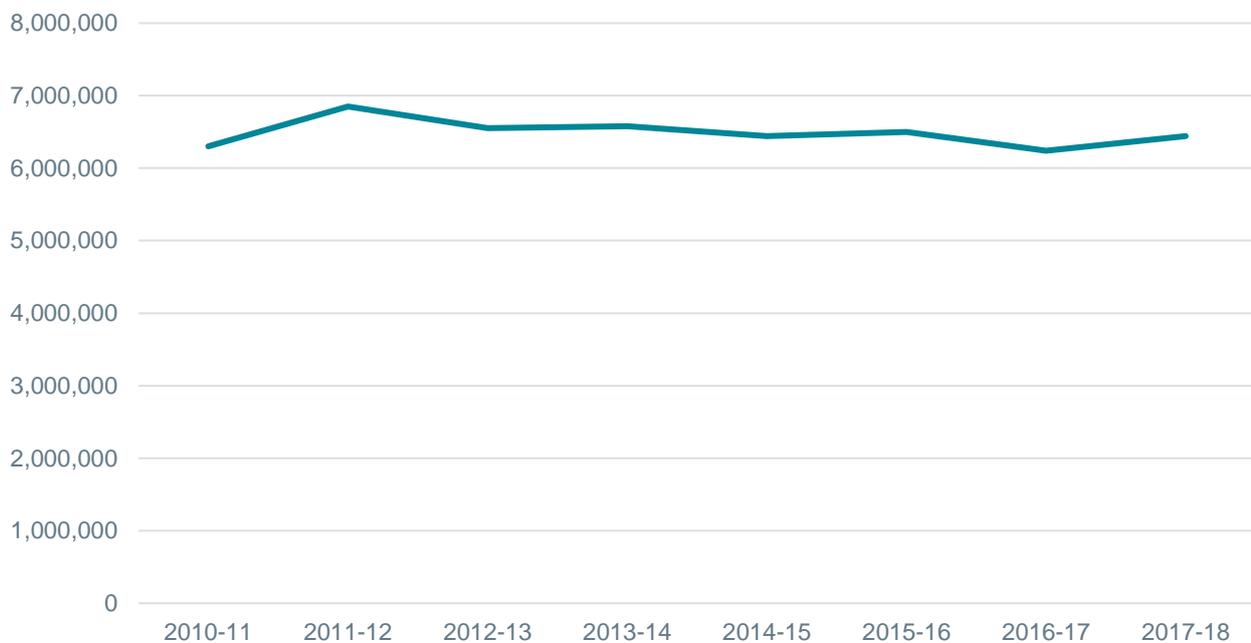
terms, particularly at the time of contract renewal. Thus, it concludes that declaration will create a material increase in competition in dependent markets.

#### 4.2.2 Competition between rail and road

Unlike other systems, Queensland Rail does not have a direct relationship with end customers on the North Coast line. In consequence, Queensland Rail also has less visibility on whether it is losing market share on this system.

From 2010-11 to 2017-18, the rail freight task on the North Coast line has been largely stable with limited growth. Queensland Rail has advised that the rail freight tasks in 2010-11 was usually low due to flood events. Excluding this year would suggest that rail freight volumes on the North Coast line have steadily declined, going from around seven billion gross tonne kilometres of intermodal freight in 2011-12 to around 6.5 billion in 2017-18.

Figure 4.2: Total intermodal gross tonne kilometres, North Coast line 2010-11 to 2017-19 ('000)<sup>45</sup>



The QCA uses existing prices to conclude that only non-bulk goods travelling between 600 and 1000km are contestable by rail and road. Thus, the QCA's analysis suffers from the reverse cellophane fallacy discussed in section 3.2. That is, the QCA has applied the SNNIP test using existing below rail access prices, which do not cover costs, and so are below prices that would occur in a workably competitive environment. Using this lower than competitive rail price to define the market results in an underestimation of the constraint that road would impose on rail in a competitive market. That is, if non-subsidised prices were used, then road and rail freight costs for longer hauls would be much closer.

The QCA also references a Bureau of Infrastructure, Transport and Regional Economics (BITRE) information sheet to suggest that rail becomes cheaper for door to door freight hauls above 1,000 km.<sup>46</sup> Further review of

<sup>45</sup> This information has been provided by Queensland Rail

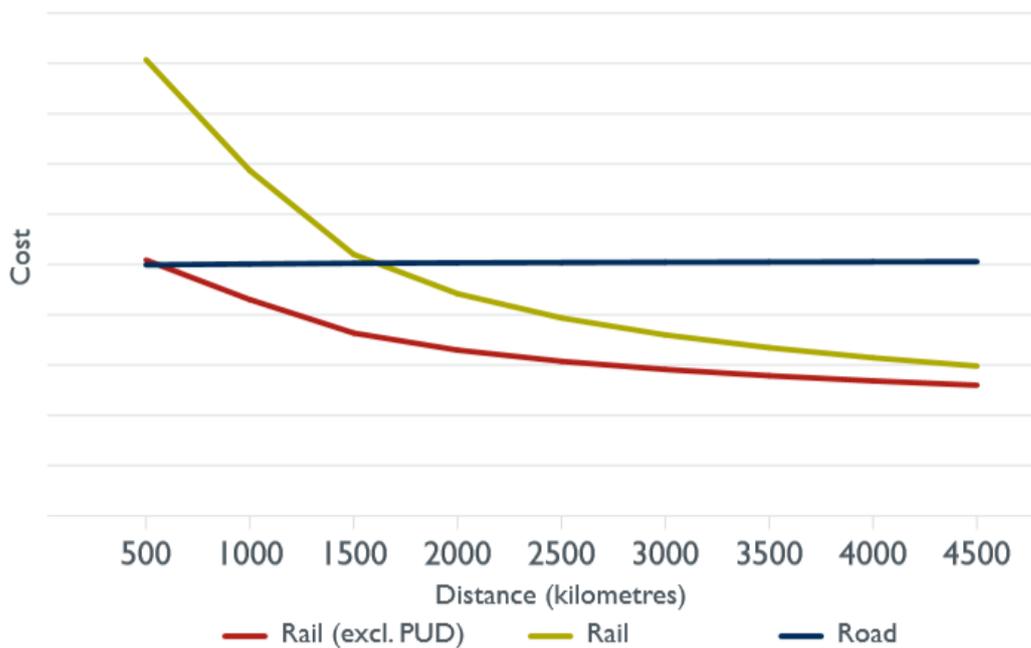
<sup>46</sup> BITRE, *Road and Rail Freight: Competitors or Complements?* Information sheet 34, July 2009, p.8.

the BITRE information sheet, as shown in Figure 4.3, suggests that the distance at which rail has a cost advantage over road is:

- approximately 600km if the costs of pickup and delivery are excluded; and
- approximately 1500km if pickup and delivery costs are included.

The North Coast line freight is mostly containerised and hence pickup and delivery costs should be accounted for when determining a tipping point. This BITRE data thus suggests that road could be cheaper even for freight tasks involving distances from 1000 to 1500 kilometres.

Figure 4.3: Average freight costs for Australian intercapital road and rail freight

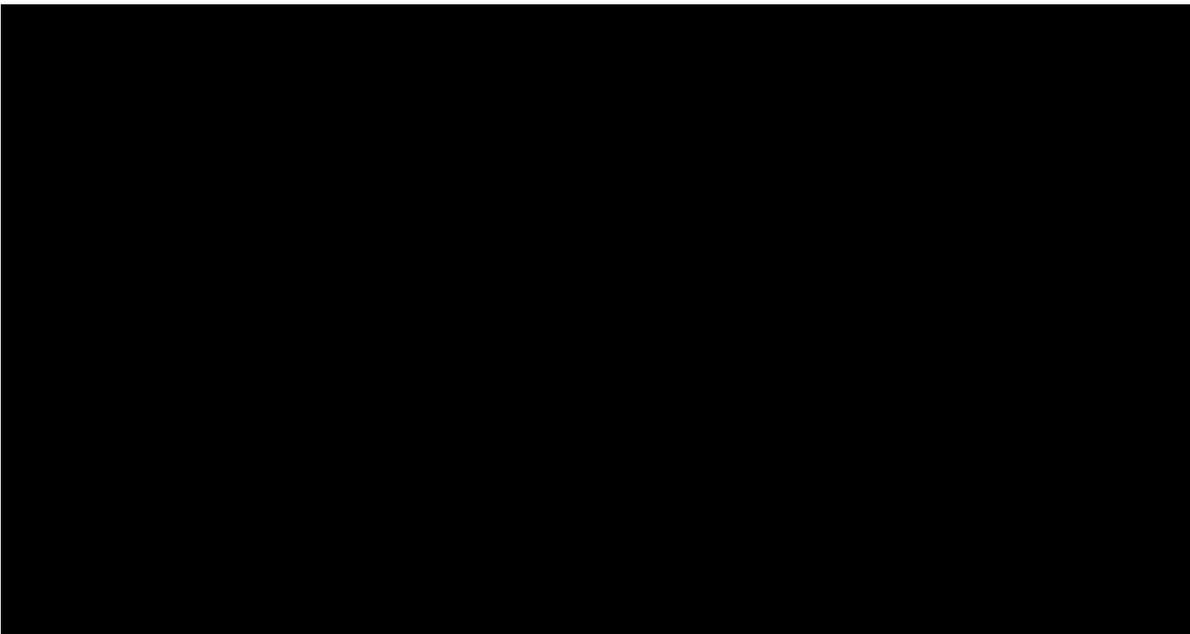


Note: Average freight costs for oil prices at approximately US\$30-50 per barrel. BITRE, Road and rail freight: competitors or complements? Information sheet 34, July 2009, p 8.

#### 4.2.3 Significant spare capacity on NCL

Although the QCA accepts that the North Coast line is not operating at capacity,<sup>47</sup> it does not provide any quantification of the extent of available capacity. Figure 4.4 illustrates that none of the sections on the North Coast line are more than 50 per cent utilised. The most utilised section is Mackay to Durroburra at 44 per cent of train path capacity and the least used section Erkala to Mackay Harbour at 4 per cent. Thus, there is significant available capacity.

<sup>47</sup> Queensland Competition Authority, *Part B Queensland Rail declaration review*, December 2018, p.45.



Sources and notes: PWC (August 2016), *Regional Rail Network Review, Network Infrastructure & Utilisation*, p 45.

As described in section 3, where there is excess capacity the provider has an incentive to maximise utilisation on its network. This is because any user that can be charged any positive margin over incremental cost of using the network represents a contribution to Queensland Rail's substantial fixed cost base.

#### 4.2.4 Charges are below regulated ceiling

As with the Mount Isa system, estimated access revenue (\$19 million for NCL South and \$27 million for NCL North, in 2017-18) is significantly below the revenue ceiling limit (\$64 million for NCL South and \$148 million for NCL North).<sup>48</sup> The access prices will remain materially the same with or without declaration as the binding constraints on Queensland Rail's prices are non-regulatory factors such as competition from road, end consumer's ability to pay and countervailing power. These factors will not change with removal of declaration and thus removing regulatory pricing constraints would not lead to access price changes.

#### 4.2.5 Impact of removing declaration on dependent markets

There are a number of problems with the QCA's analysis that cause it to determine that criterion (a) is satisfied, namely:

- the QCA underestimates the constraints placed on rail by road on the North coast line; and
- the QCA relies on a flawed interpretation of the hold-up problem.

Our conclusion is that with or without declaration the volumes and access prices on the North Coast line will be the same. This is because Queensland Rail has the incentive to maximise volume due to spare capacity, and that the access prices are not constrained by regulation and as such would not be expected to change without regulation.

<sup>48</sup> This excludes TSC and other revenue. The ceiling limit value is estimated based on book values and is calculated using revenue and expense forecasts from Queensland Rail Below Rail Product forecasts, which reflect 2017-18 Corporate Plan estimates. These values are generated by Queensland Rail.

Given no change in access prices or change in the volumes transported on the North Coast line, the structure and conduct of firms in the dependent markets would not be affected by declaration. For example, the likelihood of entry in any of these commodity markets is not impacted by declaration.

We conclude that declaration could not promote a material increase in competition in any dependent market on the North Coast line, given that declaration will not affect:

- the structure of the markets, or conduct of firms in any dependent market, in a way that enhances the competitive process; or
- the volume or quality of output in any dependent market.

We conclude that criterion (a) is not satisfied, even without taking account the impact of the Queensland Rail Access Framework which is discussed in section 5.

## 4.3 West Moreton

### 4.3.1 QCA Approach and conclusions

The QCA considers the services provided by the West Moreton and Metropolitan system together. The QCA's analysis focuses on the dependent West Moreton region coal tenements market.

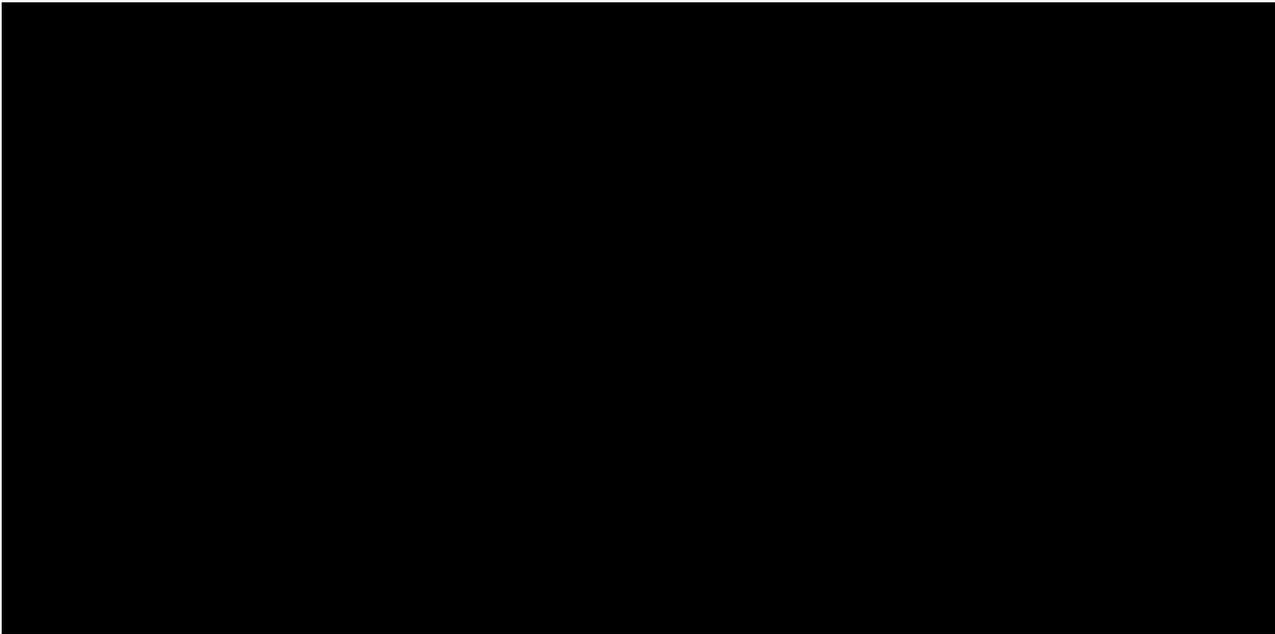
The QCA concludes that coal producers are dependent on rail to deliver their coal to port and that road does not provide a competitive constraint.

As with the other systems, the QCA places significant weight on what it describes as the hold-up problem. It accepts that in a world without declaration, Queensland Rail would have an incentive to provide access to a potential market entrant in the first period due to the spare capacity on the West Moreton and Metropolitan systems. However, the QCA also contends that Queensland Rail will have the ability and incentive to exert market power in the second period (eg, when contract needs to be renewed), leading to a hold-up problem.

The QCA concludes that access to the West Moreton and Metropolitan systems services, on reasonable terms and conditions as a result of declaration, would resolve the hold-up problem, thereby promote a material increase in competition in the West Moreton region coal tenements market.

### 4.3.2 Uncertainty of freight volumes on West Moreton system

Currently there is significant spare capacity on the West Moreton system with utilisation being at a maximum 70 per cent at Toowoomba Range (in 2017-18), with utilisation dropping to 13 per cent on the Dalby to Miles section. Figure 4.5 illustrates that there is significant availability for each freight type, with coal having 24 per cent of paths currently available.



Sources and notes: PWC (August 2016), *Regional Rail Network Review, Network Infrastructure & Utilisation*, p 45.

There is significant uncertainty on the tonnage of coal haulage that will use the West Moreton system over the next five years.

The West Moreton system currently serves two mines producing thermal coal, with current volumes around six mtpa. There is uncertainty about future volumes. Based on information from Queensland Rail, we understand the most likely scenarios are that volumes may either increase to around nine mtpa (across two mines) or decrease to two mtpa (from one mine) within the next five years. In particular:

- Yancoal has one active mine, Cameby Downs, which is expected to continue to be active throughout the period; and
- New Hope's existing production is nearing exhaustion and is expected to be closed in 2020, although it is seeking approval to extend its production at New Acland. The necessary approvals for this extension have not yet been granted, and so there is no certainty that this extension will proceed.

On the assumption that the New Acland mine does not become operational during the next 10-15 years, Queensland Rail estimate that the average annual volume of thermal coal is likely to be around two mtpa. Should the New Acland mine extension be developed, annual volume of thermal coal is instead likely to be around nine mtpa. We understand that the current capacity of the West Moreton System is around 9.5 mtpa.<sup>49</sup>

Queensland Rail's market power will depend critically on whether coal haulage is nine mtpa (the high tonnage scenario) or 2 mtpa (the low tonnage scenario). Given this, we have considered Queensland Rail's market power under the two different demand scenarios.

### 4.3.3 The low tonnage scenario

In the event that the realised annual volume of thermal coal falls to around two mtpa, the level of access charge necessary to cover the cost of providing Queensland Rail's services would most likely exceed Yancoal's ability to pay. Further, the forecast volume of Yancoal's production to be carried on Queensland

<sup>49</sup> Queensland Rail, *West Moreton System – Regional Network Management Planning*, April 2017, p 4.

Rail's network amounts to a very low rate of utilisation of the West Moreton System, ie, it has the capacity to carry around 9.5 mtpa of coal. Put simply, the revenue Queensland Rail will be able to collect will be significantly lower than the revenue ceiling and there would be significant spare capacity on the system.

In that context, Queensland Rail has strong incentives:

- to negotiate a price with Yancoal (and any other user) that results in maximum usage of its network;
- to recover the largest possible proportion of its total economic costs, given the circumstances; and
- to promote competition in dependent markets by any means possible, so as to maximise demand for services on the West Moreton System – the most obvious means available to Queensland Rail to maximise demand is to efficiently facilitate access to its network.

Given this, we conclude that with or without declaration, the volumes and access prices on the West Moreton system will be the same. Given no change in access prices or change in the volumes transported, the structure and conduct of firms in the dependent markets would not be affected by declaration. For example, the likelihood of entry in any of these commodity markets is not impacted by declaration. It follows that criterion (a) is not satisfied, even without taking account the impact of the Queensland Rail Access Framework which is discussed in section 5.

#### 4.3.4 The high tonnage scenario

In the event where the high tonnage scenario occurs, Queensland Rail has proposed to continue existing pricing arrangements for coal traffic in DAU2, ie, there will be a reference tariff that allows Queensland Rail to recover the total costs allocated to coal users.

If New Acland's extension does become operational, there could still be some limited capacity on the system, given the West Moreton System capacity of 9.5 mtpa. However, any remaining spare capacity will unlikely be sufficient to accommodate outputs from a new mine.

The above discussions suggest that Queensland Rail would be able to earn revenue that is above the revenue ceiling if it becomes undeclared. Whether this means the West Moreton system would satisfy criterion (a) is unclear, ie, would the price increase be enough to impact on the volume of coal output in the region?

Although Queensland Rail has an incentive and ability to charge higher prices, it also has a strong incentive to encourage increases in mining output so that it can earn additional profit through a network expansion. In other words, it does not have an incentive to 'price out' mining developments. If no new mining developments are 'priced out', then the increase in price would be a transfer of profit from miners to Queensland Rail but not have a material effect on competition.

## 4.4 Conclusion

We conclude that criterion (a) is not satisfied, without taking into account of the Access Framework, for the Mount Isa system, North Coast line and, if the low tonnage scenario eventuates, the West Moreton system. This is because declaration would not promote a material increase in competition in any dependent market. To reiterate, this conclusion is founded on the following important observations:

- Queensland Rail's ability to charge higher prices is constrained by market factors, ie, it does not have market power – it follows that access charges will not change if it were undeclared;
- the volume of freight hauled by rail is flat or declining on most systems, and Queensland Rail has large amounts of spare capacity – these circumstances create a strong incentive to maximise demand for its service, ie, to promote competition in markets that may utilise its infrastructure; and

- Queensland Rail's existing circumstances are compelling evidence of its lack of enduring market power, since it is unable to recover its costs, is reliant on government subsidies and is not constrained by the existing revenue ceiling.

## 5. Queensland Rail Access Framework

In its draft decision, the QCA considered that the Access Framework was not an appropriate alternative scenario, ie, the QCA did not consider it to be a relevant consideration in the world without declaration. The QCA stated that the Access Framework had not been executed and there was no evidence that it would come into force on the expiry of declaration.<sup>50</sup>

We have been asked to assume that the deed poll that gives effect to the Access Framework will be executed in March 2019. The Access Framework will therefore apply from 9 September 2020 and continue to apply to access for the purpose of operating a train service on one or more of the North Coast line, Mount Isa system, West Moreton system and/or Metropolitan system, where that train service is not a declared service.

Thus, absent declaration Queensland Rail will have in place a legally binding, enforceable Access Framework that is substantially similar to the current access undertaking, AU1. In this section we describe that Access Framework, including the pricing principles it contains, and summarise the key differences between AU1 and the Access Framework.

We conclude that given the similarity between the Access Framework and current regulation, even if the analysis of the previous sections is rejected, that there will be no difference in market outcomes between the world with and without declaration. Thus, criterion (a) will not be satisfied for any of the Queensland Rail systems.

### 5.1 'Without declaration' – Queensland Rail's Access Framework

As noted above, the Access Framework that Queensland Rail will apply is substantially the same as AU1. The key features of the Access Framework are described in the table below.

Table 5-1: Key features of Queensland Rail's proposed access framework

Clause	Feature	Comment
1.3	Differentiation and Hindering Access	<p>Despite Queensland Rail being vertically separated and so the conditions of access not being relevant, the Access Framework includes the obligations in Clauses 100,104,125, and 168C of QCA Act. These are:</p> <ul style="list-style-type: none"> <li>not to differentiate unfairly between access seekers in a way that has a material adverse effect on the ability of Access Seekers to compete when negotiating and providing access; and</li> <li>not to engage in conduct for the purpose of preventing or hindering access.</li> </ul>
1.4	Extension Investment Requirements	Substantially the same form as AU1.
1.5	Master Planning	Obligation to develop and consult on network master plan.
2	Negotiation	Detailed obligations and deadlines to ensure a good faith and timely negotiation process that is transparent due in part to information sharing requirements. Contains rules around mutually exclusive access applications.
3	Pricing	Queensland Rail will be subject to the following pricing principles:

<sup>50</sup> QCA, Queensland Competition Authority, *Part B: Queensland Rail Declaration Review*, Draft recommendation, December 2018, p 29.

		<ul style="list-style-type: none"> <li>• price limits, ie, access revenue needs to fall within the following boundaries of:               <ol style="list-style-type: none"> <li>a) ceiling limit, which reflects the efficient cost of providing the service using DORC valuation; and</li> <li>b) floor limit, which reflects the incremental cost of providing access;</li> </ol> </li> <li>• the ability to negotiate access terms within these limits, that best reflect the circumstances of access seekers; and</li> <li>• recourse to arbitration, should negotiations fail.</li> </ul>
4.3	Operating Requirements Manual	Requirement to maintain and publish an up to date Operational Requirements Manual which provides, amongst other things, detailed requirements on interfaces, safe working procedures, emergency management and network control and planning.
5	Reporting	<p>Obligation to provide monthly reports for access holders by system covering train performance, differences between trains run and planned, major incidents and network quality.</p> <p>Obligation to provide an annual financial report covering revenue, expenses and return on assets.</p> <p>Establishment of Rail User Groups to discuss and coordinate system improvements.</p>
6.1	Dispute resolution	Dispute resolution procedures including binding arbitration.
Schedule F	Network Management Principles	Sets out the network management principles including passenger priority that Queensland Rail must comply with in running its network.
Schedule H	Standard Access Agreement	A standard set of terms that is substantially consistent with the standard access agreement in AU1.

## 5.2 Pricing principles

In the material below, we describe the pricing principles to apply under the Access Framework and compare these with the existing arrangements.

### 5.2.1 Existing pricing arrangements

Overview of existing reference tariffs on the West Moreton System

Coal haulage users on the West Moreton system are the only users that pay reference tariffs.<sup>51</sup> The West Moreton System 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 gross tonne kilometres (GTK)-based charge.

<sup>51</sup> Coal haulage users on the West Moreton System that pass through the Metropolitan System pay a separate reference tariff for access to the Metropolitan System. Up until AU1's approval in 2016, coal users paid the West Moreton tariff for both systems, where the West Moreton calculation was used as a proxy for the Metropolitan System calculation, given the complex nature of the latter. In 2016, the QCA approved a separate Metropolitan reference tariff. The separate tariff uses the 2013 value of the West Moreton System tariff as a starting point and rolls this forward annually, adjusting for changes in the Consumer Price Index as well as the addition of incremental capital expenditure to its asset base.

The reference tariff is calculated so that Queensland Rail can recover the ceiling revenue limit allocated to coal services. The reference tariff is intended to be the price that is typically paid by coal services although, on occasion, the reference tariff has been varied, for example, on account of cost and risk differences. The take or pay component can represent as much as 100 per cent of access charges collected from coal services.

Coal users may purchase additional 'ad hoc services' from Queensland Rail outside of the take and pay arrangements. Revenue from 'ad hoc services' is not counted towards the 'revenue ceiling' but these services also pay the reference tariff.

Currently, only two coal mines use the Western Moreton system/Metropolitan system, being those owned by Yancoal and New Hope. Aurizon is the above rail operator for both coal mines.

For non-coal users on the West Moreton system, access prices are negotiated under the same negotiate/arbitrate framework that applies to other systems, as described below.

Pricing principles that apply to other systems

For other rail systems, Queensland Rail does not have a reference tariff. Rather, Queensland Rail is required to comply with the following pricing principles, described in their order of precedence:

- limits on price differentiation, ie, not to discriminate in favour of downstream operators, except to reflect differences in costs or risk of providing access;
- price limits, ie, access revenue needs to fall within a:
  - ceiling revenue limit, which reflects the efficient cost of providing the service; and
  - floor revenue limit, which reflects the incremental cost of providing access;
- network utilisation, where Queensland Rail may charge different rates for train service serving different markets to maximise commercial viability; and
- revenue adequacy, which states that 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.

In practical terms, this means that Queensland Rail is required to negotiate with rail operators to achieve an access price that does not discriminate between the same freight type and, when combined with revenue from other access seekers, falls within the prescribed revenue limits.

Queensland Rail and third-party operators run long distance passenger trains and heritage passenger train services throughout Queensland. The same negotiate/arbitrate pricing principles also apply to third party operators.

### 5.2.2 West Moreton System's circumstances do not justify a role for reference tariffs

The usual economic regulatory objective for the adoption of reference tariffs in the context of a rail access floor and ceiling pricing framework is:

- to assist in limiting the infrastructure provider from recovering more than the total economic cost of providing the service, including a reasonable rate of return; and
- to minimise transaction/negotiation costs by defining a set of standard terms and conditions associated with the reference tariff.

Such arrangements facilitate negotiation between access seekers and the access provider, where very similar services (aligned with those standard terms and conditions) are provided across multiple users with similar needs.

It follows that reference tariffs are only helpful when there is at least one of: (i) a risk that revenue will exceed the total economic cost of providing the service (ie, market power); and (ii) the presence of multiple, similar users.

However, the circumstances of the West Moreton System mean that the current reference tariff arrangements offer very limited benefits and may impose significant costs, because these circumstances do not apply, ie:

- the only two mines requiring access services on the West Moreton System have very different circumstances, and so the negotiation efficiency benefits offered by reference tariffs are small;
- there is significant uncertainty as to the demand for access; and
- as a consequence, there is substantial uncertainty as to what the outcome of a reference tariff calculation will be – principally because:
  - the price for any one user is heavily contingent (by several orders of magnitude) upon the circumstances of the other; and
  - there is a significant regulatory burden associated with developing the reference tariff, particularly since the arrangements trigger QCA oversight of capital expenditure decisions on the West Moreton System, whereas the QCA is not involved in such decisions in relation to other systems.

### 5.2.3 Negotiate and arbitrate framework within a floor and ceiling revenue limit

To address the issues raised above and to simplify the process, the Access Framework adopts a set of pricing principles for application to the West Moreton System that will be consistent with those in place on other Queensland Rail Systems. This will involve:

- a floor for total revenue (where total revenue includes any government contributions via the TSC payments), which reflects the incremental cost of providing the service;
- a ceiling revenue limit that reflects the total economic cost of providing the service, derived using depreciated optimised replacement cost (DORC) asset values – as for the revenue floor, any government contributions via the TSC are included in the value of total revenue, such that Queensland Rail cannot derive more revenue than the total economic cost of providing the service, taking into account the subsidies it receives;
- the ability for Queensland Rail to make capital expenditure decisions independent of QCA oversight; and
- recourse to arbitration, should negotiations fail.

The economic implications of adopting this approach would be that:

- Queensland Rail would not be able to earn more than the benchmark/efficient cost of a hypothetical new entrant supplier, which would:
  - be consistent with pricing principles in the QCA Act, since that explicitly provides that Queensland Rail can earn a level of revenue that covers its efficient costs; and
  - constrain Queensland Rail's ability to exercise market power (if any), since it cannot earn more than its total economic/efficient cost;
- Queensland Rail would have consistent pricing principles across its network;
- Queensland Rail would face a reduced regulatory burden, since there would not be any capital expenditure approval process; and
- importantly, no freight volumes would be lost, as compared with the situation under declaration.

For all users other than coal haulage users on the West Moreton System, the regimes are nearly identical, with pricing being negotiated between Queensland Rail and the Access Seeker, subject to Queensland Rail's revenue floor and ceiling limits, the latter of which prevents Queensland Rail from deriving excess

returns. The difference between the two approaches is that the value of the asset base used to derive the ceiling revenue limit uses a DORC methodology, whereas previously the methodology was not defined.

For West Moreton System coal users, the difference between AU1 and the Access Framework is that no reference tariff is to be calculated. Instead, access prices are negotiated between Queensland Rail and the Access Seeker, subject to Queensland Rail's revenue floor and ceiling limits, the latter of which prevents Queensland Rail from deriving excess returns. As for the other systems, the value of the asset base used to derive the ceiling revenue limit adopts a DORC valuation methodology.

#### Calculating the ceiling revenue limit

The primary purpose of the ceiling limit is to ensure that Queensland Rail is unable to set access charges that exceed the long run economic cost of providing the service, ie, to prevent Queensland Rail from exercising any potential market power.

Depreciated optimised replacement cost (DORC) is a common approach to valuing existing assets and therefore the economic cost of the service. The method has previously been used to determine asset values in other rail networks, eg, in the NSW Hunter Valley network, and in respect of the Aurizon network.

The Access Framework sets out that the value of the ceiling will be calculated by Queensland Rail using the DORC methodology for each system, as follows:

- optimisation – determination of the optimal configuration and sizing of the asset;
- replacement cost – a modern engineering equivalent (MEE) is established for the asset in the optimised assets and a replacement cost established; and
- depreciation – those MEE assets are depreciated (traditionally using straight-line depreciation) using the standard economic life of each existing asset together with an estimate of the remaining life of each existing asset.

### 5.3 Comparison between the Access Framework and declaration

We showed in section 5.1 above that the fundamental features of Queensland Rail's AU1 are retained in the Access Framework.

Although there are important differences in relation to the revised approach to pricing described in section 5.2.3 above, many differences are administrative or process improvements that will improve efficiency for access seekers, users and Queensland Rail.

A comprehensive list of the differences between the Access Framework and the Undertaking are described along with commentary on their impact in Appendix A1. The more significant non-price changes are discussed in this section below.

#### 5.3.1 Enforcement

The Access Framework and AU1 are both enforceable, albeit through different mechanisms.

The deed poll that gives effect to the Access Framework will be binding on Queensland Rail and legally enforceable in the courts of Queensland by covenantees (being access seekers who have signed an access application or renewal access application, access holders and the Treasurer of the State of Queensland). Damages, specific performance and declaratory relief are available for breaches of the deed poll, except in the case of a breach of the provisions relating to amendment of the Access Framework, in respect of which declaratory relief and/or damages are the only available remedies (not specific performance).

AU1 is also enforceable via the courts, either through application by the QCA or an affected party. Compliance with the undertaking is required by section 150A the QCA Act. The QCA or an affected party can apply to a court for orders requiring Queensland Rail to comply with the undertaking and for

compensation to be payable if a party has suffered loss or damage because of a breach (section 158A). In the period since Queensland Rail was declared, no action has been undertaken under this clause.

Given both AU1 and the Access Framework are ultimately enforceable by the Queensland courts with comparable remedies available under each, Queensland Rail has a strong incentive for material compliance under both regimes. It follows that there is no material change in market outcomes as a result of the different way in which the regimes can be enforced.

### 5.3.2 Dispute resolution process

AU1 and the Access Framework both contain at Section 6 a detailed dispute resolution process. AU1 utilises the QCA to determine disputes while the Access Framework make use of arbitrator agreed by the parties or appointed by the Institute of Arbitrators and Mediators. The Access Framework has a detailed set of criteria that the arbitrator must have regard to when making a decision. These criteria include the public interest and the legitimate business interests of both Queensland Rail and the access seeker.

The dispute resolution mechanism in the Access Framework conforms with the Competition Principles Agreement principles relating to effective access regimes and reflects standard commercial practice.

Given both AU1 and the Access Framework have effective dispute resolution mechanisms, there is unlikely to be a material impact on access seekers or outputs from the changes proposed in the Access Framework.

### 5.3.3 Mutually exclusive access applications

A revised approach to mutually exclusive access applications is included in the Access Framework based on the approach used in Australian Rail Track Corporation's (ARTC's) access undertakings, which have been accepted by the Australian Competition and Consumer Commission (ACCC) under Part IIIA of the *Competition and Consumer Act 2010* (Cth).<sup>52</sup> This approach allows Queensland Rail to allocate the access capacity to the access seeker which is most favourable to Queensland Rail in present value terms.<sup>53</sup> By adoption of this approach, the prescriptive queuing arrangements contained in AU1 are no longer required.

The revised approach may have an impact on competitors but will not alter the competitive process. In other words, the Access Framework and AU1 may result in different access seekers being allocated train paths. Importantly, the Access Framework approach is more efficient since it is more likely to allocate the capacity to the access seeker with the highest willingness to pay,<sup>54</sup> particularly since Queensland Rail is not vertically integrated and has no incentive other than to maximise its own position. The Access Framework will not affect rail output, since the rail capacity is utilised to the same extent under both regulatory approaches.

### 5.3.4 Price discrimination

The Access Framework has amended the appropriate conditions under which Queensland Rail can charge different prices to its customers. The approach mimics the approach used by ARTC in its access undertakings, which have been approved by the ACCC. ARTC and Queensland Rail are similar in that they are both non-vertically integrated track providers and thus have no incentive to differentiate between access seekers for anti-competitive purposes.

In the Access Framework, when setting prices Queensland Rail can take account of a range of factors including the characteristics of the train service, the commercial impact on Queensland Rail's business (such

<sup>52</sup> Australian Rail Track Corporation Limited (ARTC) Interstate Rail Network Undertaking dated 15 July 2008 (clause 3.10(d)) and the ARTC Hunter Valley Coal Network Access Undertaking dated 23 June 2011 (clause 3.13).

<sup>53</sup> Access Framework, clause 2.9.2.b.f, p 24.

<sup>54</sup> The ACCC agrees with this proposition. See for example ACCC, *Position Paper in relation to the Australian Rail Track Corporation's proposed Hunter Valley Rail Network Access Undertaking*, December 2010, p 187; ACCC, *Australian Rail Track Corporation Limited Hunter Valley Coal Network Access Undertaking - Draft Decision*, March 2010, p 658.

as credit risk and growth prospects) and logistical impacts on Queensland Rail's business (such as network performance).

Under AU1, the impact on Queensland Rail's cost and risks are allowable reasons for price discrimination. Although there is overlap with the Access Framework, the AU1 formulation does not allow some important differentiation. For example, allowing a lower access price for a start-up which had uncertain volume but was trying to prove rail as a viable alternative to road for a particular freight haul.

The revised approach may have an impact of competitors since it could result in increased price differentiation than under AU1. However, the reasons for this discrimination are defined and reasonable, given they are factors that affect Queensland Rail's risk, growth prospects, performance or costs. Queensland Rail is not vertically integrated and has no incentive other than to maximise its own position, which includes achieving the strongest possible growth in network usage. Thus, Queensland Rail has no incentive to price differentiate in a way that will reduce rail output.

### 5.3.5 Operating Requirements Manual

The Operating Requirements Manual (ORM) covers matters such as safety and environmental requirements, authorisation of rolling stock and other interface considerations. In AU1 the ORM is a schedule to the undertaking and thus amendments to the ORM require QCA approval. The ORM is not included in the Access Framework but Queensland Rail has retained the obligation to publish the ORM and consult on changes.

The reason that operational issues, such as those included in the ORM, were covered by the undertaking was due to concerns that a vertically integrated operator may use these requirements to hinder its above rail competitor's access or raise its competitor's costs.<sup>55</sup>

Given that following the creation of Aurizon, Queensland Rail is not vertically integrated, these concerns are no longer valid. In addition, access seekers and holders will continue to be able to access and make submissions in respect of the ORM under the Access Framework. The only change is that the QCA no longer has to approve changes to the ORM. There will be no material impact on access seekers rights and no change in market outcomes.

### 5.3.6 Reporting

Clause 5 of the AU1 and the Access Framework both have significant reporting requirements on Queensland Rail.

The Access Framework reporting introduces information more tailored to access seekers and includes:

- monthly operational reports (in place of current quarterly reports) by system to be provided on key operational issues relevant to rolling stock operators and access holders – these reports will cover:
  - on time train performance;
  - actual and scheduled transit times;
  - train cancellations;
  - major operational safety or environmental incidents; and
  - a summary of speed restrictions in place.
- a forum for Rail User Groups for the West Moreton, North Coast and Mount Isa Systems, to review, discuss and improve rail operational issues; and

<sup>55</sup> For example, the QCA's Final Decision in 2001 stated that Queensland Rail's vertical integration gives rise to a conflict of interest because of its ability to use rolling stock, safety and environmental requirements in the Undertaking to hinder access to its below-rail services, thereby protecting its above-rail business groups' QCA, *Final Decision on Queensland Rail's Draft Undertaking*, July 2001, p 212.

- an annual financial report which shows:
  - revenue and expenses; and
  - return on assets by system for the West Moreton, North Coast and Mount Isa systems.

In both the AU1 and the Access Framework, access seekers have access to performance and financial information. Queensland Rail's expectation is that the changes in the Access Framework will provide more relevant information to access seekers. In any event, these reporting changes will not materially impact on access seekers since they will still have access to relevant operational and financial information.

### 5.3.7 Operating Plan Template

AU1 contained an Operating Plan Template in Schedule 3. This is a blank template, which sets out the operating plan (once completed by each access seeker/holder) for the access seekers/holders service and includes information on service schedules and train information (eg, the locomotive and wagons used, mass, speed and length).

The Operating Plan Template is not included in the Access Framework. However, there are no material changes proposed to the template and Queensland Rail will instead publish the template on its website. The inclusion or exclusion of the template in the regulatory regime will have no material impact on access seekers and holders or on competitive outcomes.

The only difference will be that the QCA no longer has to approve amendments to the Template. The information is still available to access seekers and holders and Queensland Rail's incentive (as it is not vertically integrated) is to have an operating plan that is an effective operating document useful in the running of the network.

### 5.3.8 Network Management Principles

The Access Framework simplifies the Network Management Principles contained in AU1 Schedule F. AU1 includes prescriptive train planning principles, which were introduced when Queensland Rail was vertically integrated. The concern at that time was that vertically integrated rail provider could potentially hinder access or increase its rival's costs through the decisions it made in a live run environment which are governed by the Network Planning Principles. The principles included in the Access Framework are consistent with ARTC's approach in its Interstate and Hunter Valley Undertakings, which have both been accepted by the ACCC under Part IIIA of the *Competition and Consumer Act 2010* (Cth).<sup>56</sup>

Queensland Rail is not vertically integrated and has the incentive to operate the network efficiently subject to the passenger priority constraints that are present in both AU1 and the Access Framework. The simplification of the Network Management Principles will have no material impact on the way Queensland Rail operates its network and thus no material impact on access seekers or competition.

## 5.4 Conclusion

In specifying the Access Framework, Queensland Rail has retained all the features of AU1 under declaration, that aid access and that are pro-competitive. The proposed future state in the absence of declaration has sought to make administrative or process improvements which will further improve efficiency for access seekers, users and for Queensland Rail, while minimising the regulatory burden for the QCA.

In addition, the pricing framework under the Access Framework has been designed using economic principles to provide sufficient protection to access seekers, ie, to ensure that Queensland Rail cannot

<sup>56</sup> See ARTC Interstate Rail Network Undertaking (clause 9.3) and the ARTC Hunter Valley Coal Network Access Undertaking (clause 11.2).

exercise market power, and provides a fit-for-purpose regime to replace the reference tariff arrangements at West Moreton, which were generating substantial costs without providing ongoing certainty to users (given how sensitive the reference tariff is to coal volumes).

Nothing in the without declaration world (ie, in the Access Framework) suggests that access would be more restricted or that volumes or quality of service would decline, compared to a state of the world where declaration continues.

- the regimes with and without declaration are nearly identical:
  - for all systems bar West Moreton, the regimes with and without declaration are close to identical, with the exception that the asset base is set using a DORC valuation methodology rather than as a result of a negotiation between Queensland Rail and the access seeker; and
  - for the West Moreton System, the process is the same under AU1 and the Access Framework in that there is a floor and ceiling between which Queensland Rail must price which prevents excess returns – the principal difference is that the asset value used is a pure DORC valuation methodology rather than a hybrid, and that reference prices are not calculated;
- the Access Framework sets a revenue ceiling that ensures Queensland Rail cannot earn revenues that exceed its economic cost of providing the infrastructure service, and so is prevented from exercising its market power by charging excessively for access, even if it had the ability and incentive to do so (which it does not); and
- there are no material changes in non-price terms and conditions between AU1 and the Access Framework.

Accordingly, declaration would not promote competition in any dependent market, either materially or otherwise, and criterion (a) is not satisfied. Even if the QCA's position on the dynamics of the relevant markets and market power was accepted (which we do not, as we discuss in Sections 2 and 3 above), this conclusion is robust. In the with and without declaration comparison you are comparing a world with regulation against a world with the Access Framework, which is materially the same as the existing regulation.

## A1. Differences between Queensland Rail Access Undertaking 1 and the Access Framework

AF Clause	Changes	Comment
<b>Preamble</b>	Updated to reflect new situation and remove unnecessary history.	No impact on market outcomes – preamble does not contain operative provisions.
<b>1.2.1(a)</b>	Updated to refer to subparagraph (d).	Reflects the application of the Framework as set out in amended subparagraph (d).
<b>1.2.1(d)</b>	Amend (d) to remove reference to QCA Act and specify application of Framework.	Clarifies that provisions of the QCA Act relating to declared services are no longer relevant and specifies application of the Framework.
<b>1.2.2 (new)</b>	Inclusion of Framework Objective.	The objective reflects section 69E of the QCA Act and therefore there will be no impact on access seekers' rights or market outcomes.
<b>1.2.4 (formerly 1.2.3)</b>	Simplify by deleting paragraphs (b) to (g).	Removes prescriptive requirements relating to line diagram amendments. These are important for Aurizon as they define the declared Network but not Queensland Rail. Queensland Rail retains an obligation to publish and maintain up-to-date line diagrams. No impact on access seekers rights or market outcomes.
<b>1.3</b>	Incorporate requirements that apply under the QCA Act to declared services that are referred to in clause 1.3 of AU1.	References to sections 100, 104, 125 and 168C of the QCA Act will not apply to Queensland Rail if the service provided by the Queensland Rail network is not declared. These sections are directed at addressing issues relating to vertically integrated operators that are not applicable to Queensland Rail. Despite this, the requirements of these sections have been incorporated into the Access Framework. No impact on access seekers' rights or market outcomes.
<b>1.4.2</b>	Remove references to the QCA Act sections that apply only to declared services.	The references to sections 101(1) and (2) of the QCA Act have been deleted because those sections only apply to declared services so will not apply to Queensland Rail. Queensland Rail's obligation to provide relevant information has been retained so there will be no material difference in the level of information provided with and without declaration. No impact on access seekers' rights or market outcomes.
<b>1.4.3</b>	Removed reference in (b)(v)(B) to the prudency	Schedule E related to the maintenance of a Regulatory Asset Base (RAB) does not form part of the Access Framework. An obligation has been inserted instead for Queensland Rail to construct an

	assessment provisions under schedule E.	Extension Stage efficiently in accordance with Prudent Practices (as defined). No impact on access seekers' rights or market outcomes.
<b>1.4.5</b>	Delete clause.	The obligation to maintain a register of Funding Agreements and provide the register to the QCA on request is unnecessary in the context of a non-declared network as QCA no longer has oversight. Any perceived issues with Funding Agreements not resolved between the parties can be resolved under dispute resolution under clause 6. Administrative change - no impact on access seekers' rights or market outcomes.
<b>1.4.6</b>	Delete clause.	Subsequent amendment to revised pricing proposal that does not incorporate a RAB. Section 5 discusses the impact of the Access Framework pricing regime.
<b>1.4.7 (now 1.4.5)</b>	Update to refer to new dispute resolution provisions.	Clause 1.4.7 has been updated to reflect that the QCA's powers to resolve access disputes under Part 5 of the QCA Act apply only to declared services. Queensland Rail's Access Framework provides for an alternative independent and binding dispute resolution. No adverse impact on access seekers' rights and no change in market outcomes.
<b>1.5</b>	Amended to simplify to the general principle of Queensland Rail being required to consult on master planning for Extension projects and clarify that the clause only applies to those parts of the Mount Isa System, North Coast System and West Moreton System where declared services do not operate.	Clause 1.5 has been simplified to remove unnecessary prescription and a process that has not been used, while retaining the general principle that Queensland Rail must consult on master planning for expansion projects. Process improvement – no impact on access seekers' rights or market outcomes.
<b>2.1.1</b>	Amend paragraph (a) to enable Queensland Rail to agree that a request for Access Rights does not need to be in the form of an Access Application and provide that access applications must be sent to the address nominated by Queensland Rail.	The amendments to clause 2.1.1 provide more flexibility for access seekers and Queensland Rail in terms of the form of an Access Application. Process improvement – no impact on access seekers' rights or market outcomes.

2.1.2	Delete paragraph (b).	Due to Queensland Rail not always having enough access information to assess capacity, the obligation has been removed and capacity analysis will be provided later in the access negotiation process. Process improvement – no impact on access seekers' rights or market outcomes.
2.2.2	Update to refer to new dispute resolution provisions and make clear that confidentiality agreements must permit the disclosure of information as required by law, and to responsible Ministers, DTMR, the Rail Safety Regulator and the Rail Authority.	<p>Clause 2.2.2(c) has been updated to reflect that Queensland Rail's Access Framework provides for an alternative independent and binding dispute resolution. No adverse impact on access seekers' rights.</p> <p>A new clause 2.2.2(d) has been added to provide that confidentiality agreements must permit the disclosure of information as required by law, to responsible Ministers, DTMR, the Rail Safety Regulator and the Rail Authority, to enable the provision of information to relevant authorities where necessary or required. Process improvement – no impact on access seekers' rights or market outcomes.</p>
2.2.3	Amend to require consideration by Queensland Rail of the need for ring-fencing arrangements in the event that Queensland Rail may acquire interests in upstream or downstream markets.	Queensland Rail does not have interests in markets upstream or downstream from its below rail services that are in competition with third parties in those markets. In the unlikely event that circumstances change, and Queensland Rail may acquire interests in upstream or downstream markets, Queensland Rail must consider the need for ring fencing arrangements. Process improvement - no impact on access seekers' rights or market outcomes.
2.4.2	Removed references to QCA Act sections that apply only to declared services, and simplification of drafting regarding information to be supplied in connection with Access Charges.	Although the specific section references have been deleted, Queensland Rail's obligation to provide relevant information has been retained (subject to it being requested by an access seeker, as the information may not always be relevant to an access seeker) so there will be no relevant difference in the level of information provided with and without declaration – no impact on access seekers' rights or market outcomes.
2.5.1	Include requirement for an access seeker to notify Queensland Rail if it does not intend to proceed with an Access Application.	Process improvement – no impact on access seekers' rights or market outcomes.
2.7.2(a)	Remove references to QCA Act sections in that apply only to declared services.	Although the specific section references have been deleted, Queensland Rail's obligation to provide relevant information has been retained so there will be no relevant difference in the level of information provided with and without declaration - no impact on access seekers' rights or market outcomes.

<b>2.7.2(b)</b>	Simplify by removing subparagraphs (i) and (ii) (with consequential amendment in paragraph (c)).	Capacity Analysis and information reasonably required by an access seeker is already covered in other provisions of the Access Framework (such as under clause 2.4.2 and 2.7.2(a)(i), (ii) and (vii)). The change will therefore not result in any difference in the level of information provided with and without declaration. Process improvement - no impact on access seekers' rights or market outcomes.
<b>2.7.2(e)</b>	Update to reflect changes made to Part 3 of the Framework.	Consequential changes have been made to this paragraph based on changes made to other clauses in the Framework, which are discussed below.
<b>2.7.2(f)</b>	Delete paragraph.	Clause 2.7.2(f) has been deleted because it is unnecessary, as an Operating Plan is required to be developed as part of negotiations under clause 2.7.2(a)(iii). The change will therefore not result in any difference in the preparation of an Operating Plan. Process improvement – no impact on access seekers' rights or market outcomes.
<b>2.8.2</b>	Amend to make clear that an access dispute cannot be raised in respect of safety issues.	Clause 2.8.2 has been amended to make it clear that an access dispute cannot be raised in respect of safety issues because Queensland Rail is the railway manager and required to comply with rail safety legislation and the conditions attaching to its accreditation as railway manager. A dispute determination under Part 6 of the Access Framework could not override such conditions and obligations. Queensland Rail is not vertically integrated and has no incentive to use safety considerations to discriminate against access seekers. No material changes in access seekers' rights and no change in market outcomes.
<b>2.8.3</b>	Amend paragraph (a)(ii)(A) to refer to Access Framework not previous undertaking.	Clause 2.8.3(a)(ii)(A) has been updated so that it refers to the Framework. Administrative change with no impact in market outcomes.
<b>2.9.2</b>	Amend to be consistent with the ARTC Interstate Rail Network Undertaking and ARTC Hunter Valley Coal Network Access Undertaking.	No material impact on access seekers' rights – moved to industry standard approach previously approved by ACCC. Further discussion contained in section 5.
<b>2.9.3</b>	Amend to reflect changes to clause 2.9.2.	<p>Clause 2.9.3 has been amended to be consistent with the changes to clause 2.9.2 (the rationale for which is discussed in the row above), so that renewal access applications are considered on the same basis as mutually exclusive access applications.</p> <p>The Queensland Rail Access Framework retains, however, obligations on Queensland Rail to notify the relevant renewal access seeker where it receives an Access Application for access rights concerning available capacity that will arise when an existing Access Agreement expires and provide an opportunity for the renewal access seeker to submit a renewal application for negotiation.</p> <p>Access seekers who wish to guarantee long term security of capacity can negotiate long-term contracts with Queensland Rail.</p>

		Process improvement – puts mutually exclusive access applications on a more equal footing and aids efficiency as it allows Queensland Rail to choose the access seeker with the highest willingness to pay for the capacity.
<b>2.9.4</b>	Amend paragraph (b) to make it clear that rejections of proposed variations to the Standard Access Agreement is not a matter subject to the dispute resolution process.	The purpose of the Standard Access Agreement is to provide standard, 'backstop' terms. The Standard Access Agreement attached to the Access Framework is substantially the same as that approved by the QCA under AU1. It is therefore not appropriate for decisions that do not depart from the Standard Access Agreement to be subject to the dispute resolution process. Proposed variations to the Standard Access Agreement can be dealt with through a normal commercial negotiation process. Process improvement – no impact on access seekers' rights or market outcomes.
<b>2.9.5</b>	Deleted former paragraphs (a) and (c).	Consequential amendment to the removal of the queuing provisions discussed above in 2.9.2. Process improvement – no impact on access seekers' rights or market outcomes.
<b>3.0</b>	Deleted	Redundant as there is no longer a reference tariff. See discussion in section 5.
<b>3.1.1</b>	Reference to regulatory risk deleted in paragraph (b).  [Deletion of the final paragraph dealing with Transport Service Payments.]	Reference to regulatory risk in paragraph (b) is redundant if the service provided by the Queensland Rail network is not declared and so the paragraph has been simplified to refer just to "risks".  The final paragraph is effectively redundant as Queensland Rail has this discretion in any event and is not required to reduce Access Charges on account of TSC payments. Administrative change – no change in market outcomes.
<b>3.1.2</b>	Delete paragraph (b)(iii).	Clause 3.1.2(b)(iii) has been deleted as the right is covered in the pricing discrimination clauses. See discussion in section 5.
<b>3.2</b>	Deleted reference in the heading to non-coal carrying Train Services	Consequential amendment – no impact on access seekers' rights or market outcomes.
<b>3.2.2</b>	Amend to provide that Transport Services Payments are considered in the calculation of the floor revenue limit.	The change to clause 3.2.2 is consistent with the 2008 Undertaking, which explicitly stated that when determining the floor pricing limit for train services, TSC payments are to be considered.  The government provides TSC payments to encourage use of the rail network. Not taking account of TSC revenue in calculating the floor price or in comparing revenue with the floor would require Queensland Rail to charge access seekers more than if the TSC is taken into account. The approach of not taking account TSC revenue would mean that the TSC would not be reflected in lower access prices, which would undermine the government's objective. This logic also applies at the ceiling. TSC revenue should be taken into account when calculating the ceiling or assessing compliance with the ceiling. If it isn't, access prices will be higher than they should be, and Queensland Rail will receive return greater than the ceiling once TSC revenues are taken into account.

		Process change to improve the efficacy of the floor and ceiling methodology, which reflects Government policy and will result in lower access charges than if the TSC were not taken into account.
<b>3.2.3</b>	Deleted reference to QCA in the formula variable "T" and simplified so that it is effectively as determined by Queensland Rail.  Adoption of DORC methodology in paragraph (c).  Inclusion in paragraph (d) of requirement to publish on Queensland Rail's website the estimated asset value for the West Moreton System and Mount Isa System as determined using the DORC methodology]	Pricing changes – see section 5.
<b>3.3</b>	Amend to be consistent with the ARTC Interstate Rail Network Undertaking and ARTC Hunter Valley Coal Network Access Undertaking.	No material impact on access seekers' rights – moved to industry standard approach previously approved by ACCC. Further discussion contained section 5.
<b>3.4</b>	Deleted reference to clause 3.1.2 (Network utilisation).	This has been deleted as a consequential amendment for the changes discussed above in relation to clause 3.1.2. See discussion in section 5.
<b>3.5</b>	Deleted	This clause has been deleted as redundant, given there will be no reference tariff. See discussion in section 5.
<b>3.5.1 (new)</b>	Added new 3.5 heading - 'General'  Clause 3.5.1 - amended the rate review provision by the deletion of clauses 3.5.1(a)(i) and ii).	As there are no reference tariffs in the Access Framework these clauses are no longer relevant. Consequential change – section 5 includes discussion of the Access Framework pricing framework.

<b>3.5.2 (new)</b>	Added clause 3.5.2 Take or Pay Charges.	Clause 3.5.2 states that unless otherwise agreed during negotiations, Take or pay charges will be payable and will be calculated on a 100 per cent take or pay basis. In effect the clause states that Queensland Rail will negotiate take or pay amounts with the access seeker. Queensland Rail has no incentive to apply take or pay charges that cause access seekers to reduce freight volumes. Thus, this change will not have an impact on market outcomes.
<b>3.6</b>	Amend dispute resolution process so that disputes about pricing contraventions are referred to an arbitrator.	Clause 3.9 (now clause 3.8) has been amended to change the dispute resolution role currently held by the QCA to an arbitrator. Process improvement – no change in access seekers' rights or market outcomes.
<b>3.7</b>	Delete clause.	Clause 3.7 (relating to the QCA Levy) will no longer be relevant if the service provided by the Queensland Rail Network is no longer declared. Administrative change. See discussion in section 5.
<b>3.8</b>	Delete clause.	Deleted due to changes in pricing methodology. See section 5.
<b>4.1</b>	Amended reference to Capacity-related information to refer just to information.	Amended in line with amendments discussed below regarding the Network Management Principles and schedule. Administrative change.
<b>4.3</b>	Amend to remove provision for Operation Requirements Manual being included in a schedule to the Framework and clarify drafting.	The ORM has been removed from the undertaking. Queensland Rail has, however, retained the obligation to publish the ORM and consult on changes to the Manual, so access seekers will continue to be able to access and make submissions in respect of the ORM under the Access Framework. Process improvement – no material changes in access seekers rights or outcomes. Discussed further in section 5.
<b>5.1-5.4</b>	Replace with more appropriate and tailored reporting requirements.	More tailored reporting has been introduced. It is both more useful for access holders and less onerous on Queensland Rail. Process improvement – no material changes in access seekers' rights or outcomes. Discussed further in section 5.
<b>6.1</b>	Amend dispute resolution provisions to provide for commercial arbitration of disputes under the Access Framework.	The dispute resolution mechanism has been amended to reflect that the QCA's powers to resolve access disputes under Part 5 of the QCA Act apply only to declared services. Discussed further in section 5.
<b>6.2</b>	Included a limitation provision.	New clause 6.2 has been included to clarify that, subject to the terms of access agreements, funding agreements or any other agreements entered into by Queensland Rail as contemplated by the Access

		<p>Framework, Queensland Rail is not liable to any person for consequential loss arising under or in connection with the Access Framework.</p> <p>Queensland Rail is obliged to comply with the Access Framework which can be enforced through the Queensland courts. No change in market outcomes.</p>
<b>6.4</b>	Update transitional provisions to apply when Access Framework takes effect and AU1 terminates.	Clause 6.4 has been amended to provide appropriate transitional provisions to apply when the Access Framework takes effect and AU1 terminates. Process improvement – no material changes in access seekers' rights or market outcomes.
<b>6.5</b>	Updated severability clause	The updates allow provisions of the Framework to be severed if a provision is illegal/unenforceable in any relevant jurisdiction. This is consistent with good drafting practice. Administrative change with no change in market outcomes.
<b>7.1</b>	Amend clause to reflect changes in Framework.	Consequential administrative changes – no material change in access seekers rights' or market outcomes.
<b>Schedule A</b>	Delete reference to reference tariff in clause 1(m) and delete clause 2(c).	<p>Clause 1(m) has been deleted to reflect the new pricing framework discussed above.</p> <p>Clause 2(c) (requiring the provisions of Network Control diagrams) has been deleted as it is unnecessary information for what access seekers need in relation to seeking access to a system on the Queensland Rail network. If such information was relevant in a particular case, an access seeker could seek the information through the negotiation process set out in Part 2 of the Access Framework. Process improvement – no material changes in access seeker rights' or market outcomes.</p>
<b>Schedule B</b>	Add requirement for access applications to be sent to a nominated address.	The change to require access applications to be sent to an address nominated by Queensland Rail is intended to ensure that Access Applications are sent to (and received by) the appropriate person at Queensland Rail. Process improvement – no material changes in access seekers' rights or market outcomes.
<b>Former Schedule C</b>	Delete Schedule.	Schedule C has been deleted because it is unnecessary for the template to be prescribed in the Access Framework. Process improvement – no material changes in access seekers' rights or market outcomes. Discussed further in section 5.
<b>Former Schedules D and E</b>	Delete Schedules	Deleted due to changes in pricing methodology. See section 5.
<b>Schedule C</b>	Simplify Network Management Principles and align Principles more with the ARTC Interstate Rail Network	No material impact on access seekers' rights – moved to industry standard approach previously approved by ACCC. Further discussion contained in section 5.

	Undertaking and ARTC Hunter Valley Coal Network Access Undertaking.	
<b>Schedule G</b>	Delete (but retain obligation to publish and consult on changes in clause 4.3).	The rationale for deleting this schedule is set out in the row on clause 4.3 above and section 5.
<b>Schedule E</b>	Delete 1(b) and 2(a).	Administrative changes. No material impact on access seekers' rights or change in market outcomes.
	Delete 2(c).	
	Amend clause 3(c) to reflect deletion of clause 1.4.6.	
	Amend 6(e) to include reference to other necessary capital expenditure.	
	Amended paragraph 5(d)(ii)(B) to delete reference to prudency tests in former Schedule E.	
	Amended paragraph 6(c) (ii). To correct drafting error	
	Delete clause 8.11.	
<b>Schedule H - Standard Access Agreement</b>		
<b>Note at start</b>	Delete reference to Reference Tariff.	The reference to the Reference Tariff has been deleted to reflect changes to the pricing provisions discussed above. Administrative change.
<b>1.2</b>	Delete reference to QCA Act and good faith in paragraph (b)(i).	<p>The reference to negotiations occurring subject to the QCA Act has been deleted, as the QCA Act requirements relating to negotiations apply to declared services.</p> <p>The reference to "Good Faith" - that the Access Framework in clause 1.3(b) requires Queensland Rail to conduct negotiations with access seekers (which includes renewal access seekers) in "Good Faith" (as defined).</p> <p>No material changes to access seekers' rights or market outcomes.</p>

<b>1.3, 8.8(b), 18.1 (c)</b>	Delete reference to good faith. Amended clause 1.3(a) by including criteria for Queensland Rail to consider in relation to an amendment proposed by the Access Holder.	No material changes to access seekers' rights or market outcomes.
<b>2.1 (c)</b>	Added clause 2.1(c)	Cause 2.1(c) has been added so that the Access Holder must comply with the requirements, obligations and processes in the Access Framework and the Deed Poll.  The enforcement of the Access Framework is discussed in section 5. AU1 and the Access Framework are both enforceable by the Queensland Courts with comparable remedies under each and as such there is no material change in access seekers' rights or market outcomes.
<b>3</b>	Restructured for clarity	No material changes to access seekers rights or market outcomes.
<b>4.1(c)(i)</b>	Deleted reference to Subsequent Agreements.  Amended Nominee Operator to Subsequent Operator	Consequential amendments – no material change to access seekers' rights or market outcomes.
<b>4.6</b>	Amend so that it is clear that Operator who is a party to the agreement also provides the representations and warranties.	No material changes to access seekers' rights or market outcomes.
<b>5</b>	Amend to reflect rail safety legislation changes and clarify that only relevant information is required to be provided.	Administrative – no material changes to access seekers' rights or market outcomes.
<b>6.6</b>	Delete paragraph (e).	Consequential amendment to pricing framework changes which are discussed in section 5.
<b>6.7</b>	Amend clause to enable more tailored performance levels and reporting.	Clause 6.7 has been amended to enable more tailored and fit-for-purpose performance levels and reporting obligations to be agreed by the parties. Process improvement – no material changes in access seekers' rights or market outcomes.

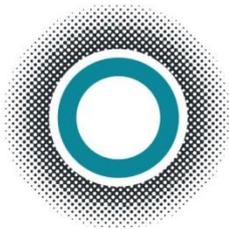
<b>7.1</b>	Amend to make clear that Maintenance Works may be undertaken as provided for in the Network Management Principles.	Clause 7.1(a) has been amended to make it clear that Maintenance Works may be undertaken as provided for in the Network Management Principles in the Access Framework. Process improvement – no material changes in access seekers' rights or market outcomes.
<b>7.3 and 8.4</b>	Delete clause 7.3(f) and 8.4(d).	Clauses 7.3(f) and 8.4(d) (requiring parties to notify each other of failures or likely failures to comply with the agreement) have been deleted they do not reflect normal commercial practice. No material changes in access seekers rights or market outcomes.
<b>8.12</b>	Fix typo in clause 8.12(b). Amended clause 8.12(a) to include a notification requirement in relation to adverse weather conditions.	Clause 8.12(a) has been amended to include a requirement for the operator to notify Queensland Rail in relation to adverse weather events, in order to promote the improvement of the efficiency of the network and safety. Process improvement – no material changes in access seekers' rights or market outcomes.
<b>8.13</b>	Amend to remove reference to draft access undertaking and DAAU process.	Administrative change – no material changes in access seekers' rights or market outcomes.
<b>9.2</b>	Amend to clarify that changes to the IRMP can be made through the exchange of written notices.	Clause 9.2 has been amended to clarify that changes to the IRMP can be made through the exchange of written notices by the parties and do not require formal variations to the access agreement. Administrative change – no material changes in access seekers' rights or market outcomes.
<b>9.3</b>	Amend to reflect new rail safety legislation.	Administrative change – no material changes in access seekers' rights or market outcomes.
<b>9.10</b>	Amend to require parties to cooperate in a safety investigation by Queensland Rail.	Clause 9.10 has been amended to reflect the commencement of the <i>Rail Safety National Law and</i> require the other parties to the agreement to cooperate in safety investigations by Queensland Rail. Process improvement – no material changes in access seekers' rights or market outcomes.
<b>13.4</b>	Amended clause 13.4(a) to include Performance Levels in the liability limitation.	The limitation of liability under clause 13.4(a) has been amended to include Performance Levels. Under the amended clause, Queensland Rail's liability in connection with failure to meet the Performance Levels is limited in the same way as other matters specified in the clause (such as Network standard or defects). No material changes in market outcomes.

<b>15 &amp; 17.2</b>	Amended to address incoming ipso facto legislative amendments.	Clause 15.1 has been included to make clear that clauses 15.2(c), 15.3(c), 15.4(a) and 15.5(a) are subject to relevant legislation and regulations regarding the enforcement of contractual provisions relating to insolvency events. Consequential amendments have been made elsewhere in clause 15 and 17.2. Administrative change – no material changes in access seekers' rights or market outcomes.
<b>18</b>	Deleted former clause 18.1 and amended 18.1(a) and (b).	Clause 18.1 has been deleted to reflect changes to pricing framework discussed above. See discussion section 5.
<b>19.1</b>	Deleted reference in clauses 19.2(d) and 19.3(a) to previous clause 19.4 (see below).	Clause 19.1(b) clarifies that disputes between Queensland Rail and an access seeker in relation to the Access Framework are to be resolved in accordance with the dispute regime under the Access Framework and not the Access Agreement.  Clause 19.1(c) has been included to make clear that the courts of Queensland have exclusive jurisdiction to determine disputes arising under the Deed Poll. No material changes to market outcomes, enforcement is discussed further in section 5.
<b>19.2 &amp; 19.3</b>	Deleted reference in clauses 19.2(d) and 19.3(a) to previous clause 19.4.	Consequential amendment for deletion of clause 19.4 (see below).
<b>19.4 (new)</b>	Added to provide for arbitration if disputes are not resolved in accordance with clause 19.	Clause 19.4 has been added to provide arbitration as a mechanism for resolving disputes under an access agreement that are otherwise not resolved in accordance with clause 19. Process improvement – no material changes in market outcomes.
<b>Former 19.4</b>	Deleted to remove determination of safety matters by the Rail Safety Regulator.	Consistent with 2.8.2. No material changes in market outcomes.
<b>19.5</b>	Amended clause 19.5 to specify courts with jurisdiction.	Administrative change – no material changes in market outcomes.
<b>27.8</b>	Minor drafting change in clause 27.8(a).  Amended to delete clause 27.8(b).	The clause has been amended to align with the dispute regime discussed above under clauses 19.1 and 19.4. No material changes to market outcomes. Discussed further in section 5.
<b>27.21</b>	Added clause 27.21 regarding transitional arrangements.	In the event that the Framework were to expire during the term of the access agreement, the parties will need to consider necessary changes to the agreement. The clause requires the parties to promptly

Does Queensland Rail's network satisfy criterion (a)?

		consult and endeavour to negotiate and agree necessary changes. Administrative change – no material impact on market outcomes.
<b>28</b>	Amend definitions to reflect changes in SAA.	Certain definitions in clause 28 have been amended based on other changes made to the Standard Access Agreement. Administrative change – no material changes in market outcomes.
<b>Schedule 1</b>	Amended in item 11 (Security Amount) to require at least six months' Access Charges.	No material changes in market outcomes.
<b>Schedule 2</b>	Amended for consequential changes relating to Reference Train Services.	The item relating to Reference Train Services has been deleted. Pricing framework discussed in section 5.
<b>Schedule 3</b>	Changes to reflect revised pricing methodology.	Pricing framework discussed in section 5.
<b>Schedule 5</b>	Amend Schedule 5 to enable more tailored performance levels and reporting, consistent with changes to clause 6.7.	Schedule 5 has been amended to enable more tailored and fit-for-purpose performance levels to be agreed by the parties, consistent with the changes to clause 6.7 discussed above. Process improvement – no material changes in access seekers' rights or market outcomes.





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