

Queensland Competition Authority

Draft Decision

Queensland Rail's 2020 Draft Access Undertaking

April 2019

We wish to acknowledge the contribution of the following staff to this report:

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DRAFT DECISION SUMMARY

On 14 September 2017, the QCA issued an initial undertaking notice requiring Queensland Rail to submit a replacement draft access undertaking for the period starting 1 July 2020, for what will become the 2020 access undertaking (AU2) period. On 14 August 2018, Queensland Rail submitted its proposed replacement draft access undertaking (the 2020 DAU) to the QCA for assessment.

Draft decision

The QCA's draft decision is to refuse to approve Queensland Rail's 2020 DAU, for the reasons detailed in this document.

The draft decision sets out our preliminary assessment of Queensland Rail's 2020 DAU against the relevant statutory criteria and the reasons why we do not consider it is appropriate to approve the 2020 DAU. We have also indicated those amendments considered appropriate in order for us to approve a replacement access undertaking for Queensland Rail's declared service.

Stakeholders endorsed Queensland Rail's approach of only proposing to change a limited number of matters from the 2016 undertaking. We also welcome Queensland Rail's desire to continue many of the policies we considered appropriate to approve in the final decision on the 2015 DAU in October 2016. While our draft decision is to require a number of amendments to Queensland Rail's 2020 DAU, there are many provisions we consider appropriate to approve. Key preliminary positions include:

- proposing a reference tariff for West Moreton coal services of \$16.93/'000 gtk (\$8.29/net tonne), which is 24 per cent less than what Queensland Rail submitted
- setting a regulated rate of return (weighted average cost of capital, or WACC) for West Moreton coal services, of 6.02 per cent, compared to 7.47 per cent proposed by Queensland Rail
- allowing planned possessions outside the master train plan (MTP), while retaining strong requirements to notify and consult with access holders/seekers and operators
- including a mechanism in the undertaking for amending the operating requirements manual (ORM)
- extending the dispute mechanism to all parties that receive the benefit of an obligation in the undertaking
- approving most aspects of Queensland Rail's proposed price differentiation rule, which applies when access charges are set for non-reference tariff services
- removing access to automatic contract renewal rights for new access seekers, but expanding renewal rights for existing access holders that have made substantial sunk investments as a transitional measure
- reducing the regulatory burden by making the QCA's role less intrusive in processes, including the adjustment amounts review.

The QCA assessed the appropriateness of all aspects of Queensland Rail's 2020 DAU, and considered all submissions received, in accordance with the statutory requirements. This assessment of the 2020 DAU considered the appropriateness of the proposal overall, and its individual aspects, having regard to the approval criteria in s. 138(2) of the QCA Act.

This summary should not be relied on as a substitute for the detailed analysis in the main body of this document. The draft decision is intended to give stakeholders insight into our preliminary views and to encourage stakeholders to make further submissions, but it is not a draft version of a final decision. Our

application of the statutory assessment criteria may change when we make our final decision, which will be informed by all relevant matters, including submissions responding to this draft decision.

Process towards an approved undertaking

In releasing a draft decision at this time, we are aware of the importance of a timely and seamless transition between undertakings. Our goal is to have an appropriate undertaking ready to replace the 2016 access undertaking when it terminates on 30 June 2020.



If our final decision is to not approve Queensland Rail's 2020 DAU, having considered all matters, we intend to immediately issue a secondary undertaking notice requiring Queensland Rail to submit an amended draft access undertaking within 60 days. We will either approve that amended draft access undertaking, or reject it.

If we find it is not appropriate to approve the amended draft access undertaking, we may prepare our own draft access undertaking for the declared service. In that case, we will provide advice on the process for assessing and approving a replacement undertaking, including timelines for submissions.

Submissions on this draft decision are due on **11 July 2019**.

The access regime

Queensland Rail provides access to a declared service for the purposes of Queensland's third party access regime established under Part 5 of the *Queensland Competition Authority Act 1997* (QCA Act).

The relevant service is 'the use of rail transport infrastructure for providing transportation by rail if the infrastructure is used for operating a railway for which Queensland Rail Limited, or a successor, assign or subsidiary of Queensland Rail Limited, is the railway manager;¹ and is referred to in this draft decision as the 'declared service'. The existing declaration of the service in s. 250(1)(b) of the QCA Act expires on 8 September 2020. The QCA is now reviewing whether, with effect from the expiry date, the relevant service (or parts of the service) should be declared (see Chapter 1 for more information).

Queensland Rail owns and operates a 6,600 kilometre rail network, including the commuter lines in south east Queensland, and the West Moreton, Mount Isa and North Coast systems.

Because of the declaration, Queensland Rail is subject to various obligations under the QCA Act, including an obligation to negotiate access to the service in good faith (s. 100) with access seekers who have various rights, including to information about the service, and to dispute resolution.

¹ The declaration of Queensland Rail's below-rail infrastructure is set out in s. 250(1)(b) of the QCA Act.

The regime also provides for developing an access undertaking, which is defined under the QCA Act as 'a written undertaking that sets out details of the terms on which an owner or operator of the service undertakes to provide access to the service whether or not it sets out other information about the provision of access to the service'.²

An undertaking approved by the QCA is intended (amongst other matters) to establish binding provisions to guide negotiation. The QCA Act constrains the QCA from making a determination in relation to an access dispute that is inconsistent with the approved undertaking (s. 119) and, to the extent permitted by an approved undertaking, provides the access provider with exemptions in certain circumstances from provisions of the QCA Act which otherwise prohibit preventing or hindering access (ss. 104 and 125).

Draft decision structure

This document provides the QCA's preliminary assessment of Queensland Rail's 2020 DAU and reasons for its draft decision to not approve it. The reference tariff is considered in Chapters 2 to 5, and the non-tariff aspects of the DAU are considered in Chapters 6 to 12. The overall structure is as follows:

- Background and context to the QCA's investigation (Chapter 1)
- Reference tariffs (sch. D)—pricing for coal services accessing the West Moreton and Metropolitan systems, including:
 - operating assumptions and tariff structure (Chapter 2)
 - regulated rate of return (WACC) (Chapter 3)
 - tariff building blocks and price (Chapter 4)
 - revenue adequacy and low volumes (Chapter 5)
- Preamble and application and scope (Part 1)—includes provisions on the scope and duration of the undertaking, the non-discriminatory treatment of access seekers and access holders, and the negotiation of funding agreements when access seekers agree to pay for extensions (Chapter 6)
- Negotiation process (Part 2, sch. B and sch. C)—a framework for the negotiation of access rights, and provision of information, between the negotiating parties (Chapter 7)
- Pricing rules (Part 3)—includes the pricing rules to apply when developing access charges for non-reference-tariff services and when renewing contracts (Chapter 8)
- Operating requirements and network management principles (Part 4 and sch. F)—the rules for managing the network, and amending technical operating requirements (Chapter 9)
- Reporting (Part 5)—the proposed framework for information reporting and demonstrating compliance with the undertaking (Chapter 10)
- Administrative provisions (Part 6)—includes a dispute resolution mechanism, rules that apply to the QCA when it makes decisions under the undertaking and provisions to address the transition from one undertaking to another (Chapter 11)
- Standard Access Agreement (sch. H)—the proposed standard access agreement that reflects the standard terms and conditions for access to Queensland Rail's network (Chapter 12).

² Schedule 2 of the QCA Act.

SUBMISSIONS

Closing date for submissions: 11 July 2019

This document represents the Queensland Competition Authority's (QCA's) preliminary view and is intended to give stakeholders an insight into that view to encourage further contributions. The QCA's application of statutory assessment criteria and its thinking may change towards its final decision, which will be informed by submissions made in response to this document. This document is not a draft version of a final decision, and it has no force of itself. There should be no expectation that it presents views and recommendations as to how to amend Queensland Rail's 2020 draft access undertaking which will prevail to the end of the decision making process unless the QCA is persuaded otherwise.

Public involvement is an important element of the decision-making processes of the QCA. Therefore submissions are invited from interested parties concerning its assessment of Queensland Rail's 2020 draft access undertaking. The QCA will take account of all submissions received within the stated timeframes.

Submissions, comments or inquiries regarding this paper should be directed to:

Queensland Competition Authority
GPO Box 2257
Brisbane Q 4001
Tel (07) 3222 0555
www.qca.org.au/submissions

Confidentiality

In the interests of transparency and to promote informed discussion and consultation, the QCA intends to make all submissions publicly available. However, if a person making a submission believes that information in the submission is confidential, that person should claim confidentiality in respect of the document (or the relevant part of the document) at the time the submission is given to the QCA and state the basis for the confidentiality claim.

The assessment of confidentiality claims will be made by the QCA in accordance with the *Queensland Competition Authority Act 1997*, including an assessment of whether disclosure of the information would damage the person's commercial activities and considerations of the public interest.

Claims for confidentiality should be clearly noted on the front page of the submission. The relevant sections of the submission should also be marked as confidential, so that the remainder of the document can be made publicly available. It would also be appreciated if two versions of the submission (i.e. a complete version and another excising confidential information) could be provided.

A confidentiality claim template is available on request. We encourage stakeholders to use this template when making confidentiality claims. The confidentiality claim template provides guidance on the type of information that would assist our assessment of claims for confidentiality.

Public access to submissions

Subject to any confidentiality constraints, submissions will be available for public inspection at the Brisbane office, or on the website at www.qca.org.au. If you experience any difficulty gaining access to documents please contact us on (07) 3222 0555.

1 THE QCA'S INVESTIGATION

The QCA's task is to either approve, or refuse to approve, Queensland Rail's 2020 DAU based on the evidence and information available, having regard to the statutory assessment criteria. We may only approve an access undertaking if we consider it appropriate to do so having regard to the approval criteria set out in the QCA Act (s. 138(2)).

We have considered Queensland Rail's 2020 DAU in accordance with the criteria in s. 138(2) and other applicable requirements of the QCA Act. In some cases, the assessment of whether it is appropriate to approve Queensland Rail's 2020 DAU, having regard to the factors listed in s. 138(2) gives rise to competing considerations. In such cases, we weighed up the competing considerations as appropriate. Where appropriate, the balance between these considerations is addressed in the relevant chapters of this draft decision.

As part of our assessment, we consider all submissions received within the stipulated time and the merits of the arguments put by stakeholders. The success of this approach depends in large part on stakeholders adopting reasonable and balanced positions. This involves stakeholders presenting proposals with adequate support and making evidence-based claims that are verifiable.

Queensland Rail's 2020 DAU has been developed from, and shares similar drafting to, Queensland Rail's 2016 access undertaking, which was approved in October 2016. Despite such similarities, we have considered Queensland Rail's 2020 DAU afresh in accordance with the requirements of the QCA Act.

Declaration review

The existing declaration of Queensland Rail's service in s. 250(1)(b) of the QCA Act expires on 8 September 2020. Pursuant to s. 87A of the QCA Act, the QCA is now reviewing whether, with effect from the expiry date, the relevant service (or parts of the service) should be declared. The QCA published a draft recommendation in December 2018.³

While there is an overlap in timeframes between the investigation of the 2020 DAU and the declaration review, the reviews are separate processes and subject to separate requirements (s. 76 and s. 138 respectively). Stakeholders should therefore be aware of the following:

- Each review process has been (and will continue to be) undertaken separately, on its merits and in accordance with the relevant assessment criteria.
- Any draft or final QCA position in respect of one matter does not pre-suppose a conclusion in the other matter.
- Submissions have been (and should continue to be) made on each process separately.
- The QCA may, nevertheless, inform itself on any matter relevant to the investigation of the 2020 DAU in any way it considers appropriate, pursuant to s. 173(1)(c) of the QCA Act.

Outline of assessment criteria

In accordance with s. 134 of the QCA Act, the QCA must consider Queensland Rail's 2020 DAU and either approve it, or refuse to approve it. In doing so, the QCA must publish Queensland Rail's 2020 DAU and

³ See QCA, *Declaration reviews: Aurizon Network, Queensland Rail and DBCT*, draft recommendations, December 2018, at <http://www.qca.org.au/Other-Sectors/Access/To/Infrastructure/DeclarationReviews/In-Progress/2020-Declaration-Review>.

consider comments on it (ss. 138(3)(c), (d)). This draft decision reflects the QCA's preliminary views on Queensland Rail's 2020 DAU, and does not necessarily reflect concluded views of the QCA.

If the QCA refuses to approve Queensland Rail's 2020 DAU, it must provide a written notice stating the reasons for the refusal and the way in which the QCA considers it is appropriate to amend Queensland Rail's 2020 DAU (s. 134(2)). Should we decide it is appropriate to issue such a notice, this will occur when we release the forthcoming final decision on Queensland Rail's 2020 DAU, after considering relevant information, including submissions in response to this draft decision. The factors affecting the QCA's consideration and approval of a draft access undertaking are set out in s. 138(2) of the QCA Act.

Approval criteria in the QCA Act

The QCA Act provides that the QCA may approve a draft access undertaking only if it considers it appropriate to do so having regard to the matters mentioned in s. 138(2), which are:

- (a) the object of Part 5 of the QCA Act, which is:
 - to promote the economically efficient operation of, use of and investment in, significant infrastructure by which services are provided, with the effect of promoting effective competition in upstream and downstream markets (s. 69E).
- (b) the legitimate business interests of the owner or operator of the service;
- (c) if the owner and operator of the service are different entities—the legitimate business interests of the operator of the service are protected;
- (d) the public interest, including the public interest in having competition in markets (whether or not in Australia);
- (e) the interests of persons who may seek access to the service, including whether adequate provision has been made for compensation if the rights of users of the service are adversely affected;
- (f) the effect of excluding existing assets for pricing purposes;
- (g) the pricing principles in s. 168A of the QCA Act, which in relation to the price of access to a service are that the price should:
 - (i) generate expected revenue for the service that is at least enough to meet the efficient costs of providing access to the service and include a return on investment commensurate with the regulatory and commercial risks involved; and
 - (ii) allow for multi-part pricing and price discrimination where it aids efficiency; and
 - (iii) not allow a related access provider to set terms and conditions that discriminate in favour of the downstream operations of the access provider or a related body corporate of the access provider, except to the extent the cost of providing access to other operators is higher; and
 - (iv) provide incentives to reduce costs or otherwise improve productivity;
- (h) any other issues the QCA considers relevant.

Section 138(3) of the QCA Act provides, among other things, that the QCA may approve the draft access undertaking only if it is satisfied the proposed undertaking:

- (a) is consistent with any access code for the service; and
- (b) is not inconsistent with a ruling relating to the service that is in effect under division 7A of Part 5 of the QCA Act.

There are no applicable access codes or rulings in effect under division 7A.

The regulatory process

On 14 September 2017, the QCA issued an initial undertaking notice to Queensland Rail under s. 133 of the QCA Act, requiring Queensland Rail to submit a draft access undertaking to the QCA by 30 April 2018.

We considered that initiating the process established by s. 133 of the QCA Act was the best way to maximise the chances that an appropriate replacement undertaking would be approved by the time the 2016 access undertaking expired.

The date for lodgement of the draft access undertaking was extended on two occasions, following requests from Queensland Rail. Queensland Rail submitted the 2020 DAU on 14 August 2018, in accordance with the extensions granted to the lodgement date. We published Queensland Rail's 2020 DAU for stakeholder comment on 16 August 2018 and received submissions from the following parties:

- Aurizon Bulk
- Aurizon Coal
- New Hope
- Pacific National
- Queensland Rail
- Yancoal.

Matters considered in this draft decision

We have considered Queensland Rail's proposal and stakeholders' submissions, having regard to the matters in s. 138(2) of the QCA Act, in forming the preliminary positions in this draft decision. For the most part, we have discussed matters that Queensland Rail raised or proposed to change from the 2016 undertaking, or that stakeholders raised. However, we have also highlighted a few matters we identified—partly arising from our role in administering aspects of the 2016 undertaking—which present opportunities to reduce the regulatory burden or clarify ambiguous provisions.

Period for submissions

We invite stakeholders to make submissions on this draft decision by 11 July 2019. All submissions received by this date will be taken into account. Stakeholders are encouraged to provide focused, detailed responses to the preliminary reasoning and proposed amendments to Queensland Rail's 2020 DAU that are set out in this draft decision. Where possible, stakeholders should provide information and evidence to support arguments advanced in submissions.

If stakeholders submit by the due date, it will promote the timely consideration and assessment of Queensland Rail's 2020 DAU. There will be a further four-week period for collaborative submissions.

Stakeholder input

While we seek submissions on all aspects of this draft decision and Queensland Rail's 2020 DAU, there are a number of matters that would benefit from specific stakeholder input, as identified throughout the draft decision. These include, but are not limited to, the following:

- in relation to the reference tariff for West Moreton coal services:
 - additional path pricing—we suggest it may be appropriate to apply a price premium of 5 per cent for additional (ad hoc) paths (section 2.3.2)

- endorsed variation events for volume reset—we suggest that at high volumes there will be no need for an endorsed variation event for recalculating the tariff to reflect additional contracting (section 2.3.4)
- frequency of capital expenditure reviews—we suggest that Queensland Rail submit capital expenditure for approval only once per undertaking period, toward the end of the term (section 2.4.2)
- setting the risk-free rate and debt margin—we consider the time-variant WACC parameters for West Moreton coal services should be determined before the term of the 2020 undertaking begins (section 3.2.3, including Box 1)
- trade-off between capital and maintenance expenditure—we are considering whether the maintenance spending proposed by Queensland Rail is appropriate to approve, having regard to past and expected capital expenditure (section 4.3)
- the tariff approach for low volumes—we suggest potential measures, including loss capitalisation and a 15 per cent price premium, to address revenue adequacy for Queensland Rail (Chapter 5)
- the process for developing regional network master plans—we support Queensland Rail's intention to consult with stakeholders about improvements to the process for developing plans and encourage Queensland Rail to submit a revised approach for our consideration (section 6.4)
- requests for access rights—we consider that the definition of 'access application' should be extended to include applications in different forms. Queensland Rail's intention to consult with stakeholders about possible drafting amendments is supported (section 7.1)
- access to renewal rights—we consider it appropriate to remove automatic contract renewal rights for new access seekers, but are seeking submissions as to appropriate renewal rights for existing access holders who have made substantial sunk investments as a transitional measure (section 8.3)
- the approval process for the ORM—we suggest a middle ground of a review process for changes to this operational document that was previously part of the access agreements (section 9.1.1)
- ad hoc planned possessions and special events—we suggest it may be appropriate to adapt the alignment calendar published by Queensland Rail to address concerns about transparency over planned possessions that are not suited to being included in the master train plan (MTP). The alignment calendar may also be useful for informing access holders about special events (section 9.2.1)
- on-time windows for freight trains—we suggest it may be appropriate to extend the on-time window (section 9.2.3)
- granting operational rights to train operators in the proposed standard access agreement (SAA)—we suggest that it may not be appropriate to approve the proposed drafting on granting operational rights to train operators, given concerns about the clarity and workability of the drafting (section 12.2)
- requirements to negotiate or consult in 'good faith' in the proposed SAA—we suggest that the 'good faith' negotiation requirements that apply in the current SAA should be included and support Queensland Rail's intention to negotiate with stakeholders on a definition of 'good faith' for our consideration (section 12.6)
- referral of disputes to an expert in the proposed SAA—we suggest that some disputes may be more appropriately dealt with by a relevant expert than a court (section 12.7).

Stakeholders' views will assist us in making our final decision on Queensland Rail's 2020 DAU. In particular, stakeholders may identify matters about which they wish to:

- provide further information or evidence
- put forward alternative positions.

2 WEST MORETON REFERENCE TARIFF APPROACH (SCHEDULE D)

The 2020 DAU covers all of Queensland Rail's declared service, but only includes a proposed reference tariff for coal services on the West Moreton and Metropolitan systems (the West Moreton reference tariff). The two systems connect mines in southern Queensland with the export terminal at the Port of Brisbane.

In the 2020 DAU, Queensland Rail proposed a 15 per cent increase in the West Moreton reference tariff (against the reference tariff in the 2016 undertaking⁴), to \$22.39 per thousand gross tonne kilometres (gtk), or \$10.05 a net tonne (nt). This was based on a 45 per cent increase in forecast annual volumes, to 9.1 million tonnes, a 50 per cent increase in forecast spending, and a 174 basis point increase in the rate of return (WACC).

Overview of the draft decision

The QCA's draft decision is that a reference tariff of \$16.93/'000 gtk, or \$8.29 a net tonne, is appropriate to approve. This is 24 per cent less than Queensland Rail's proposed tariff, and 13 per cent lower than the 2016 undertaking tariff.

The economic issues and overall pricing approach at high forecast volumes are discussed in this chapter, while the regulated rate of return and detailed cost build-up are discussed in Chapters 3 and 4 respectively. The challenges raised by potential lower forecast volumes, and an indicative tariff approach, are discussed in Chapter 5. Rules for setting prices for non-reference services (Part 3 of the 2020 DAU) are discussed in Chapter 8.

West Moreton tariff approach—summary

<i>Queensland Rail proposal</i>	<i>Clause</i>	<i>QCA draft decision</i>
Volume forecast		
Volumes of 9.1 million tonnes per annum (mtpa), with a potential lower forecast of 2.1 mtpa.		We assessed the price based on Queensland Rail's 9.1 mtpa forecast (see section 2.2.3). Low-volume scenarios are considered in Chapter 5.
Available capacity		
Coal reference tariff should underwrite unused capacity up to 97 train paths.	sch. D, cl. 3.1(f)	The proposal is not appropriate to be approved. An 87-train-path constraint should apply until there is evidence it has been exceeded (see section 2.2.3).
Tariff structure		
Two-part tariff, split into train path and gtk components.	sch. D, cls. 3.1(a),(e)	The proposal is appropriate to be approved (see section 2.3.1).
Additional paths the same price as contracted paths.		The proposal is not appropriate to be approved. Additional paths should be priced at a 5 per cent premium to contracted paths (see section 2.3.2).

⁴ The tariff comparisons in this and the subsequent paragraph are based on the 2016 undertaking tariff escalated by actual and forecast CPI to 2020–21, compared with the 2020–21 tariff proposed/calculated in the 2020 DAU or this draft decision.

<i>Queensland Rail proposal</i>	<i>Clause</i>	<i>QCA draft decision</i>
100 per cent take or pay, subject to approved ceiling revenue limit.	sch. D, cl. 4(c), (d)	The proposal is appropriate to be approved (see section 2.3.3).
Did not include an endorsed variation event to reset prices for contracted volumes.		The proposal is appropriate to be approved, subject to final volumes to be assessed (see section 2.3.4).
Other tariff matters		
Metropolitan tariff based on a proxy approach, with prices escalated by CPI from those approved in 2016 undertaking.		The proposal is appropriate to be approved (see section 2.4.1).
Capital expenditure reviews to be annual.	sch. E, cl. 1.3(a)	The proposal is not appropriate to be approved. Amendments are appropriate to review five years of capital works, during the final year of the term of the undertaking (see section 2.4.2).
Specified what must be addressed in a QCA statement of reasons for a capital expenditure determination.	sch. E, cl. 1.5	The proposal is not appropriate to be approved (see section 2.4.2).
Expand what the QCA is required to consider when assessing prudence of capital expenditure.	sch. E, cl. 3.2(e), 4.2(c), 5.3(c)	The proposal is not appropriate to be approved (see section 2.4.2).
Adopt the process outlining the accounting treatment of the capital expenditure carryover account from the 2016 undertaking	sch. E, cl. 7(e)	The proposal is not appropriate to be approved. Amendments are appropriate so that the capital expenditure carryover account more accurately reflects the appropriate accounting treatment (see section 2.4.2).
QCA to review all adjustment charges.	sch. D, cl. 6	The proposal is not appropriate to be approved. Amendments are appropriate to provide a mechanism that removes the QCA's automatic review of adjustment charges (see section 2.4.3).
Remove adjustment amount process.	sch. D, cl. 7	Our preliminary view is that removing the adjustment amount process is appropriate to approve, subject to the new undertaking being ready to approve before the 2016 undertaking terminates. This issue is not discussed further in this draft decision, but we welcome stakeholders' views.
Added ability to 'impose' access charges that vary for cost or risk.	3.3(c)	The proposal is not appropriate to be approved (see section 2.4.4).

2.1 Queensland Rail's proposal

Queensland Rail proposed an approach to determining the West Moreton reference tariff in its 2020 DAU that in many respects follows the price cap approach used to assess tariffs in the 2016 undertaking. This includes:

- a building blocks approach to determining the appropriate total revenue requirement (TRR), that provides for an average price based on:
 - recovery of efficient maintenance and operating costs

- return on capital, based on a WACC applied to a regulated asset base, and a return of capital (depreciation)
- forecast volumes over the term of the undertaking
- a common network asset base allocated between coal and non-coal services to reflect the shared nature of the system
- a two-part tariff structure, with weight/distance (gtk) and train path components (AT1 and AT2), each recovering half of the revenue requirement.

Queensland Rail proposed annual volumes of 9.1 million tonnes in its 2020 DAU submission, but said it was likely to update those forecasts as the outlook became clearer. In particular, it was waiting to learn whether the life of New Hope's New Acland mine⁵ would be extended or whether the mine would shut down. Queensland Rail forecast that, without New Acland, the volumes would be as low as 2.1 million tonnes, all from the Cameby Downs mine.⁶

Queensland Rail did not provide a formal submission based on a price at 2.1 million tonnes, but provided an indicative estimate that the reference tariff would rise to about three times the 2016 undertaking price. It said it was negotiating with Yancoal, the operator of the Cameby Downs mine, on a tariff approach at low volumes, and it would provide a further submission reflecting those discussions.⁷ We had not received a further submission at the time of publishing this draft decision.

Way forward

If Queensland Rail or other stakeholders provide further submissions on the low volume scenario, we may undertake further consultation before finalising our positions, if we consider it appropriate to do so. This would give stakeholders an opportunity to comment on the positions we develop on the West Moreton coal tariff after considering all information, including material Queensland Rail and stakeholders may provide after this draft decision.

2.2 Regulatory and economic context

2.2.1 West Moreton balance

The appropriate price for coal services on the West Moreton system will reflect a range of factors peculiar to the circumstances of the network.

The West Moreton system was constructed 150 years ago for mixed freight and passenger services. It remains fundamentally the same as when it was built, with selective upgrades to cope with the heavier coal and grain trains that it now supports. It is a high-cost, low-volume system,

⁵ New Hope owns 100 per cent of the New Acland mine. The Stage 3 expansion of New Acland has been subject to an approval process for several years. New Hope has said it will run out of coal at the current Stage 2 operations in 2020 and, even if Stage 3 is approved during 2019, coal production is likely to reduce or halt for some time, before the expansion reaches full output. See New Hope Group, *ASX release: New Hope Welcomes New Acland Coal Mine Stage 3 Environmental Authority*, 12 March 2019, at <http://www.newhopegroup.com.au/files/files/20190312%20-%20ASX%20Release%20-%20EA%20Announcement.pdf>.

⁶ Yancoal Australia (Yancoal) is the operator but not the owner of Cameby Downs. Cameby Downs and several nearby tenements are 100 per cent owned by Yancoal's major shareholder, Yanzhou Coal Mining Company.

⁷ Queensland Rail, sub. 18: 5.

compared with other coal networks, and it uses low-capacity trains that need to travel through the passenger-focused Metropolitan system to reach the Port of Brisbane.

The nature of the network means that Queensland Rail faces extra costs in providing for coal services on a system designed for lighter duty. Yet coal services are forecast to cover much of the substantial cost of sustaining the infrastructure, to the benefit of Queensland Rail and all rail users.

For miners, the standard of service they receive is limited by the configuration and condition of the West Moreton system. Yet it is unlikely that they would have any rail access at all if the old network had not been available when West Moreton coal services resumed in the 1990s.⁸

These challenges and mutual benefits need to be reflected in the tariff approach. The approach should balance the tension between the competing but mutually dependent interests of Queensland Rail and the miners.

We have considered Queensland Rail's 2020 DAU and subsequent submissions, comments from other stakeholders, and the criteria in s. 138(2) of the QCA Act, in forming our preliminary views on the appropriate West Moreton coal reference tariff, as set out in this draft decision.

An appropriate West Moreton coal reference tariff should aim to balance the objectives of, among other things:

- promoting the efficient operation of, use of and investment in network assets, including encouraging more access holders to contract on the West Moreton system (s. 138(2)(a))
- generating sufficient expected revenue to meet efficient costs and give Queensland Rail the opportunity to make a return on investments commensurate with the regulatory and commercial risks of providing access (ss. 138(2)(b), (g); 168A(a))
- setting a price that has regard to the interests of access seekers and holders, and competition in downstream markets (ss. 138(2)(a), (d), (e), (h)).

2.2.2 Volume uncertainty

The capacity available to coal services on the West Moreton system was fully contracted early in this decade, after the Cameby Downs mine opened in 2011. However, volumes fell after Peabody shut the Wilkie Creek mine in 2013. At present, there is uncertainty about whether New Hope's New Acland mine, which accounts for about two-thirds of the coal hauled on West Moreton, will continue operating beyond 2020. Queensland Rail has forecast that annual volumes will slump from its 9.1 million tonne high-volume forecast to as little as 2.1 million tonnes a year if the New Acland mine shuts.

Queensland Rail said that, notwithstanding this uncertainty, it was planning for higher volumes and investing on the assumption new customers would contract for access if the New Acland mine closed. It said:

While there is the prospect that the DAU2 period could see a drop off in coal tonnes moved on the West Moreton system to 2.1 mtpa in the short term, Queensland Rail does not consider that there is a realistic prospect of this volume of coal becoming the long term outlook for the West Moreton System.

⁸ West Moreton coal volumes peaked at 7.8 million tonnes in 2011–12, and were forecast to be 6.25 million tonnes for the 2016 undertaking period (see section 8.10 of QCA, *Queensland Rail's Draft Access Undertaking*, decision, June 2016: 184–189). New coal systems are typically built for 20 million tonnes or more.

Queensland Rail is aware of continuing interest in several coal mine developments in the region which would use the current available capacity on the system, and should all potential development of the system proceed, it is possible that expansion of the system would be required.⁹

At the same time, Queensland Rail indicated it did not expect the threefold increase in its estimated price at the low-volume forecast would be viable, saying it did 'not intend to apply a reference tariff for Yancoal at 2.1 mtpa [million tonnes a year] at the building block ceiling tariff'.¹⁰

Queensland Rail's proposed price (in sch. D), and the underlying cost build-up it has used to derive it, are based on its 9.1 million tonnes a year forecast. In this draft decision, the focus is on assessing that high-volume proposal. This is consistent with Queensland Rail's suggested approach:

Having a QCA approved reference tariff at 9.1mtpa will provide New Hope with certainty in its investment decisions in relation to its New Acland Stage 3 development.¹¹

At the high-volume forecast, there will be no question about whether users of coal services are underwriting the capacity available to them to contract, as they will be contracted to use all of it.

The greater complications arise if the New Acland mine shuts, and the West Moreton system's contracted volumes fall significantly short of available capacity. Potential ways forward under this low-volume scenario are discussed in Chapter 5.

Volume scenarios

Queensland Rail's submission is based on a 9.1 million tonne forecast for annual coal volumes on the West Moreton system (discussed in Chapters 2 to 4 of this draft decision). But Queensland Rail also indicated annual volumes could fall as low as 2.1 million tonnes (see Chapter 5). Key characteristics of the two forecasts include:

High volume

- 9.1 million tonnes a year
- 92.5 paths per week
- New Acland and Cameby Downs mines operating

Low volume

- 2.1 million tonnes a year
- 22 paths per week
- Only Cameby Downs mine operating

2.2.3 Capacity and underwriting

Capacity constraint

Coal services are the dominant users of the West Moreton system. However, it is a shared system, with small but significant use by trains carrying grain, cattle, general freight and passengers.

⁹ Queensland Rail, sub. 18: 9.

¹⁰ Queensland Rail, sub. 2: 11.

¹¹ Queensland Rail, sub. 2: 11.

The West Moreton tariff in both the 2008 QR Network access undertaking and the 2016 Queensland Rail undertaking made use of an allocation approach to apportion costs to the coal services, reflecting the share of system capacity that was available for them to use.

The West Moreton system can carry 113 trains per week travelling through the Metropolitan system to the Port of Brisbane. However, Queensland government policy has restricted coal services to contracting for 87 of those paths.¹² The QCA used that constraint to allocate common network costs to coal services, when assessing the West Moreton tariff for the 2016 undertaking.¹³

Queensland Rail said in its 2020 DAU explanatory submission that the 87-train-path constraint no longer applied, and that 97 paths were available for contracting by coal services.¹⁴ It therefore sought to increase the allocation of common network costs to coal based on the higher (97-path) constraint.

Yancoal and New Hope disagreed, saying the use of the 87-path constraint in the past had long-lasting effects, and there was no evidence it had been removed.¹⁵ New Hope said the constraint should apply until Queensland Rail signed contracts that exceeded the limit.

The application of the constraint in the past is likely to have had a chilling effect on coal exploration and investment in the West Moreton region—and is certainly something that has impacted on the timing of coal development by NHG [New Hope Group] in that region. Those effects are likely to remain for many years after the time at which clear confirmation of the available capacity has been received.¹⁶

Queensland Rail responded to the QCA's draft decision on its 2015 DAU, saying the 87-path constraint did not apply.¹⁷ No evidence was however apparent that the constraint had been removed. As stated in the QCA's decision on the 2015 DAU:

Clearly, the most compelling manner in which Queensland Rail could demonstrate that no such constraint applied would be providing evidence that it is able and willing to contract coal services above 87 paths. This would be clearest where coal services have contracted up to 87 paths and require additional paths for contracting, and DTMR [the Queensland government's Department of Transport and Main Roads] has removed the 87-path cap.¹⁸

We have not seen evidence of coal services contracting above the 87-train-path constraint; therefore, we consider removing the constraint when assessing the reference tariff to be premature. Indeed, as New Hope said¹⁹, given that coal miners' investment decisions were affected when the constraint was applied a decade ago, it may be appropriate only to remove the constraint when there is actual contracting above 87 paths.

For its 9.1 million tonnes a year scenario, Queensland Rail forecast that 92.5 weekly train paths would be required. We consider the capacity provided by 87 weekly paths—8.5 million tonnes a

¹² QCA, *Queensland Rail's Draft Access Undertaking*, decision, June 2016: 125.

¹³ See section 8.3.1 of QCA, *Queensland Rail's Draft Access Undertaking*, decision, June 2016: 121–126, for a detailed explanation of the 87-path-constraint.

¹⁴ Queensland Rail, sub. 2: 11 and 16. The 97 paths is the 113 path total capacity, less 14 paths preserved for primary industry rail traffic (mainly used for grain services), and two for passenger services.

¹⁵ New Hope, sub. 14: 11; Yancoal, sub. 16: 13; Yancoal, sub. 21: 2.

¹⁶ New Hope, sub. 14: 11.

¹⁷ Queensland Rail, *Queensland Rail's Draft Access Undertaking 1 (2015): Response to Queensland Competition Authority's Draft Decision to refuse to approve draft access undertaking*, December 2015: 29–30.

¹⁸ QCA, *Queensland Rail's Draft Access Undertaking*, decision, June 2016: 125.

¹⁹ New Hope, sub. 14: 11.

year—is an appropriate basis for assessing the high-volume scenario. The assumption is that any further capacity will be provided on an 'additional paths' (i.e. ad hoc, not contracted) basis.

This approach set out in the draft decision may change in the final decision, particularly if:

- Queensland Rail provides firmer volume numbers, or
- the QCA is provided with compelling evidence that the 87-path constraint no longer applies, and considers it is appropriate to alter the way available capacity is treated in its tariff assessment.

However, based on the information currently available, applying the 87-path constraint provides a way forward that allows the QCA to present its analysis and draft positions on the tariff submitted by Queensland Rail, so that stakeholders can make informed submissions. This is in the interests of Queensland Rail, access seekers and access holders (ss. 138(2)(b), (e), (h)).

Summary 2.1

The QCA's draft decision is that the appropriate way for Queensland Rail to amend the 2020 DAU is for the West Moreton coal tariffs to be assessed on the basis that the 87-train-path constraint applies.

Underwriting

For the 2016 undertaking period, there was a substantial portion of capacity on the West Moreton system available for coal services—namely the capacity previously contracted by the Wilkie Creek mine—which was expected not to be used. The tariff approach in the 2016 undertaking addressed this by providing for the two remaining miners using the West Moreton system to pay for the 80 paths available for West Moreton coal services, even though they were only forecast to use 63 of those paths between them.²⁰ This means Yancoal and New Hope have been, in effect, underwriting 27 per cent more capacity than they were forecast to use.

Queensland Rail's proposal to continue this approach, but to apply a higher 97-path limit, means that the miners would underwrite even more of the cost of the overall system. The underwriting approach provided revenue adequacy to Queensland Rail during the 2016 undertaking period. Underwriting 87 paths of capacity, let alone 97, would be difficult to sustain during the 2020 undertaking period at low volumes.

The expected level of underwriting and miners' willingness to pay is explored in more detail in Chapter 5, which considers appropriate price-setting mechanisms for lower volumes.

2.3 West Moreton tariff approach

Our preliminary view is to accept several aspects of the West Moreton tariff approach that Queensland Rail proposed, most of which are carried over from previous undertaking periods. These include:

- (a) applying a two-part tariff (section 2.3.1)

²⁰ The 87-path constraint for contracted coal services through the Metropolitan system applied for the 2016 undertaking period. However, seven of those paths were contracted by a mine located within the Metropolitan system, leaving 80 for contracting by coal services with an origin in the West Moreton system.

- (b) allocating costs to coal services based on the proportion of capacity that is available for them to contract (section 2.2.5 above)
- (c) applying 100 per cent take or pay (section 2.3.3)
- (d) retaining the approved ceiling revenue limit approach from the 2016 undertaking (section 2.3.3).
- (e) removing endorsed variation events for changes in contracted volumes (section 2.3.4).

However, we consider there are areas where the tariff approach proposed by Queensland Rail is not appropriate to approve and should be amended to appropriately balance the incentives and risks between Queensland Rail and access holders and seekers. These preliminary positions include applying a 5 per cent price premium for additional (ad hoc or non-contracted) services (section 2.3.2).

2.3.1 Two-part tariff

The two-part tariff was introduced in 2010 to address the potential for above-rail investments to increase volumes, and therefore below-rail revenues. By recovering half of the annual revenue requirement on a train path basis, and the other half on a weight and distance basis (i.e. per gtk), the tariff structure split the gains from any increase in capacity per train—Queensland Rail increased its revenue, while customers benefitted from lower unit costs.²¹

The tariff structure also has the effect of creating a 'distance taper'—a tariff outcome that lessens the disincentive for developing mines further from ports. This has been a feature of the central Queensland coal network tariffs since the first QCA-approved access undertaking in 2001.

The distance taper aims to strike a balance between the user pays principle, revenue adequacy and fostering development along the West Moreton line.²²

Mines closer to the Port of Brisbane (e.g. New Hope's New Acland mine) do not use infrastructure west of their haulage point but mines at the end of the line (e.g. Yancoals Cameby Downs mine) use all the West Moreton infrastructure. Queensland Rail has sunk costs for all the infrastructure and wants to recover the cost of providing access to the West Moreton system. This presents a trade-off between cost reflectivity—in relation to the portion of infrastructure that New Acland uses—and providing Queensland Rail with sufficient revenue to cover access to the entire system.

Queensland Rail proposed in the 2020 DAU to continue the distance taper approach (sch. D, cls. 3.1(a), (e)). However, New Hope said it preferred a fully user-pays tariff (i.e. one where all of the tariff was distance-based).²³

Pricing access charges using the distance taper recognises that capacity consumed closer to the port means fewer paths are available to access seekers further west. Yet, as Queensland Rail is required to maintain all the infrastructure on West Moreton, the distance taper goes some way to addressing this. Supplying a train path with an origin closer to the port carries an inherent opportunity cost to Queensland Rail (i.e. it could have sold the path to a user further west that would have generated more revenue) and the distance taper provides for users closer to the port to pay a portion of that cost.

²¹ QCA, *QR Network 2009 Draft Access Undertaking*, draft decision, December 2009: 93.

²² QCA, *Queensland Rail's Draft Access Undertaking*, decision, June 2016: 202.

²³ New Hope, sub 14: 29–30.

To provide a balance between cost reflectivity and revenue adequacy, the QCA's draft decision is that it is appropriate to retain the distance taper in the pricing structure. This approach will help balance the competing objectives above by:

- having miners closer to the port pay less for access than those further away, which is consistent with the user pays principle (ss. 138(2)(a), (e), (h)).
- encouraging economic development by mitigating some of the cost disadvantage faced by mines further from the port (ss. 138(2)(d), (h))
- addressing in part the opportunity cost to Queensland Rail of selling a shorter path, which it might otherwise have been able to use for a more distant mine that provided more revenue (s. 138(2)(b)).

Summary 2.2

The QCA's draft decision is that it is appropriate to approve the two-part tariff structure Queensland Rail has proposed for the West Moreton coal tariffs in the 2020 DAU.

2.3.2 Additional path pricing

The volume forecasts used to assess tariffs in the 2016 undertaking included a substantial number of uncontracted paths, which were expected to be used on an additional (ad hoc) basis.²⁴ Queensland Rail based these forecasts on the take-up of additional (ad hoc) paths by the Cameby Downs and New Acland mines, which had previously been used by the Wilkie Creek mine before it shut down. These additional paths had the same price that applied for contracted paths.

Over the past eight financial years, coal services used on an additional (ad hoc) basis have accounted for between 0 and 18 per cent of the paths available to coal services.²⁵

The tariff approach in the 2016 undertaking provides an incentive for miners to contract for access, because an increase in contracted volumes results in prices being adjusted through a mechanism known as an endorsed variation event.²⁶ Evidence shows that this incentive has been effective—Yancoal has twice increased contracted volumes for the Cameby Downs mine, which has resulted in tariff reductions. However, Queensland Rail is not proposing to include additional (ad hoc) paths in its forecasts for the 2020 DAU period. This means that, subject to the final volumes submitted by Queensland Rail being appropriate for assessing the West Moreton tariff, there may not be a need for the endorsed variation event mechanism that applies in the 2016 undertaking (discussed in section 2.3.4).

Therefore, setting higher prices for additional paths would be an alternative mechanism to encourage contracting (as long as the higher price does not apply to alternative paths Queensland

²⁴ The definition of 'ad hoc' services in the 2020 DAU includes both additional paths providing essentially the same service as contracted paths (i.e. taking coal from a mine to a port), and occasional or 'ad hoc' paths that might be for repositioning a locomotive, or bringing wagons from a repair depot. We have sought to make it clear where necessary which of these two applications is being discussed. See section 12.7 of this draft decision.

²⁵ Based on actual train paths used from 2010–11 to 2017–18.

²⁶ This provision requires that the new contracted volumes are higher than the volumes, including both contracted and ad hoc, that were used to develop the tariff. See section 8.5.1 of QCA, *Queensland Rail's Draft Access Undertaking*, decision, June 2016: 156–159, and the QCA's approvals of the 2016 and 2018 'Yancoal' endorsed variation events, at <http://www.qca.org.au/Rail/Queensland-Rail/More-on-QLD-Rail/2016-Access-Undertaking/Ongoing-Compliance/Reference-Tariff-Adjustments/Endorsed-Variation-Events>.

Rail has offered where is not able to provide a scheduled path). The access holders relying on additional paths would also be paying for the flexibility of using capacity without take-or-pay obligations.

Queensland Rail's submission assumes that 95 per cent of the capacity that is available to coal will be required to provide the access for its 9.1 million tonne a year forecast (i.e. 92.5 out of 97 available weekly paths).²⁷ Coal users would then pay for about 5 per cent more paths than Queensland Rail forecasts they will contract to use (i.e. the difference between 92.5 and 97).

We do not consider it appropriate to apply such a premium for contracted paths. The capacity provided by 87 weekly paths would be an appropriate basis for allocating costs (section 2.2.4). However, there is merit in a premium for additional (ad hoc) paths. Differential pricing between contracted and additional paths would:

- encourage miners to contract more paths, rather than relying on additional services, thereby giving Queensland Rail increased revenue certainty through take or pay (ss. 138(2)(b), (g))
- benefit access holders/seekers by encouraging Queensland Rail to provide paths, including those that can be used by coal services, but are not available to be contracted (ss. 138(2)(a), (d), (e), (h))
- enable Queensland Rail to achieve revenue adequacy sooner, through a higher additional railing charge (ss. 138(2)(b), (g)); this benefit is particularly relevant in low-volume scenarios (see Chapter 5).

Australian gas transmission pipelines have a similar pricing structure to Queensland Rail's coal services, under which additional pipeline capacity typically attracts a price premium of 30 per cent.²⁸ Nevertheless, a conservative approach is warranted for introducing an additional paths price premium for Queensland Rail. Miners and Queensland Rail have sunk costs in the absence of an additional paths premium, and we have considered those parties' interest in recovering these costs. Miners have also underwritten spare capacity in the past. These factors must be balanced against the desirable incentives for Queensland Rail to make capacity available and for miners to contract. A small premium of 5 per cent, while much less than that applied for gas transmission, achieves an appropriate balance in the circumstances.

We would welcome stakeholders' comments on the application and level of an additional path price premium.

²⁷ Queensland Rail, sub. 2: 11.

²⁸ Jemena's [gas pipeline rates](https://jemena.com.au/pipelines) have a 30 per cent premium for 'as available haulage' (which does not attract take or pay) over 'firm haulage' (which does) (see <https://jemena.com.au/pipelines>). APA Group has a less comparable [pricing structure](https://www.apa.com.au/our-services/gas-transmission/current-tariffs-and-terms/current-tariffs-and-terms/), but charges a similar 30 per cent premium for contracts with a term of less than 12 months (see <https://www.apa.com.au/our-services/gas-transmission/current-tariffs-and-terms/current-tariffs-and-terms/>).

Summary 2.3

The QCA's draft decision is that it is appropriate for Queensland Rail to amend the 2020 DAU (sch. D) so that additional railings by coal services on the West Moreton system are priced at a 5 per cent premium to contracted coal services.

2.3.3 Take or pay and approved ceiling revenue limit

Queensland Rail proposed in its 2020 DAU to require 100 per cent take or pay for West Moreton coal services, but to only collect take or pay when total revenue is below the 'approved ceiling revenue limit' (sch. D, cls. 4(c), (d)). The 'approved ceiling revenue limit' reflects the TRR, which is calculated on the basis that all 87 paths are contracted (see section 2.2.3 above). This is the same approach that applies in the 2016 undertaking. Stakeholders did not comment on the appropriate proportion of take or pay for West Moreton coal services, or on the approved ceiling revenue limit.²⁹

We consider that it remains appropriate to apply 100 per cent take or pay for West Moreton coal services, as it serves the objectives of:

- (a) supporting revenue certainty for the regulated access provider (ss. 138(2)(a), (b), (g); 168A(a))
- (b) encouraging 'honesty in contracting', as access holders have an incentive to sign agreements for capacity they expect to use (ss. 138(2)(a), (e), (h)).

Because Queensland Rail will be able to collect take or pay for 100 per cent of the 87 weekly paths that are forecast to be contracted (whether or not the paths are used), it will not earn less than the 'approved ceiling revenue limit' under Queensland Rail's proposed approach. Queensland Rail will be able to earn more than the 'approved ceiling revenue limit', but only if it provides more than 87 paths in total.³⁰

Our draft decision is that the 'approved ceiling revenue limit' approach proposed by Queensland Rail is appropriate to approve, having regard to the factors in s. 138(2). We consider that the approach:

- promotes the legitimate business interests of Queensland Rail, because Queensland Rail can use take or pay to achieve revenue adequacy and has the opportunity to earn additional revenue if it provides more than 87 paths (s. 138(2)(b))
- promotes the interests of access seekers and access holders, because it incentivises Queensland Rail to offer additional (ad hoc) paths beyond contracted levels if there is demand (ss. 138(2)(b), (e), (h)).
- provides access holders with an incentive to make unused rail paths available to other users to reduce their expected take-or-pay liability, particularly when the system is at or close to fully contracted.³¹ Incentives to transfer capacity promote the efficient use and operation of

²⁹ Stakeholders did use the 100 per cent take or pay for West Moreton coal services as an example of revenue protections provided to Queensland Rail, in their comments on Queensland Rail's WACC (see Chapter 3 and Appendix A of this draft decision).

³⁰ The 87 paths can be reached by any combination of contracted and additional (ad hoc) paths.

³¹ Queensland Rail's 2020 DAU does not include a capacity trading mechanism, like that included in Aurizon Network's access undertaking and system rules. Nevertheless, Queensland Rail's proposed 'approved ceiling revenue limit' approach provides some of the same benefits. See Aurizon Network's 2017 access

the network, and may therefore prevent inefficient investment in additional capacity (ss. 138(2)(a), (g)).

Summary 2.4

The QCA's draft decision is that it is appropriate to approve Queensland Rail's proposal that 100 per cent take or pay apply for the West Moreton reference tariff in the 2020 DAU, subject to an approved ceiling revenue limit (sch. D, cl. 4).

2.3.4 Endorsed variation events for volume reset

Queensland Rail proposed to remove the endorsed variation event for resetting tariffs if contracted volumes are greater than the forecasts used to develop the reference tariffs for the West Moreton and Metropolitan systems (cl. (c) of the definition of 'Endorsed Variation Event' in the 2016 undertaking). On the other hand, Queensland Rail proposed to leave the rest of the tariff variation regime in the 2016 undertaking in place. This includes both review events and endorsed variation events (sch. D, cl. 5).

Our preliminary view is that it is appropriate not to include the endorsed variation event for volume resets in the undertaking, where a high-volume scenario applies (e.g. the 9.1 million tonnes a year proposed by Queensland Rail, or the 8.5 million tonnes we used in this draft decision). If the system is fully contracted, there will be no need to have an endorsed variation event to reward access holders for contracting away the uncertainty caused by including additional (ad hoc) paths in the volume forecasts, because there will be no such uncertainty.

However, if the volume forecasts used to assess the West Moreton tariff in the final decision are substantially less than the capacity that is available for coal services to contract, then it may be appropriate to have some process for recalculating tariffs to reflect additional contracting. We will consider this in our final decision, as part of assessing the overall mix of risks and rewards, having regard to the factors in s. 138(2), including the interests of Queensland Rail and its customers. We would welcome stakeholders' comments on whether it is appropriate that the 2020 DAU include an endorsed variation event for resetting tariffs.

Summary 2.5

The QCA's draft decision is that it is appropriate to approve Queensland Rail's proposal that the 2020 DAU not include endorsed variation events for contracting above the volume forecasts used to assess the West Moreton coal reference tariff (cl. 7.1, definition of 'Endorsed Variation Event'), subject to final volumes to be assessed in the QCA's final decision.

2.4 Other reference tariff matters

2.4.1 Metropolitan tariff

The Metropolitan tariff has been developed for the past decade using a proxy approach that relies on prices derived for the coal services that use the West Moreton system. This approach avoided

undertaking, cl. 7.4 and System Rules:

<https://www.aurizon.com.au/~media/aurizon/files/what%20we%20do/network/cqcn/cqcn%20system%20rules/cqcn%20system%20rules.pdf>.

the complicated task of seeking to allocate costs for the Metropolitan system to coal services, which use only a small portion of what is predominantly a commuter network.

Queensland Rail proposed in the 2020 DAU to continue this Metropolitan proxy pricing approach, and escalate the 2016 undertaking price by actual and forecast CPI.³² New Hope supported this approach.³³

We consider that the proxy approach remains an appropriate way of determining a price that sits between:

- the incremental cost—which would be at or near zero, and
- the standalone cost—which could be expected to be at least as high as the price that is being charged.

The Metropolitan tariff approaches in the 2008 and 2016 undertakings have sought to give Queensland Rail an opportunity to develop a separate asset base for new infrastructure in the Metropolitan system that is specific to West Moreton coal and freight services. While Queensland Rail did not seek to include any infrastructure in the Metropolitan asset base during the term of the 2016 undertaking, and has not proposed to do so for the 2020 DAU period, we have had regard to the fact Queensland Rail has proposed to continue the proxy approach, and that it has received stakeholder support. This leaves the way open for Queensland Rail to apply in the future to implement a Metropolitan-specific asset base, including by potentially seeking ex post approval for capital expenditure completed during the 2020 DAU period that has not been included in its forecasts.

Accordingly, our draft decision is that it is appropriate to approve the proxy approach to the Metropolitan system tariff for West Moreton coal services that Queensland Rail has proposed in the 2020 DAU. This simple, transparent approach is in the interests of Queensland Rail, access seekers and access holders (ss. 138(2)(b), (e), (h)).

As with the 2016 undertaking, we consider that this draft decision, if confirmed in the final decision, would not predetermine our consideration of any future DAU.

Summary 2.6

The QCA's draft decision is that it is appropriate to approve the Metropolitan system tariff approach that Queensland Rail applied to West Moreton coal services in the 2020 DAU, which escalates the prices from the 2016 undertaking by actual and forecast CPI.

2.4.2 Capital expenditure approval process (schedule E)

Timing and frequency of submissions (cl. 1.3(a))

Queensland Rail proposed to submit an annual capital expenditure report to the QCA within six months after the end of each financial year (sch. E, cl. 1.3(a)). Stakeholders did not comment on the timing of the capital expenditure review process.

We are considering whether it would be appropriate to have Queensland Rail's capital expenditure reviewed less frequently, perhaps just once toward the end of the term of each undertaking. Reasons this may be appropriate include that:

³² Queensland Rail, sub. 2: 45.

³³ New Hope, sub. 14: 30.

- (a) fewer reviews may reduce the regulatory burden on Queensland Rail and stakeholders—Queensland Rail would face less work in preparing annual submissions and stakeholders would not need to comment as frequently
- (b) our costs of reviewing the capital expenditure would also likely be less, as five years of projects could be assessed at once, generating economies of scale
- (c) Queensland Rail's capital expenditure on the West Moreton system is relatively low (for example, it is a small fraction of the spending by Aurizon Network in central Queensland³⁴)
- (d) the recently completed review of spending from 2013 to 17 showed it could be done for four years³⁵
- (e) Queensland Rail can seek pre-approval if it desires more certainty before starting work on large projects (and is already doing so for the Toowoomba Range slope stabilisation project).

Accordingly, our draft decision is that it is not appropriate to approve Queensland Rail's proposal for an annual capital expenditure review. Less frequent reviews may be in Queensland Rail's legitimate business interest. The reduced cost would also be in the interest of access seekers and holders (ss. 138(a), (b), (e), (h)).

With a review once per undertaking term, much of the capital expenditure process proposed in the 2020 DAU (and carried over from previous undertakings) would remain in place. This would include assessing for prudence of scope, standard and cost, applying the capital indicator approach, and giving Queensland Rail the option of seeking pre-approval.

The capital expenditure report would need to be submitted early in the final financial year of the undertaking term, to allow sufficient time to complete the review before finalising the tariffs for the next undertaking period. The QCA considers that Queensland Rail should be able to submit its report by 31 August 2024.

The QCA is seeking comments from Queensland Rail and other stakeholders on whether and how a less frequent capital expenditure review process should be implemented.

Summary 2.7

The QCA's draft decision is that it is not appropriate to approve the proposed annual capital expenditure process in the 2020 DAU (sch. E, cl. 1.3). The QCA invites comments from Queensland Rail and other stakeholders on whether a single, five-year review toward the end of the term of each undertaking term would be appropriate to approve.

Statement of reasons (cl. 1.5)

Queensland Rail proposed to add a prescriptive list of factors that must be addressed in a statement of reasons produced by the QCA for decisions made under the capital expenditure

³⁴ Aurizon Network's 2017–18 capital expenditure claim is for \$211.2 million, while Queensland Rail's is for \$12.3 million, excluding interest during construction.

³⁵ See QCA, *Queensland Rail's 2013–17 capital expenditure claim*, decision notice, attachment to the QCA's letter to Queensland Rail, 21 March 2019.

approval process in the 2020 DAU (sch. E, cl. 1.5).³⁶ New Hope and Yancoal opposed Queensland Rail's proposal.³⁷

We do not consider that it is appropriate to approve this amendment. The QCA already provides reasons for decisions made under schedule E, and the current form of the undertaking provides the QCA with necessary flexibility for the statement of reasons to reflect the circumstances at hand. Also, adopting the proposed amendments may lead to further costs being incurred and delays in statements being produced.

Further, we do not consider that Queensland Rail has adequately demonstrated that it receives insufficient reasons in relation to decisions made under schedule E that would support the amendment being accepted.

Therefore, our draft decision is that it is not in the interests of stakeholders to adopt the proposed amendments (ss. 138(2)(a), (e), (h)). Our draft decision is that the capital expenditure approval process in the 2016 undertaking should be adopted in the 2020 DAU.

Summary 2.8

The QCA's draft decision is that it is not appropriate to approve the proposed list of factors that must be addressed in a statement of reasons for a capital expenditure decision (sch. E, cl. 1.5). Schedule E, cl. 1.5 should therefore be removed from the 2020 DAU.

Prudency criteria (cls. 3.2(e), 4.2(c), 5.3(c))

Queensland Rail proposed to expand what the QCA would be required to consider when assessing the prudency of capital expenditure, standard of works and costs (sch. E, cls. 3.2(e), 4.2(c), 5.3(c)). New Hope and Yancoal opposed Queensland Rail's proposal.³⁸

We do not consider the proposed amendments are appropriate, as the factors listed in the 2016 undertaking adequately prescribe what we should consider when undertaking prudency assessments. The proposed amendments add unnecessary complexity to the process by requiring us to also consider if additional material submitted by Queensland Rail, on which there is no limitation, is relevant.

Our view is that the wording of the existing clauses in the 2016 undertaking should be adopted, as Queensland Rail's proposed amendments may delay decisions and reduce certainty for stakeholders (ss. 138(2)(a), (b), (e), (h)). The current form of the undertaking also does not prevent Queensland Rail from submitting supplementary information for the QCA to consider, as also noted by New Hope.³⁹

Summary 2.9

The QCA's draft decision is that it is not appropriate to approve the proposed amendments to the prudency assessment processes (sch. E, cls. 3.2(e), 4.2(c), 5.3(c)). Those clauses should be removed from the 2020 DAU.

³⁶ Queensland Rail, sub. 2: 64.

³⁷ New Hope, sub. 15: 5; Yancoal, sub. 16: 21.

³⁸ New Hope, sub. 15: 5; Yancoal, sub. 16: 21.

³⁹ New Hope, sub. 15: 5.

Carryover account (cl. 7(e))

Queensland Rail proposed in the 2020 DAU to adopt the process outlining the accounting treatment of the capital expenditure carryover account from the 2016 undertaking (sch. E, cl. 7(e)).

We have considered the provision afresh, and are not inclined to adopt cl. 7(e) in its current form, as the current wording does not accurately reflect the appropriate accounting treatment of the capital expenditure carryover account. For the purposes of clarifying the intention of cl. 7(e), we consider the clause should be amended to reflect that the capital component described in cl. 7(b) is to be included in the asset base, and the cashflow components described in cl. 7(c) are to be taken into account in tariff pricing. Further consequential amendments may also be required to reflect accurately how the balance in the capital expenditure carryover account is recovered or returned to access holders.

Clarifying the intention and process behind the accounting treatment of the capital expenditure carryover account is in the interests of stakeholders as it provides certainty (ss. 138(2)(a), (b), (h)).

Summary 2.10

The QCA's draft decision is that the appropriate way to amend the proposed approach to the capital expenditure carryover account in the 2020 DAU (sch. E, cl. 7e)) is to make it more accurately reflect the appropriate accounting treatment, as explained in section 2.4.2.

2.4.3 Adjustment charge approval process (sch. D, cl. 6)

Queensland Rail proposed in the 2020 DAU to adopt the adjustment charge approval process from the 2016 undertaking (sch. D, cl. 6 of the 2020 DAU). Adjustment charges are a true-up of access charges, which results from a variation to the reference tariff that is approved by the QCA after that variation is to take effect (sch. D, cl. 6.1).

The adjustment charge approval process requires Queensland Rail to submit the proposed adjustment charges to the QCA for approval and may involve the QCA consulting with stakeholders before deciding whether to approve or refuse to approve the proposed charges (cls. 6.2 to 6.4).

While it remains appropriate for us to approve variations to the reference tariff (sch. D, cl. 5), our draft decision is that it is not appropriate to approve the resulting adjustment charges (sch. D, cl. 6). The QCA's role in approving adjustment charges is unnecessary, because the process of calculating adjustment charges is mechanical and should be able to be verified by Queensland Rail's customers. We consider that the unnecessary regulatory burden and potential delays involved in us approving adjustment charges is inefficient and is not in the interests of Queensland Rail or access holders (ss. 138(2)(a), (b), (h)). In case of a dispute about calculating the adjustment charges, the dispute resolution procedures in Part 6 of the undertaking could be used.

Therefore, our draft decision is that Queensland Rail should amend cls. 6.2 to 6.5 of schedule D of the 2020 DAU to remove the requirement for the QCA to approve adjustment charges. Consequential amendments may also be required.

Summary 2.11

The QCA's draft decision is that the appropriate way for Queensland Rail to amend the adjustment charge process in the 2020 DAU (sch. D, cls. 6.2 to 6.5) is to remove the requirement for the QCA to approve adjustment charges. Consequential amendments may also be required.

2.4.4 Price differentiation for reference tariffs

Queensland Rail proposed that it be able to 'impose access charges' that vary from the reference tariff, to reasonably reflect differences in cost or risk to Queensland Rail of providing access (cl. 3.3(c)). Apart from adding the ability to 'impose' the variation, the proposed clause has the same effect as that in the 2016 undertaking. The changes formed part of a broader amendment to the limits on price differentiation in Part 3 of the 2020 DAU, which mostly applied to non-reference tariff services (see section 8.2 of this draft decision).

New Hope and Yancoal opposed the change. New Hope said the drafting should make it clear that only cl. 3.3(c), and not the rest of cl. 3.3, applied to reference tariffs, and that the cost or risk should be 'efficient'.⁴⁰ Yancoal said it should be clearer that cost or risk was the only basis for variation.⁴¹

The price differentiation provision in the 2020 DAU for reference tariffs may be in the interest of Queensland Rail, but is not in the interest of access seekers/holders, as it provides for Queensland Rail to 'impose' variations that should be subject to negotiation (ss. 138(2)(b), (e), (h)). We therefore consider Queensland Rail's proposed drafting lacks balance and is not appropriate to approve.

Our view is that it would be appropriate to amend the proposed price differentiation rule for reference tariffs so it specifies Queensland Rail will 'negotiate' any differences that reasonably reflect the degree to which the cost or risk of providing access for the proposed service differs from that of the reference train service. The clause should clearly specify that any variations should 'only' reflect those differences. We consider that New Hope's concern about the cost or risk needing to be efficient is addressed by the requirement that the variation 'reasonably reflect differences' (cl. 3.3(c)).

Summary 2.12

The QCA's draft decision is that the appropriate way for Queensland Rail to amend the price differentiation rule for reference tariffs in the 2020 DAU (cl. 3.3(c)) is to specify that Queensland Rail will 'negotiate' any variation of the reference tariff to reflect the degree to which the cost or risk of providing access for the proposed service differs from that of the reference train service and that any variations 'only' reflect those differences.

⁴⁰ New Hope, sub. 15: 5–6.

⁴¹ Yancoal, sub. 16: 20.

3 RATE OF RETURN

The WACC is an estimate of the rate of return on investment which is commensurate with the regulatory and commercial risks involved with providing access to the service. For the Queensland Rail 2020 DAU, the WACC (or rate of return) is used in the building block methodology as an input to calculate the reference tariffs for coal services operating on the West Moreton system.

In the 2020 DAU, Queensland Rail has proposed a WACC of 7.47 per cent, having regard to the risks facing the entire Queensland Rail network.

Overview of the draft decision

The QCA's draft decision is that a WACC of 6.02 per cent is appropriate, based on the placeholder averaging period of January 2019 (see the summary table below). In coming to this view, the QCA has considered that it is appropriate to assess only the regulatory and commercial risks that Queensland Rail faces in providing access for coal traffic on the West Moreton system, rather than risks associated with the entire Queensland Rail network. This chapter sets out the QCA's considerations of individual WACC parameters in forming its bottom-up WACC estimate, as well as the appropriateness of the overall WACC generated from this analysis.

Rate of return (WACC)—summary

<i>Queensland Rail proposal</i>	<i>QCA draft decision</i>
WACC scope	
The WACC provides a return commensurate with the risks of providing services across the entire Queensland Rail network.	The proposal is not appropriate to be approved. The WACC should provide a return commensurate with the risks facing coal traffic on West Moreton only (see section 3.1).
Assessment of individual WACC parameters	
A bottom-up assessment of individual WACC parameters provides a post-tax nominal (vanilla) WACC of 7.47% for a June 2017 placeholder averaging period.	The proposal is not appropriate to be approved. A bottom-up assessment of individual WACC parameters provides a post-tax nominal (vanilla) WACC of 6.02% for a January 2019 placeholder averaging period (see section 3.2).
Class 1 railroads, ports, airports and toll roads are relevant comparator industries for estimating the asset beta and capital structure.	The proposal is not appropriate to be approved. West Moreton coal's ⁴² exposure to systematic risk is greater than that of regulated energy and water businesses, but less than that of toll roads (see sections 3.2.1 and 3.2.2).
An asset beta of 0.77 and an equity beta of 0.98 are appropriate. West Moreton coal exhibits greater systematic risk than Aurizon Network.	The proposal is not appropriate to be approved. An asset beta of 0.5 (and an equity beta of 0.71) are appropriate. These values are consistent with the underlying West Moreton coal asset exhibiting greater systematic risk than Aurizon Network (see section 3.2.1).

⁴² By West Moreton coal, the QCA refers to Queensland Rail's operations providing below-rail access to coal-carrying train services on the West Moreton system.

<i>Queensland Rail proposal</i>	<i>QCA draft decision</i>
Cost of debt is estimated for a BBB+ benchmark entity, in a manner consistent with the Aurizon Network UT5 draft decision.	The proposal is not appropriate to be approved. A cost of debt estimated for a BBB benchmark entity based on Bloomberg and RBA third-party estimates is appropriate (see section 3.2.2 and 3.2.4).
A term-matched risk-free rate and a market risk premium of 7.0 per cent are proposed, consistent with the approach in the Aurizon Network UT5 draft decision.	The proposal is not appropriate to be approved. A 10-year risk free rate and a market risk premium of 6.5 per cent are appropriate (see section 3.2.3 and 3.2.5).
A gamma estimate of 0.46, consistent with the Aurizon Network UT5 draft decision.	The proposal is not appropriate to be approved. A gamma of 0.484 is appropriate, reflecting more recent values/rulings (see section 3.2.6).
Assessment of the bottom-up estimate	
Queensland Rail proposed a WACC of 7.47%, in accordance with the WACC parameters assessed.	The proposal is not appropriate to be approved. A WACC of 6.02 per cent for the placeholder averaging period provides a return on investment commensurate with the commercial and regulatory risks involved. See section 3.3.

The QCA's approach

Queensland Rail has proposed a post-tax nominal (vanilla) WACC of 7.47 per cent, comprising:

- cost of equity of 8.76 per cent
- cost of debt of 4.13 per cent
- a capital structure of 28 per cent debt.

In reviewing Queensland Rail's WACC proposal, we have had regard to the pricing principles in s. 168A(a) of the QCA Act which state that the price of access should generate expected revenue for the service that is at least enough to meet the efficient costs of providing access to the service, and include a return on investment commensurate with the regulatory and commercial risks involved.

The QCA's draft decision is that it is not appropriate to approve Queensland Rail's 2020 DAU WACC proposal, having regard to the approval criteria in the QCA Act (s. 138(2)). For a January 2019 placeholder averaging period, the QCA's draft decision is that an appropriate rate of return is 6.02 per cent, comprising:

- a return on equity of 6.92 per cent
- a return on debt of 4.67 per cent
- a capital structure of 40 per cent debt (60 per cent equity)
- gamma of 0.484.

Queensland Rail said it sought to minimise debate over allowed returns by accepting the QCA's WACC methodology, as set out in the QCA's draft decision on Aurizon Network's 2017 DAU (UT5), except to update the beta and gearing ratio.⁴³

The beta and gearing inputs that Queensland Rail used to estimate its WACC have contributed significantly to the QCA's draft decision that it is not appropriate to approve Queensland Rail's

⁴³ Queensland Rail, sub. 2: 17.

proposal. Relevantly, Queensland Rail's proposed WACC, which is based on the risks of the entire Queensland Rail network, is likely to provide a rate of return that does not represent the risks associated with coal traffic on the West Moreton system. Our view is that a WACC based on the risks faced by coal traffic on the West Moreton system is appropriate.

We had regard to both a bottom-up assessment of individual WACC parameters and the overall reasonableness and appropriateness of the resulting WACC. While a bottom-up assessment provides a means for assessing an appropriate rate of return for Queensland Rail, an ultimate consideration is whether the overall WACC is appropriate, having regard to all of the relevant factors in s. 138(2) of the QCA Act. Queensland Rail said that, as many aspects of its proposal reflect positions taken by the QCA in the draft decision on Aurizon Network's UT5, it reserved the right to revisit its WACC proposal in light of any subsequent developments, including the QCA's final UT5 decision.⁴⁴

The QCA's bottom-up WACC assessment has incorporated developments since the QCA's draft decision on Aurizon Network's 2017 DAU, including the final decision on Aurizon Network's DAU, which now forms the approved 2017 Aurizon Network undertaking. For the purposes of clarification, all relevant matters have been considered afresh for the purposes of this draft decision.

At the time of this draft decision the future of New Hope's New Acland mine remains uncertain. We have largely assessed Queensland Rail's WACC on the basis that New Hope's New Acland Stage 3 project goes ahead. We note that this approach is consistent with Queensland Rail's proposed price (in sch. D), which has been derived based on a 9.1 million tonnes a year forecast. When we revisit the WACC in the final decision, we will take into account the final volumes as submitted by Queensland Rail and assessed by the QCA.

3.1 WACC scope

Queensland Rail proposed a WACC based on risks that the entire Queensland Rail network faces, noting:

In determining the WACC for rail entities, the QCA has consistently set a network wide WACC rate. That is, the WACC has been determined on the characteristics of, for example, Queensland Rail's entire below rail network, rather than having separate WACC calculations for each individual system based upon the system's characteristics.⁴⁵

New Hope and Yancoal disagreed with Queensland Rail's assessment that the relevant risk profile included risks to its activities outside of West Moreton coal. New Hope said:

NHG considers that, consistent with the QCA Act pricing principles, the rate of return that is allowed for in pricing of services for coal customers should reflect the degree of risk faced in supplying services to those customers. The pricing principles provide that the price of access to a service should generate expected revenue for the service that is at least enough to meet the efficient costs of providing access to the service and include a return on investment commensurate with the regulatory and commercial risks involved in providing the services. To the extent that QR faces a different degree of risk in the supply of other services, that should not be reflected in returns recovered from coal customers.⁴⁶

We had regard to the pricing principles in the QCA Act, amongst other considerations, when determining an appropriate rate of return for Queensland Rail.

⁴⁴ Queensland Rail, sub. 2: 17.

⁴⁵ Queensland Rail, sub. 18: 5.

⁴⁶ New Hope, sub. 14: 13.

Contrary to Queensland Rail's submission, we have not always had regard to network-wide characteristics when determining a WACC for Queensland Rail. While the definition of WACC in the 2016 access undertaking applied to the ceiling price for tariffs on all networks, the matters considered in determining the 2016 undertaking WACC related to the risks of providing access for coal traffic on the West Moreton system.

In the 2020 DAU, the purpose of the WACC is as an input to the calculation of the reference tariff for coal-carrying services that operate on the West Moreton system. As such, the WACC should reflect the risks that are pertinent to coal traffic that travels over this system. This is consistent with estimating a rate of return that is commensurate with the regulatory and commercial risks involved in providing the service for which the reference tariff is being set. To set a return on investment based on risks relevant to the whole network would be inefficient, as it would send incorrect investment signals. It would also not reflect a return commensurate with the risks involved in providing the reference service on the West Moreton system. Coal traffic on Queensland Rail's West Moreton system is likely to bear risks that are significantly different from risks to other parts of the network. A WACC that reflects an average of all disparate risks incentivises capital expenditure above an efficient level in West Moreton, where the allowed WACC is higher than the required WACC. Conversely, there would be under-investment in areas where the required return on investment is higher than the allowed WACC. Additionally, if a WACC for the entire Queensland Rail network is used, this would result in inefficient pricing (as different WACCs result in different prices), which would lead to inefficient use of the network.

For these reasons, the QCA considers it appropriate to determine a WACC by having regard to only risks borne by Queensland Rail's coal operations on the West Moreton system.⁴⁷

3.2 Individual WACC parameters

Queensland Rail's proposed post-tax nominal (vanilla) WACC is based on a build-up of individual WACC parameters. Queensland Rail's WACC proposal was accompanied by advice it received from its consultant, Frontier Economics (Frontier).

In considering whether it is appropriate to approve Queensland Rail's overall WACC, the QCA has undertaken a bottom-up WACC analysis to evaluate Queensland Rail's proposal.

Table 1 outlines Queensland Rail's proposed parameter build-up associated with its 2020 DAU WACC proposal, as well as the QCA's consideration of individual WACC parameters.

Importantly, this is not a like-for-like comparison, as Queensland Rail's WACC parameters are estimated with reference to a June 2017 placeholder averaging period, while the QCA's WACC parameters are estimated with reference to a January 2019 placeholder averaging period.

⁴⁷ For the avoidance of doubt, the WACC within this chapter is applicable to reference tariff services on West Moreton only. As a result, the QCA considers that consequential amendments to the definition of 'WACC' may be required to reflect the QCA's position on the WACC for non-reference tariff services (see section 8.3).

Table 1 WACC parameters—Queensland Rail's proposal and the QCA's draft decision

<i>Parameter</i>	<i>Queensland Rail 2020 DAU submission</i>	<i>QCA draft decision</i>
Credit rating	BBB+	BBB
Risk-free rate	1.90%	2.28%
Market risk premium	7.00%	6.50%
Asset beta	0.77	0.50
Gearing	28%	40%
Corporate tax rate	30%	30%
Gamma	0.46	0.484
Equity beta	0.98	0.71
Debt beta	0.12	0.12
Cost of equity	8.76%	6.92%
Debt margin (incl. refinancing)	2.23%	2.39%
Cost of debt	4.13%	4.67%
WACC	7.47%	6.02%

Note: Most of the parameters in the table have been rounded to two decimal places for presentation. To preserve accuracy, the QCA has not rounded any of the WACC inputs in estimating a final WACC figure.

Our assessment of the individual parameters used to generate a bottom-up estimate is outlined below.

3.2.1 Beta

The asset beta (or unlevered equity beta) of an entity is a relative measure of the underlying risk of the entity relative to the risk of the market as a whole—often referred to as systematic risk. The levered equity beta reflects not only this risk but also the financial risk borne by equity holders from the use of debt as part of the funding for the business.

Appropriate comparator industries

Queensland Rail proposed an asset beta of 0.77, based on advice it received from Frontier. Frontier formed this view by conducting a first principles analysis of the risks facing the entire Queensland Rail network. Frontier noted that there were few, if any, comparators that embodied all of Queensland Rail's key risk characteristics. Consequently, Frontier considered that:

Comparators should be selected and afforded weight on the extent to which their asset beta reflects conditions relevant to Queensland Rail in contrast to alternative comparators.⁴⁸

Frontier determined that Class 1 railroads and ports were the most relevant comparators, and provided weightings of 40 per cent to Class 1 railroads and 30 per cent to ports. It considered airports to be the next most relevant comparator and assigned a weighting of 15 per cent. Frontier stated that toll roads and pipelines were less relevant, and applied weightings of 15 per

⁴⁸ Queensland Rail, sub. 4: 3.

cent and 0 per cent respectively. According to Frontier, energy and water businesses were not relevant at all, sharing no key, risk-based features with Queensland Rail.⁴⁹

Yancoal and New Hope did not agree with Queensland Rail's assessment of appropriate comparator industries. Yancoal considered from first principles that the best comparators would be Australian coal supply chain businesses with similar exposure to coal commodity prices and regulatory arrangements, and Australian water and electricity businesses with similar regulatory arrangements.⁵⁰ New Hope considered that, due to the similarities between Queensland Rail and Aurizon Network, regulated energy and water businesses were the best comparators for Queensland Rail.^{51,52}

As outlined above, we consider that the beta should reflect the risks pertinent to coal traffic that travels over the West Moreton system. Consequently, the first principles analysis that the QCA undertook to determine appropriate comparator industries focused specifically on these risks, rather than risks faced by the entire network.

First principles analysis

The QCA's first principles analysis (Appendix A) concluded that the comparators considered by Queensland Rail to have some relevance (Class 1 railroads, ports, airports, toll roads and North American pipelines), are all likely to have higher exposure to systematic risk than West Moreton coal. Class 1 railroads, North American pipelines, ports, toll roads, and airports business groups all operate in environments where the underlying demand for the provided service is responsive to the state of the economy, and have limited mechanisms to buffer revenues in the event of an economic shock. In contrast, Queensland Rail is unlikely to have cyclical demand for its coal operations on West Moreton. Furthermore, Queensland Rail has a regulatory regime that is likely to provide a high level of revenue stability in the event that there is a temporary reduction in demand for West Moreton coal services. Consequently, Class 1 railroads, North American pipelines, ports, toll roads and airports business groups are likely to exhibit greater systematic risk than West Moreton coal.

We consider that West Moreton coal is likely to face a greater level of systematic risk than regulated energy and water businesses. West Moreton coal and regulated energy and water businesses share many similarities, including market power and regulatory frameworks that insulate revenues. However, there are some differences between West Moreton coal and regulated energy and water businesses, in particular Queensland Rail's potentially greater exposure to volume risk.

The conclusion from the detailed first principles analysis (Appendix A) is that the asset beta for West Moreton coal is likely to be less than the asset beta of toll roads but greater than the asset beta of regulated energy and water businesses.

We engaged Incenta Economic Consulting (Incenta) to estimate raw asset betas for firms within these two comparator groups. Incenta considered that it was appropriate to use 10-year asset beta data, rather than 5-year asset beta, as a 10-year estimation period is likely to contribute to greater stability of estimates, owing to an increased number of observations, and smaller standard errors. By taking an average of weekly and monthly 10-year data, Incenta calculated an

⁴⁹ Queensland Rail, sub. 4: 4; sub. 4: 18.

⁵⁰ Yancoal, sub. 16: 8.

⁵¹ Because the QCA has determined regulated energy and water businesses are an appropriate comparator industry for Aurizon Network.

⁵² New Hope, sub. 14: 22.

average asset beta of 0.38 for regulated energy and water businesses, and an average asset beta of 0.51 for toll road businesses.^{53, 54}

Further crosschecks

The first principles analysis compared the level of systematic risk faced by West Moreton coal, Aurizon Network's Central Queensland Coal Network (CQCN) and ARTC's Hunter Valley Coal Network (HVCN), as well as other regulated Australian freight networks (ARTC interstate network, Arc Infrastructure, and The Pilbara Infrastructure (TPI)). The analysis indicates that Aurizon Network is likely to face less systematic risk compared to West Moreton coal, because of a stronger regulatory framework⁵⁵ and a more resilient customer base. Similarly, the HVCN has a stronger regulatory framework, which can better buffer cash flows, resulting in less exposure to systematic risk. We considered that ARTC interstate, Arc Infrastructure and TPI are likely to face greater exposure to systematic risk, largely because of negotiate-arbitrate regulatory regimes that provide for less revenue certainty than the regulatory framework applicable to West Moreton coal.

Determining an appropriate beta

As Frontier has estimated an asset beta by using a weighted average of comparator industries that all exhibit a greater level of systematic risk than West Moreton coal, we consider that Queensland Rail's proposed asset beta of 0.77 is likely to overstate the risks facing West Moreton coal. Therefore, we are of the view that Queensland Rail's proposed asset beta is not appropriate.

Having regard to the first principles analysis, we do not consider that any one specific business sample acts as a direct comparator set for West Moreton coal at this time. Rather, an appropriate asset beta is likely to be:

- higher than the estimated asset beta for regulated energy and water businesses (0.38)
- lower than the estimated asset beta for toll road businesses (0.51)

In selecting an asset beta from within the range of 0.38 to 0.51, we also had regard to crosschecks performed against other regulated Australian rail networks.

Taking these factors into account, and noting the uncertainty in determining an asset beta that falls between two point estimates, we consider that there is merit in estimating an asset beta that is toward the upper bound of the range between regulated energy and water businesses and toll road businesses. As such, we consider that an asset beta estimate of 0.50 is appropriate.

We used the Conine de-levering/re-levering formula to convert the asset betas to equity betas, and vice versa, using a debt beta of 0.12. In conjunction with a gearing level of 40 per cent (see below), we estimated an equity beta of 0.71 for Queensland Rail.

3.2.2 Capital structure and credit rating

The capital structure and credit rating of a firm are two WACC inputs that are inherently linked. The benchmark capital structure determines the relative weights to attach to the debt and equity components of the firm's funding. The benchmark credit rating is informed by the capital

⁵³ That is the 10-year weekly figure is an average, and the 10-year monthly figure is an average. The final figure is an average of these two numbers.

⁵⁴ Incenta, *Estimating Queensland Rail's WACC for the 2020 DAU—asset beta, benchmark gearing, and credit rating*, 2019: 13–20.

⁵⁵ A 'stronger' regulatory framework refers to a suite of mechanisms or instruments within the regulatory regime that are able to more successfully buffer the revenue of the regulated entity.

structure. Companies that face less risk in their operating environment can in general sustain higher levels of debt for a given rating category.

Capital structure

Queensland Rail's consultant, Frontier, estimated the capital structure by applying weightings to the midpoint of five-year and 10-year observed gearing levels in comparator industries.⁵⁶ Frontier applied the same weights to the same comparators used in its asset beta analysis.⁵⁷ In doing so, Frontier estimated a gearing level for Queensland Rail of 28 per cent. In relation to the difference in gearing level from the 2016 undertaking, Frontier submitted:

We note that a 28% gearing figure is materially below the 55% figure that the QCA has adopted in recent decisions for Queensland Rail and Aurizon. However, a lower level of gearing is consistent with a higher degree of systematic risk—other things being equal, riskier assets are able to support relatively less debt.⁵⁸

Yancoal and New Hope disagreed with Queensland Rail's proposed approach to gearing. They considered that Queensland Rail's proposed gearing level was inappropriate, as it was not based on the relevant risk profile.

We do not consider the capital structure proposed by Queensland Rail to be appropriate. As outlined above, the appropriate gearing level should be set with reference to West Moreton coal—rather than the entire Queensland Rail network.

We engaged Incenta to provide advice on an appropriate level of gearing for West Moreton coal. Incenta evaluated the business risk⁵⁹ of a number of different industries and determined that regulated energy and water businesses and toll roads were likely to be the best comparators for West Moreton coal. Incenta calculated the average and median level of gearing for regulated energy and water businesses in the sample to be 38 and 39 per cent respectively, while for toll road businesses it calculated the average and median level of gearing to be 39 and 42 per cent respectively. As such, Incenta considered that a point estimate of 40 per cent for West Moreton coal was reasonable.⁶⁰

The QCA accepts Incenta's approach and empirical analysis, noting consistency with the QCA's own first principles analysis. As such, the QCA considers that 40 per cent represents an appropriate level of gearing for West Moreton coal.

Credit rating

Queensland Rail proposed a benchmark credit rating of BBB+, based on the precedent set by the QCA's draft decision on Aurizon Network's UT5.⁶¹

As a firm's credit rating and capital structure are inherently linked, we also engaged Incenta to provide advice on an appropriate benchmark credit rating for West Moreton coal. Incenta considered that the best way to establish a benchmark credit rating for West Moreton coal is to take the benchmark gearing level (40 per cent) and apply Standard & Poor's credit rating

⁵⁶ Queensland Rail, sub. 4: 19.

⁵⁷ That is, a weight of 40% to Class 1 railroads, 30% to ports, 15% to airports and 15% to toll roads.

⁵⁸ Queensland Rail, sub. 4: 20.

⁵⁹ Business risk in this context is not to be confused with systematic risk, which is relevant to beta. Rather, in this instance, 'business risk' is related to the absolute volatility of earnings.

⁶⁰ Incenta, *Estimating Queensland Rail's WACC for the 2020 DAU—asset beta, benchmark gearing, and credit rating*, 2019: 25–36.

⁶¹ Queensland Rail, sub. 2: 20.

methodology.⁶² Standard & Poor's credit rating methodology involves establishing a business risk profile and a financial risk profile for the firm, before determining an anchor credit rating.

Figure 1 Anchor credit rating matrix

		Financial risk profile					
		1	2	3	4	5	6
		Minimal	Modest	Intermediate	Significant	Aggressive	Highly leveraged
Business risk profile	1 Excellent	AAA/AA+	AA	A+/A	A-	BBB	BBB-/BB+
	2 Strong	AA/AA-	A+/A	A-/BBB+	BBB	BB+	BB
	3 Satisfactory	A/A-	BBB+	BBB/BBB-	BBB-/BB+	BB	B+

Source: Incenta, *Estimating Queensland Rail's WACC for the 2020 DAU—asset beta, benchmark gearing, and credit rating*.

As Standard & Poor's has not evaluated the business risk associated with West Moreton coal, Incenta has benchmarked West Moreton coal against assessments made for Aurizon Network and Brookfield Rail.⁶³ Incenta analysed a number of factors, including market power, EBITDA volatility, regulation, level and trend of industry margins, counterparty risks and take-or-pay contracts. It concluded that West Moreton coal's business risk was more similar to Aurizon Network's (which was rated strong by Standard & Poor's), than to Brookfield Rail's (rated satisfactory by Standard & Poor's).⁶⁴ Consequently, Incenta determined that a business risk profile rated strong was appropriate for West Moreton coal.

To assess West Moreton coal's financial risk profile, Incenta tested two key credit metrics—FFO⁶⁵/debt and FFO/interest cover. Incenta considered that under an assumed asset beta of 0.51 (the estimated asset beta for toll roads), the credit metrics would suggest financial risk that was significant, which would imply a BBB credit rating. For an assumed asset beta of 0.38 (the estimated asset beta for regulated energy and water businesses), the credit metrics would suggest either significant or aggressive financial risk, implying a credit rating of either BBB or BB+.

Based on Incenta's analysis, we consider that the BBB+ credit rating that Queensland Rail has proposed is not likely to be appropriate. Rather, given that we have estimated an asset beta of 0.50, we are of the view that a BBB credit rating is appropriate.

3.2.3 Risk-free rate

The risk-free rate is the rate of return on an asset with zero default risk, and compensates the investor for the time value of money. Commonwealth Government bonds are commonly considered to be a reasonable proxy for the risk-free asset.

In its initial submission, Queensland Rail proposed to maintain the methodology employed in the Aurizon Network UT5 draft decision, to estimate the risk-free rate.⁶⁶ New Hope and Yancoal supported that approach.

⁶² Incenta, *Estimating Queensland Rail's WACC for the 2020 DAU—asset beta, benchmark gearing, and credit rating*, 2019: 38.

⁶³ Brookfield operates a 5,500 km open access multi-user rail freight network spread across the southern part of Western Australia.

⁶⁴ Incenta considered that Aurizon Network and West Moreton coal shared characteristics such as market power, and comprehensive regulatory regimes, which differentiated them from Brookfield Rail and its negotiated agreements framework.

⁶⁵ FFO refers to funds from operations.

⁶⁶ Queensland Rail, sub. 2: 17.

However, Queensland Rail indicated in its proposal that it might make further submissions if the QCA made any changes to the WACC methodology applied in the UT5 draft decision.⁶⁷

The QCA does not bind itself to previous market parameter decisions where it considers past decisions are no longer providing appropriate regulatory outcomes. As part of the UT5 final decision, the QCA considered that there is merit in giving consideration to alternative approaches adopted by other Australian regulators, specifically adopting a 10-year bond term (and not a term-matched bond) to estimate the risk-free rate.⁶⁸

We see merit in considering a 10-year bond term to estimate the risk-free-rate in undertaking a bottom-up WACC assessment. In estimating the term of the risk-free rate, other regulators have generally accepted the argument that the term of the bond should be a proxy for the life of the regulated asset. A 10-year risk-free rate is adopted by other Australian regulators including the AER, ACCC, IPART, ERA, ESCOSA and ESC. A longer-term bond may better reflect the expectations of investors—given the long-term nature of infrastructure asset investment.

Adopting such a position as part of a bottom-up WACC assessment provides for a return on investment that is at least commensurate with the commercial and regulatory risks involved.

For the placeholder 20-day averaging period to 31 January 2019, the QCA has estimated a 10-year risk-free rate of 2.28 per cent. The risk-free rate will be updated to reflect an averaging period that takes place closer to the start of the regulatory period (see Box 1).

⁶⁷ Queensland Rail, sub. 2: 17.

⁶⁸ QCA, *Aurizon Network's 2017 draft access undertaking*, decision, December 2018: 78.

Box 1: Setting the period to estimate the risk-free rate and debt risk premium

The risk-free rate and debt risk premium have been estimated using a placeholder 20-day averaging period to the end of January 2019 (see sections 3.2.3 and 3.2.4). These time-sensitive parameters will be updated in the future to reflect an averaging period that takes place closer to the start of the regulatory period.

Queensland Rail has not nominated an averaging period for the 2020 DAU. The QCA will assess Queensland Rail's proposed averaging period once it has been submitted.

The QCA is of the view that Queensland Rail's 2020 DAU averaging period must occur before the regulatory control period starts. Importantly, a proposed averaging period must be nominated well in advance of the occurrence of the period—allowing Queensland Rail to propose an averaging period afterwards introduces the potential for upward bias of the WACC.

For Queensland Rail's 2020 undertaking to be ready to approve by the time the 2016 access undertaking expires in June 2020, the QCA may need to release a final decision in February 2020.⁶⁹ In order to assess the WACC in time for the release of the final decision, the averaging period must occur in late 2019, or January 2020 at the latest.

This timing provides regulatory certainty to stakeholders and will not require further updating of WACC parameters and tariffs. This approach would require an averaging period that ended a number of months before the start of the regulatory period, and time-sensitive WACC parameters might change within this period. However, there is no expectation that movements in time-sensitive WACC parameters will be biased in a particular direction. Additionally, proposing an averaging period in advance provides for hedging to be implemented.

Alternatively, should the averaging period be after the release of the final decision, but before the start of the regulatory period, the QCA's final decision would contain a WACC estimate with placeholder values to be updated at a later date. Such a process would require the undertaking to include clauses that would allow this to occur.

Given the regulatory certainty associated with adopting an averaging period occurring before the end of January 2020, the QCA's preliminary view is that this earlier process will provide the best outcome for stakeholders.

The QCA is also open to the idea of extending the length of the averaging period to 40 business days to limit the extent to which short-term volatility influences market rates—should Queensland Rail request this.

The QCA is seeking stakeholder comment on this process for setting the averaging period for Queensland Rail's 2020 undertaking.

3.2.4 Debt risk premium

The debt risk premium is the amount above the risk-free rate a business has to pay to acquire debt funding from financial markets and is related to, among other factors, a firm's credit rating.

⁶⁹ The QCA Act provides that the QCA can allow up to 90 days for the regulated entity to submit a complying undertaking (s. 134(2b)).

The debt risk premium increases in line with the riskiness of the business and varies over time in line with market circumstances.

Queensland Rail proposed to maintain the methodology employed in the Aurizon Network UT5 draft decision for estimating the debt risk premium. This approach is based on applying an 'on-the-day' benchmark debt management strategy. New Hope and Yancoal also supported this approach.⁷⁰

In the draft decision on Aurizon Network's UT5, the QCA used an econometric-based approach to estimate the debt risk premium for the benchmark credit rating. Under this approach, the econometric specification might change to maximise the use of the available data. The QCA has also used third-party data from the Reserve Bank of Australia (RBA) and Bloomberg to act as a crosscheck on the estimate generated from the econometric approach.

In past regulatory decisions, the averaging period has generally occurred before the release of the draft decision, giving stakeholders the opportunity to comment on both the bond sample as well as the methodology used to estimate the debt risk premium. However, the averaging period for the Queensland Rail 2020 DAU has not been nominated for a date before the draft decision, making it difficult to undertake adequate and timely consultation on the appropriate econometric approach to be adopted for Queensland Rail's 2020 DAU.

Given these circumstances, we consider that a viable alternative to the econometric approach is to use third-party data from the RBA and Bloomberg to estimate the debt risk premium. As the data from these providers is prepared by third parties, the approach does not require us to exercise judgement when updating the debt risk premium—enabling us to estimate the debt risk premium for the final decision without needing to consult with stakeholders over methodological issues. Furthermore, because we consider a BBB target credit rating is appropriate for West Moreton coal, we will not need to make any adjustments to the broad-based BBB-rated data series published by Bloomberg and the RBA to account for a different target credit rating (e.g. BBB+).

To assess the reasonableness of this alternative approach, we compared the debt risk premium generated from previous econometric outputs, against the average of the corresponding Bloomberg and RBA estimates. Based on this exercise, we do not consider that differences between the two approaches are biased in any particular direction at this time (see Figure 2).

⁷⁰ New Hope, sub. 14: 22; Yancoal, sub. 16: 5.

Figure 2 Debt risk premium estimation using econometric vs Bloomberg/RBA approaches



Notes:

1. In instances where the entity had a BBB+ credit rating, we generated comparable estimates using RBA and Bloomberg data by applying a weight of 1/3 to the respective A-rated series and a weight of 2/3 to the respective BBB-rated series.
2. We have used estimates from Bloomberg's 7-year fair value curve, extrapolated to 10 years for the UT4 and GAWB data points as Bloomberg's 10-year BVAL series had not yet been established at the time of these averaging periods.

Source: QCA analysis.

While there are differences between the methods and bond samples used to construct the RBA and Bloomberg BVAL series, we do not consider one provider as superior to the other for the purposes of this draft decision. We therefore consider it appropriate to use an average of both series, noting that this will have the effect of reducing the standard error of the estimate.

The use of third-party estimates is common across the Australian regulatory landscape. For instance, the ACCC calculates the debt risk premium by using an average of the Bloomberg and RBA series, while the Australian Energy Regulator (AER) uses both the Bloomberg and RBA series as part of its estimate of the total cost of debt.⁷¹

⁷¹ As specified in its December 2018 rate of return instrument, the AER also uses data from Thomson Reuters to inform its total cost of debt estimate.

We have estimated the debt risk premium using both the RBA and Bloomberg BVAL BBB data series for the placeholder 20-day averaging period to 31 January 2019. We obtained the following debt risk premium estimates:

- 2.56 per cent, using the RBA BBB-rated series, extrapolated to an effective 10-year term⁷²
- 2.00 per cent, using the Bloomberg BVAL 10-year BBB rated series
- 2.28 per cent, taking an average of the RBA and Bloomberg estimates.

Due to the reasons provided above, we consider that for the placeholder 20-day averaging period to 31 January 2019, a debt risk premium of 2.28 per cent is appropriate for a BBB benchmark credit rating.

We consider that a debt refinancing transaction cost allowance of 0.108 per cent is an appropriate estimate of the cost to source new debt.⁷³ Alongside a debt risk premium of 2.28 per cent and a 10-year risk-free rate of 2.28 per cent, we have estimated a forward-looking cost of debt of 4.67 per cent for West Moreton coal.

This estimate is based on Queensland Rail's proposal to apply an 'on-the-day' benchmark debt management strategy for setting the cost of debt. In considering Queensland Rail's proposal, the QCA is open to considering alternative regulatory debt management strategy benchmarks—should the regulated entity be able to sufficiently demonstrate why such an alternative benchmark strategy is appropriate, having regard to the criteria in s. 138(2) of the QCA Act.

We acknowledge that alternative approaches will yield different cost of debt estimates—for instance, we calculated that an estimate of the cost of debt under a trailing average debt management strategy is 6.38 per cent.⁷⁴ However, differences in these estimates will be influenced by the extent to which historical cost of debt calculations are relied upon.⁷⁵ The key factor is that the benchmark debt management strategy for setting the cost of debt is an appropriate approach for the regulated entity, having regard to the regulatory and commercial risks involved.

Queensland Rail has not provided information or a proposal that an alternative debt management strategy to the on-the-day approach is appropriate for estimating its cost of debt for the 2020 DAU. In the absence of such information, our rationale for adopting the on-the-day approach is that the time-variant WACC parameters should reflect prevailing market conditions—taking account of the latest market information and investor expectations.

For the placeholder 20-day averaging period to 31 January 2019, we consider at this point that an overall cost of debt of 4.67 per cent is appropriate for Queensland Rail's 2020 DAU. Subject to

⁷² The QCA has extrapolated the RBA series to an effective 10-year term by applying same approach as specified in the AER rate of return instrument. More detail on how this calculation is performed can be found in: AER, *Rate of return instrument*, December 2018, <https://www.aer.gov.au/system/files/Final%20rate%20of%20return%20instrument%20-%20December%202018.pdf>.

⁷³ This was the recently updated estimate of debt refinancing costs applied in the Aurizon Network UT5 decision.

⁷⁴ Based upon an immediate transition to a 10-year trailing average. The QCA has estimated this figure by taking a simple average of the cost of debt for the 20-business days to 31 January for each year over the past 10 years. As the Bloomberg BVAL 10-year BBB series only dates back to 2014, the QCA has relied entirely on RBA data. This estimate also includes an allowance for debt refinancing costs of 0.108 per cent.

⁷⁵ A trailing average cost of debt reflects a long-term average of cost of debt estimates, whereas an on-the-day approach is strictly forward-looking, based on a recent averaging period.

consideration of submissions, the QCA's draft decision is that the cost of debt will be updated to reflect an averaging period that takes place closer to the start of the regulatory period (see Box 1).

3.2.5 Market risk premium

The market risk premium (MRP) is the additional return an equity investor requires, to be compensated for the risk of investing in a market portfolio of risky assets relative to purchasing a risk-free asset.

In its 2020 DAU submission, Queensland Rail proposed an MRP of 7 per cent, based on the MRP used to assess Aurizon Network's WACC in the UT5 draft decision.⁷⁶

Yancoal did not support an MRP of 7 per cent, noting that recent decisions by the ACCC and AER included MRPs of 6 per cent and 6.5 per cent respectively. Yancoal also noted that after those AER decisions, the AER proposed in its draft rate of return guidelines to adopt an MRP of 6 per cent.⁷⁷ Similarly, New Hope considered that the QCA's estimate of the MRP in the draft decision on Aurizon Network's UT5 was materially higher than the MRP proposed by the AER in its draft rate of return guidelines. New Hope said the QCA had given too much weight to the Wright approach when estimating the MRP in the Aurizon Network UT5 draft decision, noting that it lacked empirical support.⁷⁸

As part of the collaborative submission process, Frontier, on behalf of Queensland Rail, responded to the issues raised by Yancoal and New Hope. Frontier considered that the decision for an MRP of 7 per cent in the Aurizon Network UT5 draft decision was consistent with the QCA's use of a four-year risk-free rate. Frontier noted that if the QCA adopted a 10-year risk-free rate, the equivalent MRP would be 6.5 per cent. In relation to the Wright approach, Frontier submitted that disregarding the Wright approach would be inconsistent with the QCA's empirical analysis, which shows that there was not a significant difference between the stability of the MRP (Ibbotson) and real market return (Wright). Frontier said the ACCC had always adopted an MRP of 6 per cent, regardless of market conditions, and the AER's decision for an MRP of 6 per cent in its recently released rate of return guidelines was inconsistent with its own empirical evidence and with the approach of other regulators.⁷⁹

Frontier's assessment that any evaluation of the MRP must also consider the risk-free rate is reasonable. In the Aurizon Network UT5 draft decision, the QCA estimate of the MRP was 7 per cent based on a four-year risk-free rate. As we are now proposing to approve a 10-year risk-free rate for this decision, an equivalent MRP of 6.5 per cent is appropriate in the context of the draft decision on Aurizon Network's UT5. That said, we have considered these matters afresh for the purposes of this draft decision. We also note that the AER has lowered its estimate of the MRP to 6.1 per cent in its final rate of return guidelines.⁸⁰ However, recent decisions by other Australian regulators produce MRP estimates that range from 6 per cent to 8 per cent.

⁷⁶ Queensland Rail, sub. 2: 20.

⁷⁷ Yancoal, sub. 16: 12.

⁷⁸ New Hope, sub. 14: 14.

⁷⁹ Queensland Rail, sub. 20: 18, 19.

⁸⁰ AER, 2019: 220.

methods, is 6.35 per cent.⁸² Consistent with the QCA's standard approach of rounding the MRP to the nearest half percent, results in an MRP of 6.5 per cent.

Given the updating of the various MRP estimates and the use of a 10-year risk free rate, we consider that Queensland Rail's proposal of an MRP of 7 per cent is not appropriate to approve. Instead, we consider that an MRP of 6.5 is appropriate.

3.2.6 Gamma

The Australian tax system allows companies to provide their shareholders with credits (i.e. dividend imputation credits) to reflect company taxes paid on profits that are distributed as dividends. Shareholders then use dividend imputation credits to reduce their own tax liabilities. Therefore, imputation credits effectively reduce a company's cost of capital.

The value of dividend imputation credits is captured by a parameter known as 'gamma', which is the product of:

- the distribution rate—the ratio of distributed imputation credits to company tax paid, and
- the utilisation rate—the value-weighted average over the utilisation rates of imputation credits of all investors in the market.

Queensland Rail proposed a gamma of 0.46, maintaining the estimate employed in the Aurizon Network UT5 draft decision, to estimate gamma.⁸³ New Hope and Yancoal supported this approach.⁸⁴

The gamma estimate the QCA considered appropriate as part of the Aurizon Network UT5 draft decision was 0.46, based on a distribution rate of 0.83 and a utilisation rate of 0.55. The same methodology was used to estimate gamma for the UT5 final decision—updating the distribution rate and utilisation rate to reflect more recent data—which resulted in the QCA's estimated gamma of 0.484, based on a distribution rate of 0.88 and a utilisation rate of 0.55.⁸⁵

We have considered these matters fully for the purposes of this draft decision.

As we have updated gamma to reflect more recent data, we do not consider it is appropriate to approve Queensland Rail's proposed gamma of 0.46. Instead, we consider a gamma of 0.484, based off a distribution rate of 0.88 and a utilisation rate of 0.55 is appropriate for the 2020 Queensland Rail draft access undertaking.

3.3 Overall WACC

While the QCA's bottom-up WACC assessment is a means for considering all the components of Queensland Rail's WACC proposal separately, ultimately the QCA must consider whether it is appropriate to approve the overall WACC, having regard to the factors in s. 138(2) of the QCA Act.

Our view is that Queensland Rail's proposed WACC of 7.47 per cent does not reflect the risks associated with its coal operations on the West Moreton system. Consequently, we do not consider that this proposal is in the interests of access holders and the efficient operation of the

⁸² A statistically defensible set of weights is: Ibbotson (25%); Cornell DGM (25%); Siegel (15%); Wright (15%); and surveys (20%). This set of weights places relatively more emphasis on the two methods that are entirely independent of each other (the Ibbotson and Cornell DGM methods). Doing so maximises the use of the information available (and reduces the mean square error of the estimate).

⁸³ Queensland Rail, sub. 2: 20.

⁸⁴ New Hope, sub. 14: 14; Yancoal, sub. 16: 5.

⁸⁵ The product of the distribution rate of 0.88 and the utilisation rate of 0.55 is 0.484.

network (ss. 138(2)(e), (h)), nor is it consistent with the pricing principles in the QCA Act (ss. 168A, 138(2)(g)).

Recent regulatory decisions for comparable Australian coal networks and other Australian regulators provide a useful comparison for considering whether the QCA's bottom-up WACC assessment provides an appropriate overall WACC for Queensland Rail. It is difficult to directly compare WACC estimates approved by different regulators due to timing differences, assessment approaches for particular parameters (e.g. for cost of debt), and de-levering and re-levering methods used by regulators to convert asset betas to equity betas (and vice versa). However, certain elements within the WACC build-up can be examined.

After reviewing recent regulatory decisions for comparable Australian coal networks by other Australian regulators (the ACCC and AER), and having regard to its bottom-up WACC assessment above, the QCA considers that a WACC of 6.02 per cent for the January 2019 placeholder averaging period will provide Queensland Rail with a return on investment commensurate with the commercial and regulatory risks involved in providing access to coal services on the West Moreton system (ss. 138(2)(a), (g); 168A(a)). It also appropriately balances the interests of access holders and access seekers with the interests of Queensland Rail (ss. 138(2) (b), (e), (h)) and promotes efficient operation, use of and investment in the West Moreton system (s. 138(2)(a)). For these reasons, the QCA's draft decision is that Queensland Rail's proposed WACC is not appropriate to approve, and a WACC of 6.02 per cent is appropriate to approve.

3.3.1 Comparisons with other regulatory approaches

There are limitations in making WACC comparisons with other regulatory decisions for infrastructure networks in Australia, given Queensland Rail may bear significantly different risks to those infrastructure networks.

However, we have considered the approaches to estimating the market-based WACC parameters that the two national regulators, the ACCC and AER, currently apply. The ACCC regulates the ARTC's HVCN and the AER regulates the Australian energy network services.

The ACCC and AER apply the same approach to estimating the risk-free rate—based on a 10-year Commonwealth government bond—but they apply different approaches to estimating the MRP and gamma (Table 3).

Table 3 Benchmarking of market-based WACC parameters

	<i>QCA (West Moreton coal)</i>	<i>AER</i>	<i>ACCC</i>
Risk-free rate	10-year	10-year	10-year
MRP (%)	6.5	6.1	6.0
Gamma	0.484	0.585	0.5

Source: AER rate of return guidelines, ACCC Interstate Rail access undertaking 2018.

Our proposed approaches for estimating the market-wide WACC parameters result in a similar, although higher, overall WACC, all other things equal. As such, we consider our estimates for these market-based parameters, for the purposes of this draft decision, are likely to be reasonable.

We recognise that in making comparisons with other regulatory decisions, the proposed averaging period will have implications for the overall WACC estimate. Queensland Rail is

proposing to apply an ‘on-the-day’ approach to estimating the time-sensitive parameters, but is yet to nominate an averaging period for the 2020 DAU.

While time-sensitive WACC parameters will vary depending on the timing of the proposed averaging period, these WACC parameters should reflect prevailing market conditions if estimated using the on-the-day approach. Queensland Rail has the ability to manage risk associated with varying market conditions—for instance, as an assumed benchmark entity, it is able to undertake hedging activities for a proposed averaging period that is nominated in advance. Queensland Rail is also able to extend the length of the averaging period, to help mitigate potential short-term volatility of market rates.

Therefore, we consider that, from the information provided, there is no reason to suggest that Queensland Rail is unable to manage any risk associated with estimating the WACC for a particular averaging period.

3.3.2 Comparison with other regulatory decisions for Australian coal networks

In considering Queensland Rail's exposure to risk in providing coal services on the West Moreton system, we undertook a comprehensive first principles and benchmarking analysis as part of the bottom-up WACC assessment (see Appendix A).

We also reviewed recent regulatory WACC decisions for similar infrastructure businesses to determine whether these bottom-up estimates provide Queensland Rail with a return on investment commensurate with the risks involved. A particular consideration was the extent to which firm-specific characteristics of other Australian coal networks were factored into recent regulatory WACC decisions.

Our proposed gearing and credit rating are lower, and our proposed asset beta is higher, than those of the CQCN and the HVCN (see Table 4). This result is consistent with our view that West Moreton coal is likely to face a greater level of overall risk (i.e. general volatility) relative to these other regulated Australian coal networks.

Table 4 Benchmarking of firm-specific WACC parameters

	<i>West Moreton coal</i>	<i>Aurizon Network</i>	<i>ARTC's HVCN</i>
Asset beta	0.5	0.42	0.45
Gearing (% debt)	40	55	52.5
Credit rating	BBB	BBB+	BBB+

Note: While the ACCC calculated ARTC's cost of debt using BBB rated data, 'the ACCC considers that ARTC's credit rating should be at least BBB+ if not higher'.

Source: Aurizon Network's 2017 draft access undertaking, ACCC ARTC Hunter Valley access undertaking.

While the customer bases of these networks exhibit similar characteristics—namely, they are coal miners that supply the seaborne coal export market—there are differences in the regulatory frameworks that apply to them and in the customer bases of the networks.

All three regulated coal networks have regulatory mechanisms that help provide revenue stability, but the regulatory frameworks implemented in the CQCN and HVCN have greater risk mitigation arrangements relative to Queensland Rail's framework. A comparison of key regulatory protections and risk-mitigating mechanisms for each of the networks is in Table 5. A distinguishing factor is that differences between a revenue cap and a price cap are likely to expose West Moreton coal to a higher level of volume risk than the other networks.

Another significant difference is that Queensland Rail has a smaller and less diverse coal customer base than the other two coal network operators. While Queensland Rail's counterparty risk is generally considered in relation to the underlying drivers for demand in the seaborne thermal coal market, these characteristics of its customer base make Queensland Rail more exposed to counterparty risk, should a customer temporarily stop railings.⁸⁶ This counterparty risk is mitigated by the larger customer bases in the CQC and HVCN, where the risk is shared across the customers through the system tariffs and the revenue cap mechanisms.

Table 5 Comparison of regulatory protections and risk-mitigating mechanisms

	<i>West Moreton coal</i>	<i>Hunter Valley Coal Network</i>	<i>Aurizon Network</i>
Form of regulation	Price cap	Revenue cap with unders and overs	Revenue cap with unders and overs
Contracting	Long-term take-or-pay contracting	Rolling 10-year take-or-pay contracting	Long-term take-or-pay contracting
Take-or-pay	Take-or-pay set at 100 per cent of access charges	Take-or-pay of up to 90 per cent of access charges	Take-or-pay of approximately 30 to 70 per cent of access charges
Loss capitalisation	Temporary loss capitalisation ^a	Loss capitalisation on Pricing Zone 3	No loss capitalisation
Depreciation	Standard asset lives	Depreciation based on weighted average mine life ^b	Accelerated depreciation

a Under the QCA's proposed tariff approach, Queensland Rail may accrue loss capitalisation for up to five years before the account begins to depreciate at 20 per cent per annum. A maximum premium of 15 per cent can be applied to the tariff to recover capitalised losses.

b Weighted average mine life for HVCN was set at a level less than the functional asset life.

Source: Aurizon Network's 2017 draft access undertaking, ACCC ARTC Hunter Valley access undertaking.

While coal operations on Queensland Rail's West Moreton system are exposed to more volume and counterparty risk than the CQC and HVCN, this draft decision provides other mechanisms within the regulatory framework to address Queensland Rail's exposure to such risk where appropriate. For example:

- 100 per cent take-or-pay contracts in the West Moreton system will largely mitigate the short-term volume risk associated with a price cap. This short-term volume risk is completely mitigated where Queensland Rail contracts 8.5 million tonnes a year. Queensland Rail has forecast volumes up to 9.1 million tonnes for the regulatory period which, if achieved, would allow it to earn revenue above the total revenue requirement.
- An additional 5 per cent tariff premium is proposed for all uncontracted volumes railed. This will compensate Queensland Rail for volume risk associated with uncontracted railings. Relevantly, contracted annual railings are capped at 8.5 million tonnes, with any additional railings contributing to Queensland Rail earning revenue above the forecast allowed revenue.
- Based on the available evidence, the market outlook does not indicate a long-term structural decline in demand for West Moreton coal in the foreseeable future. This long-term outlook

⁸⁶ This risk is highlighted by the circumstances resulting in uncertainty of volume outcomes for New Hope's New Acland mine Stage 3.

for coal railings in the West Moreton system is supported by Queensland Rail's view that in the medium to long term, annual railings on the West Moreton system will be 9.7 million tonnes or higher.

- A tariff premium may apply (of up to 15 per cent) when Queensland Rail under recovers its forecast total revenue requirement in the previous year (see section 5.2.2). This tariff premium has similarities to an unders and overs mechanism for recovering the total revenue requirement throughout the regulatory period. It mitigates the risk that Queensland Rail is unable to recover its regulatory revenues, due to forecast volumes not materialising or if a customer temporarily stops riling. It is noted that the QCA has approved measures in the past to support recovery of Queensland Rail's costs with lower volumes—for example, it approved a tariff premium of 27 per cent for the 2016 undertaking period.⁸⁷
- A limited-life loss capitalisation mechanism is proposed to provide Queensland Rail with the opportunity to recover any losses of revenue over a five-year period. A staged write-down of these losses would then occur over a further five-year period, if new customers had not been found to use the spare capacity (see section 5.2.1). This proposed mechanism will mitigate the extent to which Queensland Rail is exposed to counterparty risk, where a customer temporarily stops riling.
- Queensland Rail's firm-specific WACC parameters provide it with a higher rate of return, all other things equal, in comparison to the relevant parameters for the CQCN and HVCN as specified in Table 4. This compensates Queensland Rail for exposure to a higher level of risk.

In considering Queensland Rail's regulatory compact as a whole, and having compared its firm-specific characteristics with other regulated Australian coal networks, we are of the view that this draft decision provides Queensland Rail with a return on investment commensurate with the risks involved.

Summary 3.1

The QCA's draft decision is that the appropriate way for Queensland Rail to amend the 2020 DAU is to revise its proposed total revenue requirement and reference tariffs, based on a WACC of 6.02 per cent, comprising:

- (1) a return on equity of 6.92 per cent
- (2) a return on debt of 4.67 per cent
- (3) capital structure of 40 per cent debt (60 per cent equity)
- (4) gamma of 0.484.⁸⁸

⁸⁷ QCA, *Queensland Rail's Draft Access Undertaking*, June 2016: 144–46; see also sections 2.2.3 and 5.1.1 of this draft decision.

⁸⁸ These figures have been rounded for presentational purposes.

4 TARIFF BUILDING BLOCKS AND PRICE (SCHEDULES D AND E)

The price for access to the West Moreton system by coal services is calculated based on building blocks including maintenance and operating costs, a regulated asset base, capital expenditure, and forecast volumes.

In the 2020 DAU, Queensland Rail proposed reference tariffs for coal-carrying train services of \$22.39/'000 gtk for the West Moreton system and \$18.13/'000 gtk for the Metropolitan system.

Overview of the draft decision

Our draft decision is that Queensland Rail's proposed reference tariff for the West Moreton system is not appropriate to approve. Based on our assessment of efficient building blocks, our draft decision is that Queensland Rail should amend its West Moreton reference tariff to \$16.93/'000 gtk. However, we consider Queensland Rail's proposed Metropolitan tariff is appropriate to approve.

Tariff building blocks—summary

<i>Queensland Rail proposal</i>	<i>QCA draft decision</i>
Volumes of 9.1 mtpa	The proposal is not appropriate to be approved. Volumes of 8.5 mtpa should be used to assess the tariff (see section 4.2).
Maintenance costs of \$140.9 million (2020–21 dollars) over the 2020 DAU period	The proposal is not appropriate to be approved. Maintenance costs of \$118.0 million (2020–21 dollars) are appropriate (see section 4.3).
Train control costs of \$19.2 million (2020–21 dollars) over the 2020 DAU period	The proposal is appropriate to be approved (see section 4.4).
Corporate overheads and other on-costs of \$29.6 million (2020–21 dollars) over the 2020 DAU period	The proposal is not appropriate to be approved. Corporate overheads and other on-costs of \$27.4 million (2020–21 dollars) are appropriate (see section 4.4).
Opening common network asset base of \$419.8 million, including capital expenditure of \$175.6 million (2013–20)	The proposal is not appropriate to be approved. An opening common network asset base of \$386.1 million is appropriate, with a capital expenditure of \$140.9 million (2013–20) (see section 4.5).
Forecast capital expenditure of \$159.4 million (2020–21 dollars) over the 2020 DAU period	The proposal is appropriate to be approved (see section 4.6).
Allocate common costs to coal based on 97 paths	The proposal is not appropriate to be approved. Common costs should be allocated to coal services based on 87 paths (see section 4.7).
Did not calculate a capital expenditure carry-over amount	Apply a carry-over balance to the West Moreton total revenue requirement for coal services by deducting \$6.2 million (2020–21 dollars) before determining the West Moreton tariff (see section 4.8).
West Moreton reference tariff of \$22.39 per thousand gtk	The proposal is not appropriate to be approved. A West Moreton reference tariff of \$16.93 per thousand gtk is appropriate (see section 4.9).
Metropolitan reference tariff of \$18.13 per thousand gtk	The proposal is appropriate to be approved (see section 4.9).

4.1 Building blocks approach to regulatory pricing

We assessed the West Moreton coal reference tariff using the building blocks approach, which was used by Queensland Rail to develop its proposed tariff. The access tariffs are calculated to recover building blocks including:

- a return on assets (WACC) from a regulatory asset base (RAB)
- a return of assets from the RAB (depreciation)
- allowances for:
 - maintenance
 - operating expenses
 - taxation.

These returns are subsequently divided by a volume forecast to determine a reference tariff. The West Moreton tariff is a two-part tariff, which comprises:

- a weight and distance-based component (AT1), which is charged per gtk
- a fixed component (AT2), which is charged per train path.

The Metropolitan tariff is assessed using a proxy approach, and is also a two-part tariff.

4.2 Volumes

The West Moreton system is a mixed system, carrying coal and non-coal products such as livestock, grain and passengers. The total tonnage forecast for each of these traffics is used as an allocator of common costs, while the coal tonnage is used as a denominator for calculating the tariff.

Queensland Rail submitted a volume forecast of 9.1 million tonnes per year representing full occupation of the 87-train-path constraint plus 5.5 additional train paths a week, which equates to 8.5 million tonnes per year plus 0.5 million tonnes⁸⁹ above the constraint.⁹⁰

For non-coal products, Queensland Rail has estimated that [REDACTED] tonnes will be transported per year.

Table 6 West Moreton system volumes, Queensland Rail forecast

<i>Financial year</i>	<i>Annual forecast (2020–21 to 2024–2025)</i>
Coal (mgtk)	3,037.2
Coal (nt)	9.1 million
Non-coal (mgtk)	[REDACTED]
Non-coal (nt)	[REDACTED]

Source: Queensland Rail, AU2 Model 14.08.18 (9.1MTPA) for QCA, August 2018.

Having regard to the uncertainty about coal volumes on the West Moreton system over the term of the undertaking, we assessed the high-volume (9.1 million tonnes a year) scenario in

⁸⁹ Variance between 9.1 million tonnes and aggregating 8.5 and 0.5 million tonnes is due to rounding.

⁹⁰ Queensland Rail submitted that the constraint on West Moreton train contracting for coal services is 97 loaded paths, but did not provide evidence. See section 2.2.3 of this draft decision.

Queensland Rail's 2020 DAU, which is based on an assumption that the New Acland coal mine Stage 3 project will go ahead. However, without evidence that Queensland Rail has contracted above the 87-train-path constraint we assume that this restriction will continue to apply on the West Moreton system. On this basis, the volume used to assess the reference tariffs in this draft decision is 8.5 million tonnes a year.

We consider it appropriate to use the volumes set out in Table 7 to assess Queensland Rail's proposed West Moreton coal tariff.

Table 7 West Moreton system volumes, QCA forecast

<i>Financial year</i>	<i>Annual forecast (2020–21 -to 2024–2025)</i>
Contracted coal (mgtk)	2,891.3
Contracted coal (nt)	8.5 million
Non-coal (mgtk)	██████
Non-coal (nt)	██████████

Summary 4.1

The QCA's draft decision is that it is appropriate to assess the West Moreton reference tariffs in the 2020 DAU by:

- (1) applying the 87-train-path constraint, such that access charges are based on annual contracted volumes of 8.5 million tonnes
- (2) allocating common network costs and allowances on the basis the 87-train-path constraint is still in place.

4.3 Forecast maintenance costs

Queensland Rail's maintenance cost forecasts in the 2020 DAU (see Table 8) are 14.4 per cent higher, in real terms, than the maintenance cost allowance used to assess the prices in the 2016 undertaking.⁹¹ This increase is not entirely tonnage related. As noted by New Hope, Queensland Rail's proposal indicated that its maintenance costs would have been 8.7 per cent higher in real terms even assuming constant tonnage.⁹²

⁹¹ Queensland Rail, sub. 7: 22.

⁹² New Hope, sub. 14: 26.

Table 8 West Moreton maintenance costs proposed by Queensland Rail (\$m)

	2020–21	2021–22	2022–23	2023–24	2024–25	Total
Track	24.0	24.0	24.1	24.2	24.3	120.6
Resurfacing	■	■	■	■	■	■
Lowering	■	■	■	■	■	■
Rail grinding	■	■	■	■	■	■
Structures	3.0	2.7	2.5	2.3	2.0	12.5
Trackside system	1.5	1.5	1.5	1.5	1.5	7.3
Facilities/other	0.1	0.1	0.1	0.1	0.1	0.4
Total	28.5	28.3	28.2	28.0	27.9	140.9

Note: Values are in 2020–21 dollars.

Source: Queensland Rail, sub. 7: 25–26.

As part of our assessment, we engaged Systra Scott Lister (Systra) to assess Queensland Rail's proposed maintenance costs independently. Systra analysed the maintenance expenditure forecasts submitted by Queensland Rail with reference to the proposed scope of work.⁹³ The biggest changes recommended by Systra were for ballast resurfacing and formation repairs, but Systra also addressed other aspects of the proposed maintenance costs.

Ballast resurfacing and formation repairs

Systra found that Queensland Rail's proposed increase in mechanised resurfacing, combined with track lowering when ballast heights become excessive, was not the most efficient means of maintaining track alignment at the forecast higher tonnages. Systra observed that some sites were being resurfaced six times per year, and this excessive resurfacing was driving the requirement to undertake the track lowering task, which is not commonly observed on other rail networks. As an alternative, Systra recommended undertaking additional formation rebuilds (funded in the capital allowance) in the first two years of the undertaking with the goal of eliminating areas that required more than two resurfacings a year. This approach:

- significantly reduces the resurfacing requirement. Systra said that under this regime resurfacing would cost ■ over the 2020 DAU, which is just over half the ■⁹⁴ (2020–21 dollars) allowance Queensland Rail proposed.
- eliminates the need for track lowering, which is a by-product of the excessive resurfacing regime.⁹⁵

Other maintenance costs

Systra also made a number of other key findings, including:

- The allowance for structure maintenance should be increased to account for a higher expenditure on timber bridges. This increase is based on a recommendation that the timber

⁹³ Systra Scott Lister, *Queensland Rail West Moreton System: Review of proposed maintenance, capital & operations expenditure*, prepared for the QCA, April 2019 (Systra, *Expenditure review*, April 2019). We have published this report on our website with this draft decision.

⁹⁴ Systra, *Expenditure review*, April 2019: 104.

⁹⁵ Systra, *Expenditure review*, April 2019: 107.

bridges replacement program be limited to those structures where inspections have shown that the piers are defective.⁹⁶

- The proposed grinding frequency for the Rosewood to Jondaryan corridor is in excess of Civil Engineering Track Standards tonnage requirements. Systra has reduced the grinding allowance to align with Civil Engineering Track Standards.⁹⁷
- The scope of works and proposed costs put forward by Queensland Rail for trackside systems, facilities, track inspections, planning and technical support and 'other track' were considered reasonable.
- On a per kilometre basis, West Moreton's maintenance costs, excluding track lowering, are significantly higher than comparators.⁹⁸

Our draft decision is that the total maintenance costs that are appropriate to approve are \$118.0 million (2020–21 dollars) for the 2020 DAU. In making this draft decision, we took into account:

- the lack of focus on the efficiency of Queensland Rail's operations, highlighted by stakeholders⁹⁹
- Systra's benchmarking which indicated that Queensland Rail's overall maintenance costs are significantly higher than those of comparators
- Systra's assessment that aspects of Queensland Rail's proposal are excessive in scope—for example, costs relating to resurfacing and rail grinding
- Systra's assessment that many aspects of Queensland Rail's maintenance cost proposal are appropriate to approve—for example, trackside systems, facilities, track inspections, planning and technical support.

We consider approving Queensland Rail's proposal would allow it to recover inefficient costs, which is inconsistent with the pricing principles in the QCA Act (s. 168A(a)). While that might be in the interests of Queensland Rail (s. 138(2)(b)), it would also not be in the interests of access seekers and access holders and would not promote the efficient use of the network (ss. 138(2)(a), (e), (h)). Therefore, on balance, Queensland Rail's proposal is not appropriate to approve.

We invite stakeholders' comments on whether the maintenance costs proposed by Queensland Rail over the 2020 DAU period sufficiently reflect the amount of past capital expenditure on the West Moreton system. Between July 2013 and June 2020 (the 2016 undertaking period), Queensland Rail's actual and forecast spending is an estimated \$81.4 million on track, and \$32.4 million on structures.¹⁰⁰ We also invite comments on whether the proposed trade-off between capital and maintenance expenditure is appropriate.

⁹⁶ Systra, *Expenditure review*, April 2019: 105.

⁹⁷ Systra, *Expenditure review*, April 2019: 111.

⁹⁸ Systra, *Expenditure review*, April 2019: 88.

⁹⁹ New Hope, sub. 14: 26.

¹⁰⁰ QCA calculation based on historical capital expenditure, where that has been submitted to the QCA and approved under schedule E of the 2016 undertaking, and forecast capital expenditure where the schedule E process is yet to be completed.

Table 9 West Moreton maintenance costs, QCA draft decision (\$m)

	2020–21	2021–22	2022–23	2023–24	2024–25	Total	Change
Track	19.5	19.3	19.1	19.0	19.0	95.8	(24.9)
¹⁰¹ Resurfacing	■	■	■	■	■	■	■
Lowering	■	■	■	■	■	■	■
Rail grinding	■	■	■	■	■	■	■
Structures	3.4	3.1	2.9	2.6	2.4	14.4	1.9
Trackside system	1.5	1.5	1.5	1.5	1.5	7.3	–
Facilities/other	0.1	0.1	0.1	0.1	0.1	0.4	–
Total	24.5	23.9	23.5	23.2	22.9	118.0¹⁰²	(23.0)

Note: Values are in 2020–21 dollars.

Summary 4.2

The QCA's draft decision is that the appropriate way for Queensland Rail to amend the 2020 DAU is to apply a maintenance allowance of \$118.0 million (2020–21 dollars) over the 5-year term of the undertaking.

Allocation of maintenance costs to coal

Queensland Rail derived its maintenance costs forecasts for a 9.1 million tonnes a year scenario. The forecasts are for the movement of all coal and non-coal (including passenger) services on the network between Rosewood and Columboola.¹⁰³ To allocate costs between coal and non-coal traffics, Queensland Rail proposed to split maintenance into fixed and variable categories and then allocate the fixed component of costs to coal, on the basis of coal's share of train paths and the variable component, on the basis of coal's share of gross tonne kilometres.

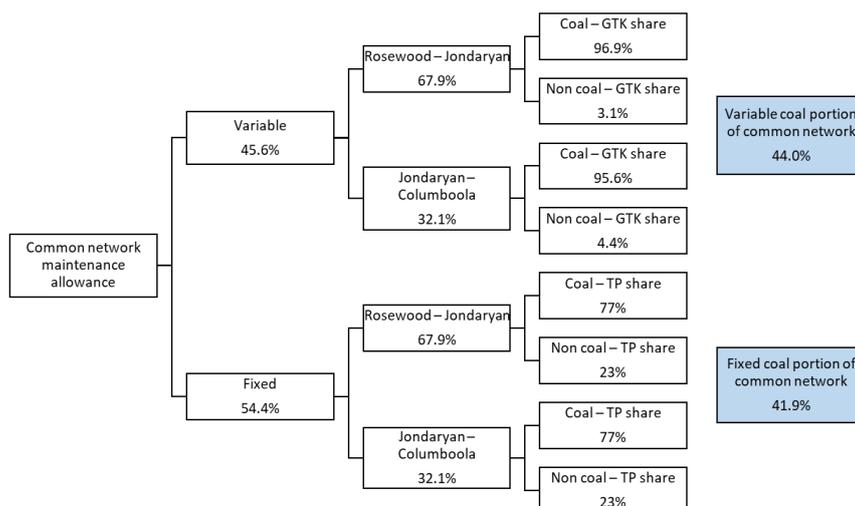
We consider it is appropriate to utilise this allocation approach, but have adjusted the allocation to reflect the 87-train-path constraint and the maintenance forecasts in this draft decision (illustrated in Figure 4).

¹⁰¹ Resurfacing, lowering and rail grinding are subsets of the 'Track' category in the table.

¹⁰² Note when deducting \$23.0 million from Queensland Rail's proposal \$140.9 million the total is \$117.9 million instead of \$118.0 million. This variance is caused by forecast track maintenance being \$60,000 higher in Tables 12 and 14 relative to Table 10 in the material accompanying Queensland Rail's DAU (Queensland Rail, sub. 7: 25–26). The total in this table adopts aggregate track maintenance reported in Tables 12 and 14.

¹⁰³ Queensland Rail, sub. 7: 24.

Figure 4 Allocation of West Moreton maintenance costs to coal



4.4 Forecast operating costs

Queensland Rail proposed an operating cost allowance that is 23 per cent higher per annum in real terms relative to the allowance approved in the 2016 undertaking (Table 10).¹⁰⁴ It said the 2016 undertaking allowance was not enough to cover the costs of providing operating services, in particular train control.¹⁰⁵

Table 10 West Moreton operating costs proposed by Queensland Rail (\$m)

	2020–21	2021–22	2022–23	2023–24	2024–25	Total
Train control	3.8	3.8	3.8	3.8	3.8	19.2
Corporate overheads and other on-costs	5.9	5.9	5.9	5.9	5.9	29.6
Total	9.7	9.7	9.7	9.7	9.7	48.7

Note: Values are in 2020–21 dollars.

Source: Queensland Rail 2018, sub 2: 34.

We engaged Systra to assess Queensland Rail's proposed operating costs independently. Systra reviewed the bottom-up costing of train control provided by Queensland Rail and benchmarked the remaining costs against industry benchmarks.

Train control

Systra's analysis of train control costs derived an estimate that is less than 1 per cent lower than the Queensland Rail estimate over the five-year period of the 2020 DAU. On this basis we have accepted Queensland Rail's train control cost estimate for the high volume scenario.

¹⁰⁴ Queensland Rail, sub. 2: 40.

¹⁰⁵ Queensland Rail, sub. 2: 38.

Summary 4.3

The QCA's draft decision is that it is appropriate to approve Queensland Rail's proposed train control allowance of \$19.2m (2020–21 dollars) over the five-year term of the 2020 DAU.

Corporate overheads and other on-costs

Systra's analysis of corporate overheads and other on-costs determined that these costs made up 9.25 per cent of Queensland Rail's total costs (including train control, maintenance and capital expenditures) and that this proportion was within Systra's benchmarked estimate.¹⁰⁶ Applying this on-cost ratio to the cost estimates developed in this decision results in a revised on-cost estimate 7.4 per cent lower than Queensland Rail's estimate of on-costs. This approach addresses to some extent stakeholders' concern that Queensland Rail's operating costs were fixed and would not vary with activity.¹⁰⁷

Table 11 West Moreton corporate overheads and other on-costs estimated by Systra (\$m)

	2020–21	2021–22	2022–23	2023–24	2024–25	Total
Corporate overheads and other on-costs	6.1	5.6	5.4	5.2	5.2	27.4

Notes: (1) Values are in 2020–21 dollars. (2) Corporate overhead allowance calculated by applying the benchmark estimated by Systra (9.25%) to the revised costs detailed in this decision.

Source: Systra, Expenditure review, April 2019: 143, 147.

Having regard to Systra's assessment, we formed the view that aspects of Queensland Rail's operating cost proposal are excessive (for example, on-costs). We consider approving Queensland Rail's proposal would allow it to recover inefficient costs, which is inconsistent with the pricing principles in the QCA Act (s. 168A(a)). While the costs may be in the legitimate business interests of Queensland Rail (s. 138(2)(b)), they may not be in the interests of access seekers and access holders and would not promote the efficient use of the network (ss. 138(2)(a), (e), (h)). Therefore, on balance, they are not appropriate to approve.

Summary 4.4

The QCA's draft decision is that the appropriate way for Queensland Rail to amend the corporate overheads and on-costs in the 2020 DAU is to use a forecast of \$27.4m (2020–21 dollars) over the five-year term of the undertaking.

Allocation of operating costs to coal

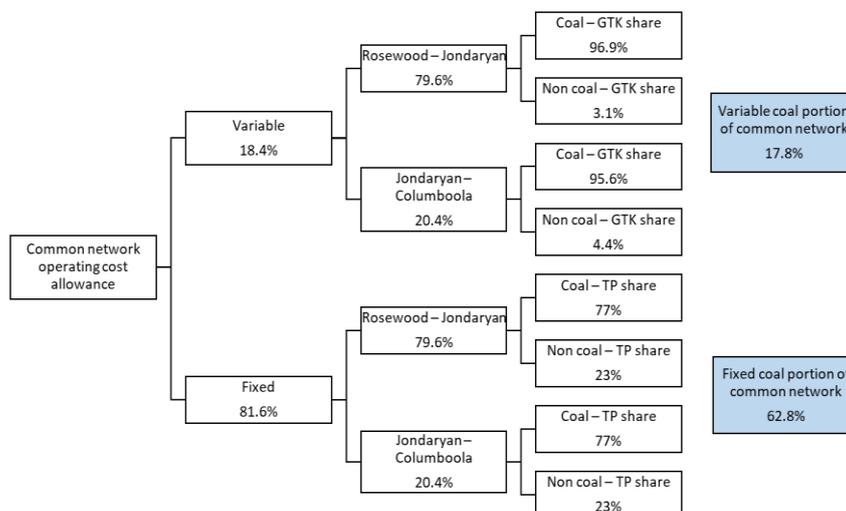
Queensland Rail derived operating cost forecasts for a 9.1 million tonnes a year scenario. The forecasts are for the movement of all coal and non-coal (including passenger) services on the network between Rosewood and Columboola. To allocate costs between coal and non-coal traffics, Queensland Rail proposed to split operating costs into fixed and variable categories and then to allocate the fixed component of costs to coal on the basis of coal's share of train paths and, the variable component on the basis of coal's share of gross tonne kilometres.

¹⁰⁶ Systra, *Expenditure review*, April 2019: 146.

¹⁰⁷ Yancoal, sub. 16: 17; New Hope, sub. 14: 23.

We consider it appropriate to use this allocation approach, but have adjusted the allocation to reflect the 87-train-path constraint (illustrated in Figure 5).

Figure 5 Allocation of West Moreton operating costs to coal



4.5 Opening asset base—West Moreton common network asset base

Queensland Rail proposed to roll forward the West Moreton common network asset base at inflation, noting that it included capital indicators from the 2016 undertaking rather than actual capital expenditure (Table 12).¹⁰⁸

Table 12 West Moreton common network asset base roll-forward proposed by Queensland Rail (\$m)

	2013–14	2014–15	2015–16	2016–17	2017–18	2018–19	2019–20	2020–21
Opening asset value	270.6	284.1	304.3	325.2	349.4	373.8	398.2	419.8
Capex	12.9	24.8	26.0	28.8	30.1	27.7	25.3	
Inflationary gain	8.9	4.5	4.7	6.2	6.2	9.7	10.3	
Less depreciation	(8.3)	(9.0)	(9.9)	(10.8)	(11.9)	(13.0)	(14.0)	
Closing asset value	284.1	304.3	325.2	349.4	373.8	398.2	419.8	

Source: Queensland Rail, sub. 2: 14.

The capital indicator is an ex ante estimate of the capital expenditure which will be incurred during a regulatory period. As detailed in the undertaking, the capital indicator does not imply the QCA has accepted that level of capital expenditure into a RAB (sch. E, cl. 2.1(f) of both the 2020 DAU and 2016 undertaking). Instead, at the end of each year Queensland Rail is required to provide the QCA with a capital expenditure claim. The QCA then makes a decision on the expenditure claim and the approved capital expenditure replaces the capital indicator in the RAB. Further to this, in the event that the QCA-approved capital expenditure differs from the relevant capital indicator, this difference is entered into a capital expenditure carryover account (see

¹⁰⁸ Queensland Rail, sub. 2: 13.

section 4.8 of this draft decision). The QCA is suggesting in this draft decision that capital expenditure reviews be undertaken once per regulatory period as opposed to annually (see section 2.4.2).

Our draft decision is to approve Queensland Rail's approach to determining the common network opening asset value; however, we require Queensland Rail to amend its 2020 DAU to include updates for actual data and more recent forecasts. New Hope raised this issue in its submission.¹⁰⁹

Table 13 presents the West Moreton common network roll-forward, updated for the capital expenditure approved by the QCA for the period from 2013–14 to 2016–17¹¹⁰ and Queensland Rail's claimed actual capital expenditure for 2017–18 (which is currently under review by the QCA).¹¹¹

Table 13 West Moreton common network asset base roll-forward, QCA draft decision (\$m)

	2013–14	2014–15	2015–16	2016–17	2017–18	2018–19	2019–20	2020–21
Opening asset value	270.6	282.9	299.4	316.3	332.3	339.8	364.4	386.1
Capex	11.7	21.0	22.0	20.4	12.8	27.7	25.3	
Inflationary gain	8.9	4.4	4.6	6.0	5.8	8.8	9.4	
Less depreciation	(8.3)	(8.9)	(9.7)	(10.5)	(11.1)	(11.9)	(12.9)	
Closing asset value	282.9	299.4	316.3	332.3	339.8	364.4	386.1	

Note: Including approved 2016 undertaking capital expenditure for the period from 2013–14 to 2016–17, and claimed actual capital expenditure for 2017–18.

We consider it appropriate to make this draft decision having regard to the factors set out in s. 138(2) of the QCA Act and for the reasons contained in the analysis above.

Summary 4.5

The QCA's draft decision is that the appropriate way for Queensland Rail to amend its 2020 DAU is to apply a common network opening asset value of \$386.1 million, derived by using the actual capital expenditure incurred during the 2016 undertaking.

4.6 Forecast capital expenditure

Queensland Rail proposed forecast capital expenditure (the capital indicator) of \$159.4 million for the West Moreton system over the five-year 2020 DAU period (Table 14).

¹⁰⁹ New Hope, sub. 14: 10.

¹¹⁰ QCA, *Queensland Rail's 2013–17 capital expenditure*, decision notice, attachment to the QCA's letter to Queensland Rail, 21 Mar 2019: 5.

¹¹¹ Queensland Rail, *West Moreton System Capital Expenditure Report 2017–18*, Feb 2019: 5.

Table 14 Capital expenditure forecast proposed by Queensland Rail (\$m)

	2020–21	2021–22	2022–23	2023–24	2024–25	Total
Timber bridge upgrade	■	■	■	■	■	■
Formation repairs	■	■	■	■	■	■
Culvert replacement	■	■	■	■	■	■
Track reconditioning	■	■	■	■	■	■
Resleepering	■	■	■	■	■	■
Rerailing	■	■	■	■	■	■
Level crossing reconditioning	■	■	■	■	■	■
Other track	■	■	■	■	■	■
Signalling	■	■	■	■	■	■
Telecoms	■	■	■	■	■	■
Total	38.0	32.9	31.1	28.5	28.9	159.4

Note: Values are in 2020–21 dollars.

Source: Queensland Rail 2018, sub. 2: 25.

New Hope asked us to 'obtain separate impartial advice so as to reach an independent and informed view of the prudence of the proposed capital expenditure'.¹¹² We then engaged Systra to advise on the prudence of the scope and efficiency of the cost.

Systra's analysis highlighted the importance of developing a capital expenditure budget in the context of the overall asset management philosophy, through a 'total cost approach'.¹¹³ Consistent with its proposed maintenance approach, Systra recommended that there should be material changes to Queensland Rail's proposed investment in structures and rail formation, including:

- a reduced estimate for timber bridge replacement, on the basis that Queensland Rail's asset management plan does not support a blanket strategy of replacing bridges¹¹⁴
- an increase the allowance for formation repairs, on the basis that its assessment indicated that the additional capex would result in material maintenance cost savings (see section 4.3 for a discussion of formation repairs and resurfacing).

¹¹² New Hope sub. 14:26.

¹¹³ Systra, *Expenditure review*, April 2019: 104.

¹¹⁴ Systra, *Expenditure review*, April 2019: 116.

Table 15 Systra capital expenditure forecast (\$m)

	2020–21	2021–22	2022–23	2023–24	2024–25	Total	Change
Timber bridge upgrade	■	■	■	■	■	■	■
Formation repairs	■	■	■	■	■	■	■
Culvert replacement	■	■	■	■	■	■	■
Track reconditioning	■	■	■	■	■	■	■
Resleepering	■	■	■	■	■	■	■
Rerailing	■	■	■	■	■	■	■
Level crossing reconditioning	■	■	■	■	■	■	■
Other track	■	■	■	■	■	■	■
Signalling	■	■	■	■	■	■	■
Telecoms	■	■	■	■	■	■	■
Total	42.7	30.3	29.5	24.7	28.3	155.5	(3.9)

Note: Values are in 2020–21 dollars.

Source: Systra, *Expenditure review*, April 2019.

Queensland Rail's proposed capital indicator is \$3.9 million (2.5 per cent) higher than the estimate derived by Systra.¹¹⁵ On this basis, we consider Queensland Rail's overall budget to be reasonable. However, there are material differences in the mix of projects proposed and Systra has highlighted the importance of explicitly taking into account maintenance/capital expenditure trade-offs when developing expenditure forecasts for both aspects of rail infrastructure costs.

We consider it appropriate to approve Queensland Rail's proposed allowance as it would promote the interests of Queensland Rail (s. 138(2)(b)) and would be in the interests of access seekers and access holders; it would also promote the efficient use of the network (ss. 138(2)(a), (e), (h)).

Summary 4.6

The QCA's draft decision is that it is appropriate to approve Queensland Rail's proposed capital indicator in the 2020 DAU and calculate revenues and reference tariffs to reflect the capital indicator outlined in Table 14.

4.7 Coal's share of the common network asset base

While Queensland Rail proposed minimal changes to its common network asset base opening value, it did propose to increase coal's share of this asset base by changing the coal cost allocator from 80 to 97 train paths (Table 16).¹¹⁶

¹¹⁵ Systra, *Expenditure review*, April 2019: 155.

¹¹⁶ Queensland Rail, sub. 2: 15.

Table 16 Coal share of the common network asset base proposed by Queensland Rail (\$m)

	2020–21	2021–22	2022–23	2023–24	2024–25
Opening asset value	346.7	377.0	403.1	424.7	450.2
Capex	33.8	30.0	26.1	30.5	28.4
Inflationary gain	9.1	9.8	10.4	11.0	11.6
Less depreciation	(12.5)	(13.8)	(14.9)	(16.1)	(17.3)
Closing asset value	377.0	403.1	424.7	450.2	472.9

Source: Queensland Rail, AU2 Model 14.08.18 (9.1MTPA) for QCA, August 2018.

We consider that increasing the allocation of common network RAB to coal without evidence of the 87-train-path constraint (discussed in section 2.2.3) being lifted is premature; therefore, the 87-train-path constraint should apply.

Our draft decision on the West Moreton common network asset base to coal (Table 17) reflects:

- a coal allocation based on 87 train paths
- the QCA-approved capital expenditure for 2013–14 to 2016–17 (section 4.5)
- Queensland Rail's capital expenditure claim for 2017–18 (section 4.5).

Table 17 Coal share of the common network asset base, QCA draft decision (\$m)

	2020–21	2021–22	2022–23	2023–24	2024–25
Opening asset value	286.6	313.8	337.2	356.6	379.5
Capex	30.1	26.7	23.2	27.2	25.3
Inflationary gain	7.5	8.2	8.7	9.3	9.8
Less depreciation	(10.5)	(11.5)	(12.5)	(13.5)	(14.6)
Closing asset value	313.8	337.2	356.6	379.5	400.0

Summary 4.7

The QCA's draft decision is that the appropriate way for Queensland Rail to amend its 2020 DAU is to allocate the common network asset base to coal services on the basis of the 87-train-path constraint, giving an opening value in July 2020 of \$286.6 million.

4.8 Capital expenditure carryover account

A carryover balance is determined each year by calculating the difference between the return on capital, depreciation and tax depreciation associated with the original capex estimate, and the equivalent returns from the actual capital expenditure (sch. E of the 2016 undertaking). These yearly balances are then rolled forward by the applicable WACC in a capital carryover account and the net balance of this account at the end of the regulatory period is added to (or subtracted from) the total revenue requirement calculated for the next regulatory period.

Queensland Rail recorded an over-recovery of \$6.2 million (2020–21 dollars) in its capital expenditure carryover account from the 2016 undertaking (section 4.5 above). This is due to the approved (or proposed) capital expenditure for years 2013–14 to 2017–18 being \$34.7 million less than the corresponding years' capital indicators in the 2016 undertaking. To clear this

balance, \$6.2 million has been deducted from the present value (2020–21 dollars) of the West Moreton revenue requirement for coal in the 2020 DAU.

Summary 4.8

The QCA's draft decision is that the appropriate way for Queensland Rail to amend the 2020 DAU is to apply a carry-over balance to the West Moreton total revenue requirement for coal services by deducting \$6.2 million (2020–21 dollars) before determining the West Moreton tariff.

4.9 Revenue requirement (building blocks) and reference tariffs

Building blocks

Queensland Rail's proposed total revenue requirement for coal incorporates higher allocations of the common network asset base, maintenance and operating expenses than in the 2016 undertaking tariff approach (Table 18).

Table 18 Revenue requirement for coal proposed by Queensland Rail (\$m, mid-year)

	2020–21	2021–22	2022–23	2023–24	2024–25	Total
Return on capital	26.4	28.4	30.2	31.9	33.7	150.6
Plus depreciation	12.2	13.4	14.4	15.6	16.8	72.4
Less inflation	(8.8)	(9.5)	(10.1)	(10.7)	(11.3)	(50.4)
Less TSC capital charge	(1.2)	(1.2)	(1.2)	(1.2)	(1.2)	(6.0)
Plus operating allowance	8.6	8.8	9.1	9.3	9.5	45.3
Plus maintenance allowance	26.0	26.5	27.0	27.6	28.1	135.3
Plus working capital allowance	0.2	0.2	0.2	0.2	0.2	1.1
Plus tax allowance	2.0	2.7	2.7	2.6	2.6	12.6
Revenue requirement	65.4	69.4	72.3	75.4	78.5	360.9

Note: Queensland Rail's proposed revenue requirement has been converted from end-of-year totals to mid-year totals by deflating by WACC for six months.

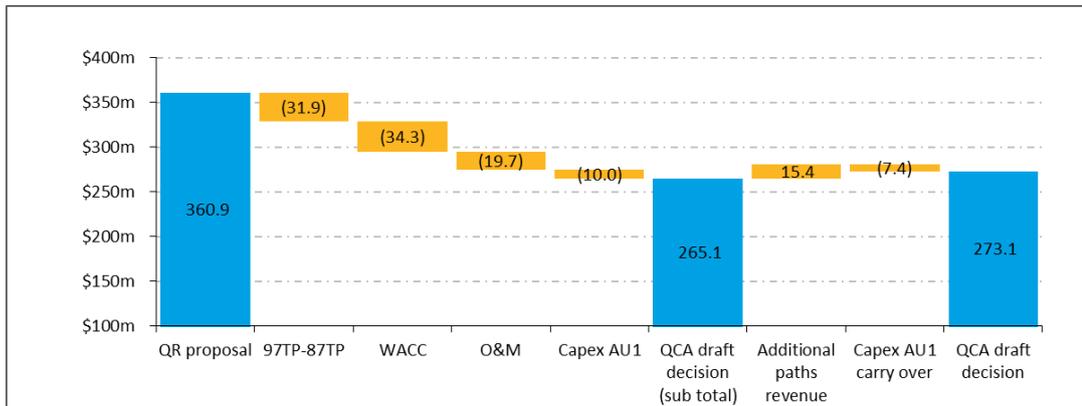
Source: Queensland Rail, AU2 Model 14.08.18 (9.1MTPA) for QCA, August 2018.

On the basis of the analysis presented in this chapter, our view is that the West Moreton system building blocks proposed by Queensland rail would result in the recovery of inefficient costs and should be amended to reflect:

- an allocation of common network costs to coal based on 87 train paths (see sections 4.3 and 4.4), affecting the return on assets, depreciation and all allowances and inflation numbers
- a maintenance allowance of \$118.0 million (2020–21 dollars) (see sections 4.3)
- a WACC of 6.02 per cent (see Chapter 3) affecting the return on assets
- an operating cost allowance of \$46.6 million (2020–21 dollars) (see section 4.4)
- the actual and proposed capital expenditure in years 2013–14 to 2017–18 (see section 4.5)
- a negative balance of \$6.2 million in the capital carryover account (see section 4.8).

Figure 6 illustrates the differences between the total revenue proposed by Queensland Rail and what we consider to be appropriate as part of this draft decision.

Figure 6 Total revenue requirement, Queensland Rail's proposal and the QCA's draft decision



Note: All figures are \$million, mid-year.

Appropriate reference tariffs

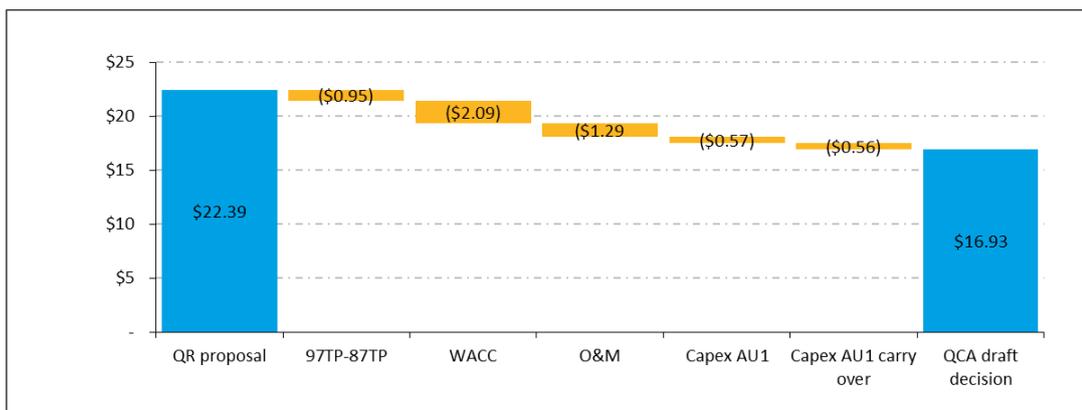
West Moreton

As discussed in this chapter, Queensland Rail's proposed West Moreton coal tariff of \$22.39/'000 gtk is based on building blocks that would allow it to recover inefficient costs, which is inconsistent with the pricing principles in the QCA Act (s. 168A(a)). While that might be in the interests of Queensland Rail (s. 138(2)(b)), it would not be in the interests of access seekers and access holders and would not promote the efficient use of and investment in the network (ss. 138(2)(a), (e), (h)). Therefore, on balance we do not consider it is appropriate to approve Queensland Rail's proposed tariff.

Our draft decision is that it would be appropriate to approve a West Moreton tariff of \$16.93/'000 gtk, based on the building blocks summarised above (section 4.9) and assessed through Chapters 2 to 4 above.

Figure 7 illustrates the differences between the West Moreton tariff proposed by Queensland Rail and what we consider to be appropriate to approve as part of this draft decision.

Figure 7 West Moreton tariff, Queensland Rail's proposal and the QCA's analysis



Summary 4.9

The QCA's draft decision is that the appropriate way for Queensland Rail to amend the 2020 DAU is to include a West Moreton reference tariff of \$16.93 per thousand gtk.

Metropolitan

Queensland Rail proposed to apply the 2016 undertaking proxy methodology for the 2020 DAU Metropolitan system reference tariff.¹¹⁷ It proposed a tariff of \$18.13/'000 gtk.

As discussed in section 2.4.1 of this draft decision, the proxy approach developed in the 2016 undertaking remains an appropriate way of determining the Metropolitan tariff. While this approach has a number of limitations, detailed in the QCA's June 2016 decision on Queensland Rail's 2015 DAU, the approach continues to have the support of stakeholders.¹¹⁸ Our draft decision is therefore that it is appropriate to approve Queensland Rail's proposed Metropolitan system reference tariff for coal services.

Summary 4.10

The QCA's draft decision is that it is appropriate to approve Queensland Rail's proposed Metropolitan reference tariff for coal services of \$18.13 per thousand gtk for the 2020 DAU.

¹¹⁷ See QCA, *Queensland Rail's Draft Access Undertaking*, decision, June 2016: 168–174.

¹¹⁸ New Hope, sub. 14: 30.

5 REVENUE ADEQUACY AND LOW VOLUMES

Revenue adequacy for Queensland Rail is one of the criteria the QCA considers when deciding whether it is appropriate to approve a DAU (ss. 138(2)(a), (b), (g); 168A(a)). While the 2020 DAU includes a West Moreton reference tariff for annual volumes of 9.1 million tonnes, Queensland Rail said it was possible the annual volumes could be as low as 2.1 million tonnes. Queensland Rail did not formally propose a tariff for that low-volume scenario, but estimated that the ceiling price at 2.1 million tonnes would exceed \$50/000 gtk—more than three times the current price.

Overview of indicative approach

After considering options for a transparent and efficient pricing approach if volumes on West Moreton fall to levels at which full cost recovery for Queensland Rail is difficult or impossible, our indicative position is that the high-volume tariff discussed in Chapters 2, 3 and 4 of this draft decision would be the basis of the price at lower volumes. But we are suggesting it may be appropriate to apply further measures, including limited-life loss capitalisation and a price premium, to underwrite some of the unused capacity.

Revenue adequacy and low volumes—indicative positions

<i>Queensland Rail proposal</i>	<i>QCA indicative positions</i>
A loss capitalisation approach may be considered.	Limited-life loss capitalisation may be appropriate (see section 5.2.1).
Queensland Rail may propose a way of recovering capitalised losses.	Recovery premiums may be appropriate to promote revenue adequacy for Queensland Rail (see section 5.2.2).
Indicative operating, maintenance and capital allowances at annual coal volumes of 2.1 million tonnes are proposed.	The proposed cost allowances at 2.1 million tonnes may be too high (see section 5.2.3).

5.1 Balancing interests at low volumes

A rail network represents a large investment, for which substantial parts of the maintenance costs and capital expenditure are fixed, at least in the short term. This means that as volumes fall, the cost per unit of service will rise.

Queensland Rail said it may face this challenge of falling volumes and inelastic costs on the West Moreton system. If the New Acland mine closes next year, Queensland Rail will be exposed to a large revenue shortfall, beyond any reasonable level of underwriting by the Cameby Downs mine, which would be the only remaining access holder on the system.¹¹⁹ Queensland Rail and Yancoal, the operator of Cameby Downs, are negotiating on a pricing structure to apply if this happens. Queensland Rail said it might submit a proposed way forward that reflected those negotiations, but no submission had been received at the time of publishing this draft decision.¹²⁰

The QCA considers the approach suggested in this chapter will assist the negotiation process. Developing a position alongside that of Queensland Rail is also consistent with the preference of Yancoal, which said:

¹¹⁹ Queensland Rail, sub. 2: 11.

¹²⁰ Queensland Rail, sub. 18: 5.

While Yancoal is not certain that it will reach an agreed resolution, such that the QCA should continue to progress its thinking on the appropriate tariffs to apply in those circumstances, Yancoal intends to continue those discussions with QR in parallel to the regulatory process.¹²¹

The average price approach used to calculate tariffs for West Moreton coal services means the competing interests of Queensland Rail and its customers are more easily reconciled at high utilisation—a price access holders are willing to pay can be reduced as demand rises, while still leaving room for Queensland Rail's revenue to increase.

This situation is reversed as volumes and utilisation fall—the high proportion of fixed, or at least inelastic, costs means that at low volumes it becomes difficult or impossible to maintain a price access holders are willing to pay while supporting the revenue required to sustain the rail infrastructure.

We consider the policy implications of a low-volume average-price tariff below, including:

- underwriting unused train paths (section 5.1.1)
- willingness to pay (section 5.1.2).

5.1.1 Underwriting unused paths

Queensland Rail based much of its West Moreton tariff proposal in the 2020 DAU on the methodology of the 2016 access undertaking, which used a building blocks approach to set an average price for the service, based on a volume forecast. In the 2016 undertaking approach, the costs were allocated to coal services based on capacity that was available for them to contract, rather than what they were forecast to use. This meant that access holders were underwriting up to 27 per cent more capacity than they were forecast to use (see section 2.2.3).¹²²

This approach helped promote revenue adequacy for Queensland Rail, as coal services—the dominant users on West Moreton—underwrote a large proportion of the overall costs. It also reflected other considerations, including that the miners had access to the asset if they wanted it. In other words, they had an option over the capacity formerly contracted to Peabody for the Wilkie Creek mine. And indeed, the high-volume forecast proposed by Queensland Rail in the 2020 DAU would mean all of the spare capacity available for coal services to contract on West Moreton would be tied up in long-term access agreements with the two incumbents (see Chapter 2).

Stakeholders are concerned, though, about what will happen if volumes fall short of that forecast. They said in their comments on the 2020 DAU that they should not be required to underwrite unused paths. New Hope said:

NHG does not accept that it is appropriate that coal services should immediately be required to pay for additional capacity, beyond the capacity which is required by those services, simply because the capacity is now (or becomes, in the future) theoretically available.¹²³

¹²¹ Yancoal, sub 21: 2.

¹²² The tariffs in the 2016 undertaking were assessed based on a forecast that 63 return train paths a week would be used out of 80 available for contracting by West Moreton coal services. However, the access charges recovered efficient costs for providing 80 paths—see section 2.2.3 of this draft decision, and pp. 130–146 of the QCA's June 2016 decision on Queensland Rail's 2015 DAU.

¹²³ New Hope, sub. 14: 11.

This was echoed by Yancoal, which said:

The QR Submission contains no justification for why additional costs of surplus capacity should simply be allocated to coal services in the current context where they are unlikely to be utilised by any customers.¹²⁴

Queensland Rail said it had based its 2020 DAU approach on an expectation that, even if the New Acland mine shut down, other demand would emerge, and the West Moreton system would return to full utilisation.¹²⁵ We consider that, while revenue adequacy for Queensland Rail is an important consideration, it is not reasonable to expect the current customers to have an unlimited obligation to underwrite what is, in effect, Queensland Rail's long-term business development plan.

5.1.2 Willingness to pay

At very low volumes, one of the key questions will be how much the remaining access holder(s) are willing to pay. It is difficult to assess this precisely.

Benchmarking against other coal systems provides only indicative comparisons, because the service provided differs. For example, the larger trains and higher axle loads on other systems are more cost-effective, as they allow more tonnes of coal to be moved for every tonne of rollingstock. In addition, other rail systems haul coal used for steelmaking, while West Moreton only carries thermal coal, used for generating electricity.

However, there is evidence that other mines in Australia face below-rail costs in the same range as those paid by West Moreton users. For example:

- NSW Upper Hunter Valley—\$9.00/nt¹²⁶
- Minerva on the Blackwater system in the CQCN—\$6.99/nt.¹²⁷

The current Cameby Downs tariff of more than \$10/nt¹²⁸ is higher than both these comparators, and all are multiples of the Goonyella average price of \$2.20/nt.¹²⁹

The current price provides some information, although it does not rule out the 'true' willingness to pay being higher. The 2016 undertaking access price of \$8.76/nt¹³⁰ can be assumed to be economically viable, as:

- both access holders continue to rail coal, and have done so through fluctuations in the thermal coal price
- Yancoal has steadily expanded output at Cameby Downs and is looking to increase it further.¹³¹

¹²⁴ Yancoal, sub. 16: 13.

¹²⁵ Queensland Rail, sub. 18: 9.

¹²⁶ QCA calculations for a Hunter Valley Zone 3 mine, based on tariffs and distances published by ARTC.

¹²⁷ QCA calculation based on UT5 decision, 2020–21 price.

¹²⁸ Based on QCA calculations and published West Moreton tariffs for 2018–19.

¹²⁹ QCA calculation based on UT5 decision, excludes electric asset costs, 2020–21 price.

¹³⁰ Calculated from Queensland Rail source data and converted to 2020–21 dollars. This is the average price of hauling coal from West Moreton to the export terminal at Fisherman Islands, including the price for crossing the Metropolitan system.

¹³¹ Yancoal, November 2016. See also <https://www.yancoal.com.au/page/en/assets/mine-sites/cameby-downs/cameby-downs-continuation-project/>.

- New Hope is looking to expand mining operations and extend their life through its New Acland Stage 3 project
- Queensland Rail said it had received access requests for the West Moreton system that would use the available capacity, and might require expanding the system.¹³²

We are interested in stakeholders' views on whether the current price provides a reasonable indication of access seekers and holders' willingness to pay, and how that information can be appropriately addressed when assessing the West Moreton coal reference tariffs at low volumes.

5.2 Low-volume tariff measures

A high-cost system with limited customers and low coal haulage presents a pricing challenge. As discussed previously, applying an average price building blocks methodology at 2.1 million tonnes a year would generate a high tariff—Queensland Rail calculated it might be as much as three times that in the 2016 undertaking. Queensland Rail said it intended to negotiate a price below its calculated price.¹³³

The QCA's preliminary position is that the price derived for the high-volume scenario should form the basis of the price at lower volumes as well. At the same time, the QCA is proposing measures (discussed below) to promote Queensland Rail's revenue adequacy, having regard to customers' willingness to pay and other regulatory objectives. These measures include:

- implementing limited-life loss capitalisation at low tonnages (section 5.2.1)
- adding loss-recovery premiums on contracted paths and additional (ad hoc) paths (section 5.2.2)
- operating, maintenance and capital expenditure allowances at low volumes (section 5.2.3).

5.2.1 Loss capitalisation

Queensland Rail suggested a potential way to deal with the low tonnage scenario was to use loss capitalisation—however, it did not say how this might be implemented.¹³⁴ Loss capitalisation is the deferral of regulated costs from current to future periods in circumstances where volumes are low but expected to grow.¹³⁵

New Hope and Yancoal both requested that the QCA consider optimising Queensland Rail's regulatory asset base (RAB) to produce a lower tariff at lower volumes.¹³⁶ Queensland Rail's consultant, Frontier Economics, responded that optimising assets would be inappropriate, as it would make the regulatory regime one-sided.¹³⁷ Queensland Rail said loss capitalisation may be an option instead:

An approach that has been used by ARTC in the Hunter Valley, the ACCC for the NBN Co and Aurizon Network in Central Queensland is a 'loss capitalisation' (catch-up) model where losses at low tonnages are capitalised and then recouped at higher tonnages.

¹³² Queensland Rail, sub. 2: 15; sub. 18: 9.

¹³³ Queensland Rail, sub. 2: 42.

¹³⁴ Queensland Rail, sub. 18: 4.

¹³⁵ See ARTC, *Hunter Valley Coal Network access undertaking development*, stakeholder consultation paper, March 2015: 4.

¹³⁶ New Hope, sub. 14: 10–12; Yancoal, sub. 16: 3.

¹³⁷ Queensland Rail, sub. 19: 6.

Consultation with both Yancoal and New Hope indicated that they are willing to explore the concept further.¹³⁸

Neither Queensland Rail nor stakeholders proposed to change the criteria for determining whether an asset should be optimised. These criteria in the 2020 DAU, which are unchanged from the 2016 undertaking, include demand for access deteriorating to a point from which there is no expectation of recovery, and a possibility of actual bypass (sch. E, cl. 1.2(b)).

The QCA considers that optimising Queensland Rail's asset base may be premature, given Queensland Rail's confidence that volumes will recover.¹³⁹ However, unfettered loss capitalisation where volumes remain low could produce an onerous barrier to entry for future access seekers, should the price required for Queensland Rail to recoup a large accumulated loss be more than they are willing to pay. Loss capitalisation is typically used in the case of lumpy assets such as dams, where there is a reasonable expectation that demand will build over time to a level where the capitalised losses can be recouped.

West Moreton has different demand characteristics. Therefore loss capitalisation, if it was to be used for West Moreton, would need to be appropriately constructed to suit the nature of the asset and the market for access.

The loss capitalisation mechanism should be symmetrical, in that any over-recovery (for instance revenue associated with additional paths and government subsidies through the Transport Service Contract (TSC)) should also be placed in this account and accrue at the WACC to offset any subsequent under-recovery. In the event of low volumes, any unrecovered revenue would be capitalised in an under-recovery account.

However, the QCA is also proposing that the capitalised losses have a limited life, to prevent the accumulated amount in the under-recovery account from ballooning to a level at which there is no reasonable prospect of recovery.

The balance in the loss capitalisation account would accrue at the WACC. Each under- or over-recovery would remain at full value in the under-recovery account for five years, after which it would be fully depreciated over the next five years. This 10-year life—five-years of accumulation, then five years of 'depreciation'—will help mitigate the accumulation of losses while giving Queensland Rail a reasonable amount of time to find new customers to recover its forgone revenue. The 10-year life would reduce any distortionary inter-generational effects where past costs are borne by future users.

The QCA is interested in stakeholders' views about whether limited-life loss capitalisation is an appropriate approach if West Moreton coal volumes decline to low levels.

5.2.2 Loss recovery premiums

The reference tariffs in the 2016 undertaking recovered the efficient costs of providing 80 paths available for contracting by West Moreton coal users, from forecast volume of 63 paths (section 2.2.3). This promoted revenue adequacy for Queensland Rail. In assessing Queensland Rail's proposed tariffs in the 2020 DAU, the QCA has considered potential ways to provide support for Queensland Rail's revenue where there is unused capacity that is available for coal customers to contract. This includes premiums on the prices of both contracted paths and additional (ad hoc) paths.

¹³⁸ Queensland Rail, sub. 2: 43.

¹³⁹ Queensland Rail, sub. 18: 9.

Contracted paths

West Moreton tariffs that were assessed in the past were structured so that the capacity available to coal was underwritten by coal users.¹⁴⁰ We consider that this approach should be continued to an extent, if volumes in the 2020 DAU period fall substantially short of full utilisation. However, this should be done without requiring coal services to underwrite the full amount.

A possible way to achieve this is by implementing a 15 per cent premium that would take effect if volumes fall to a point where losses are being capitalised. The price mark-up of 15 per cent can be considered reasonable, as it would facilitate recovery of Queensland Rail's revenues but also be a price customers are willing to pay (see Box 2 for a worked example of the low volume tariff measures).

Queensland Rail is able to recover some asset revenues and allowances not recovered from coal services through a government subsidy known as the TSC. In the loss capitalisation scenario, any income derived from the TSC revenue resulting from the RAB under-recovery would be credited to the loss-capitalisation account and act as an offset to an under recovery. This would prevent double recovery by Queensland Rail.

This approach is intended to bring Queensland Rail closer to revenue adequacy when volumes are low, while maintaining a transparent tariff approach that allows access seekers and holders to estimate future access costs (ss. 138(2)(b), (e), (h)).

The QCA is interested in stakeholders' views about whether a premium of 15 per cent at low volumes appropriately balances Queensland Rail's interest in recovering its costs against the interests of access holders and access seekers.

Additional paths

The QCA is considering pricing additional (ad hoc) paths at a five per cent premium to contracted paths (discussed in section 2.3.2). The differential pricing between additional and contracted paths may be especially useful in a low-volume environment, as it:

- increases the incentive for miners to contract to avoid higher charges
- allows Queensland Rail to reach a point of revenue adequacy sooner if access holders choose not to contract.

Pricing additional paths at higher rates also reflects to some extent the value of avoiding take-or-pay charges. This is particularly relevant in a low-volume environment where spare capacity is plentiful, and the risk of not securing additional paths is low. Income associated with additional paths would be credited to the loss-capitalisation account (see section 5.2.1) and act as an offset to an under recovery.

¹⁴⁰ QCA, June 2016: 119–146.

Box 2 Worked example of the low-volume tariff measures

Scenario assumptions

- Forecast annual volumes are 3.5 million tonnes from 2020–21 to 2022–23, and 8.5 million tonnes from 2023–24 to 2034–35.
- The reference tariff is based on 8.5 million tonnes and has been adjusted for inflation; total revenue requirement is equal to the reference tariff in any year multiplied by volumes of 8.5 million tonnes a year from 2020–21 to 2034–35.
- Actual revenue is the reference tariff in any year multiplied by annual volumes of 3.5 million tonnes from 2020–21 to 2022–23, and 8.5 million tonnes from 2023 to 2035.
- A loss occurs in a year when actual revenue is less than the total revenue requirement (which would be adjusted to reflect operating allowances for lower volumes).
- Accrued losses are capitalised for each year they exist; capitalised losses have a limited life in that the full value remains in place for five years and is then fully depreciated over the next five years.
- In any year where an accumulated under-recovery of revenue exists, a percentage premium is added to the reference tariff of that year. The premium is capped either at an amount that removes the under-recovery or a maximum of 15 per cent.

Under this scenario, the price premium applies from 2020–21 to 2027–28 (Figure 8) allowing Queensland Rail to recover its losses from low-demand years (

Figure 9). However, where actual volumes remain very low for an extended period, not all losses would be recovered through the price premium due to the limited life for capitalised losses.

Figure 8 Total revenue requirement and actual revenue

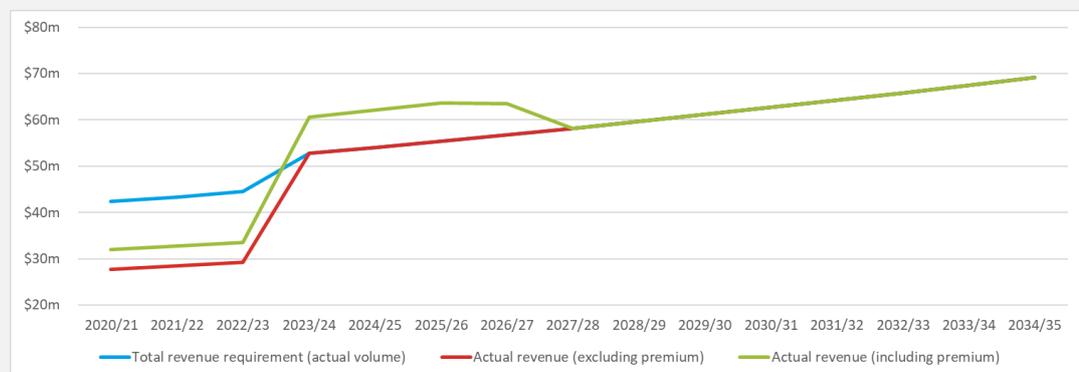
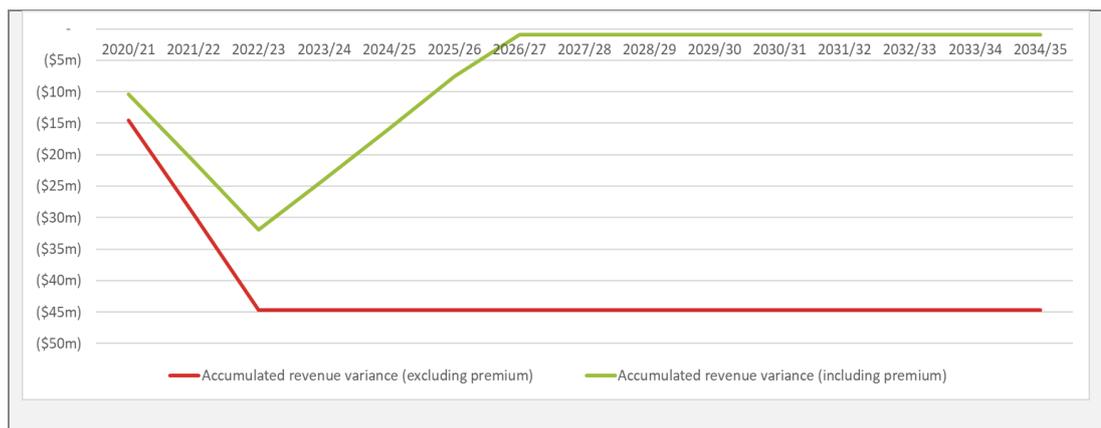


Figure 9 Accumulated revenue variance



5.2.3 Low-volume operating, maintenance and capital expenditure allowances

While Queensland Rail did not formally propose a price for annual volumes of 2.1 million tonnes, it provided indicative estimates of costs that it might propose for that low-volume scenario (see Table 19).¹⁴¹

Table 19 Queensland Rail's indicative allowances for 2.1 million tonne annual volume (\$m)

	<i>Capital expenditure</i>	<i>Maintenance costs</i>	<i>Operating costs</i>
9.1 million tonnes	159.3	140.9	48.7
2.1 million tonnes	144.5	101.8	48.7

Note: All figures are for the five-year undertaking period

Source: Queensland Rail, sub. 2.

Yancoal was concerned about the costs proposed by Queensland Rail:

The QR Submission indicates that 100% of its operating costs are fixed and 57.3% of its maintenance costs. That is a very high proportion of fixed costs, which warrants detailed consideration.¹⁴²

New Hope said the allowances were too high:

In addition, proposed maintenance and operating costs appear excessive and have not been adequately justified as being prudent and efficient.¹⁴³

We engaged Systra to review Queensland Rail's capital expenditure, maintenance and operating cost forecasts. Systra's main focus was costs at the high-volume forecast formally proposed by Queensland Rail in the 2020 DAU (see Chapter 4). However in providing advice on the high-volume scenario, it also prepared some preliminary estimates of costs at 2.1 million tonnes (Table 20 provides a summary of the estimates in Systra's report).

Table 20 Systra's indicative allowances for 2.1 million tonne annual volume (\$m)

	<i>Capital expenditure</i>	<i>Maintenance costs</i>	<i>Operating costs</i>
Systra estimate	91.3	87.4	35.5
Variance from QR	(53.2)	(14.4)	(13.2)

¹⁴¹ Queensland Rail, sub. 2: 21.

¹⁴² Yancoal, sub. 16: 17.

¹⁴³ New Hope, sub. 14: 4.

Note: All figures are for the five-year undertaking period.

Source: Systra, April 2019.

Systra's estimates are preliminary. However, they show how the high proportion of fixed costs creates a challenge for achieving revenue adequacy from coal services on the West Moreton system at low volumes. Costs will be lower as volumes fall, but the cost per unit of service can still be expected to be higher.

If it becomes clear over the coming months that a low-volume scenario on the West Moreton system is likely to apply, we will seek more detailed technical advice on appropriate costs, including considering any updated volume and cost estimates provided by Queensland Rail.

While we have not sought to consider the appropriate cost estimates for low volume scenarios in detail in this draft decision, stakeholders may wish to comment on the analysis and estimates in Systra's report.

6 PREAMBLE AND APPLICATION AND SCOPE (PART 1)

The preamble sets out the high-level context for Queensland Rail's 2020 DAU. Part 1 of the 2020 DAU contains provisions on the duration and scope of the undertaking, the non-discriminatory treatment of access seekers and access holders, and the negotiation of funding agreements when access seekers agree to pay for extensions. The provisions in Part 1 are largely consistent with the provisions in the 2016 undertaking, although there are some differences.

Overview of the draft decision

Our draft decision is that the preamble is appropriate to be approved. We consider that Queensland Rail should make some amendments to Part 1 of the 2020 DAU, but most provisions in Part 1 are appropriate to be approved.

Preamble and application and scope (Part 1)—summary

<i>Queensland Rail proposal</i>	<i>Clause</i>	<i>QCA draft decision</i>
Preamble		
Provides high-level context for Queensland Rail's 2020 DAU.	n/a	The proposal is appropriate to be approved (see section 6.1).
Term of the undertaking		
Five-year term—1 July 2020 to 30 June 2025.	1.1	The proposal is appropriate to be approved (see section 6.2).
A shorter term will apply in certain circumstances, for example, if the service is no longer declared.		The proposal is not appropriate to be approved. Amendments are appropriate to clarify that the undertaking will continue if the service, or part of the service, is declared (see section 6.2).
Extensions and network connections		
Various provisions relating to the negotiation, development and funding of extensions. There is no standard connection agreement.	1.4 (and others)	The proposal is largely appropriate to be approved. However, we consider that clarifying amendments to the definition of 'extension' are appropriate (see section 6.3).
Master planning provisions		
Regional network master plans for the Mount Isa and West Moreton systems will be developed on request. Queensland Rail is not required to develop a plan if customers do not agree to fund it.	1.5	The proposal is not appropriate to be approved. Amendments are appropriate to require Queensland Rail to provide access to the master planning process for all systems, except the North Coast system. We support Queensland Rail's proposed approach of consulting with stakeholders about changes to the process for developing master plans and encourage Queensland Rail to submit a revised approach for consideration (see section 6.4).
Other matters		
Removal of the words 'subject to schedule F', which were in the 2016 undertaking.	1.2.1(b)(ii)	The proposal may not be appropriate to be approved, because the reasons for removing these words are not clear. The QCA seeks further submissions from Queensland Rail and stakeholders on this issue. ¹⁴⁴

¹⁴⁴ We note that New Hope agreed with Queensland Rail's proposal on the basis that schedule F did not appear to be inconsistent with passenger priority obligations and preserved train path obligations (New Hope, sub. 15: 8).

6.1 Preamble

The preamble provides high-level context for Queensland Rail's 2020 DAU. Having regard to the factors in s. 138(2), we consider that it is appropriate to approve Queensland Rail's proposal. While our view on the extent to which road transport is a viable alternative mode of transport to rail may not align with the view expressed by Queensland Rail in the preamble¹⁴⁵, we do not consider that the expression of this view in the preamble would affect the operation of the undertaking.

6.2 Term of the undertaking (cl. 1.1)

Under Queensland Rail's proposal, the undertaking will commence on the approval date, which is expected to be 1 July 2020, and terminate on the earlier of:¹⁴⁶

- (a) 30 June 2025
- (b) in respect of any part of the service to which this undertaking relates, the date on which that part of the service ceases to be a declared service for the purposes of Part 5 of the QCA Act
- (c) the date on which this undertaking is withdrawn in accordance with the QCA Act.

Proposed five-year term

Queensland Rail considered that a five-year term—1 July 2020 to 30 June 2025—was appropriate, noting that it has only proposed targeted amendments to the 2016 undertaking and that fewer reviews would lower costs to Queensland Rail, the QCA and stakeholders, without compromising outcomes.¹⁴⁷ Stakeholders also supported a five-year term.¹⁴⁸

In our view, a five-year term appropriately balances the benefits of providing certainty to stakeholders about the terms and conditions of access for a reasonable period of time and flexibility to deal with changing circumstances. This is in the interests of Queensland Rail, access seekers and access holders, and the public interest (ss. 138(2)(b), (d), (e), (h)).

Summary 6.1

The QCA's draft decision is that it is appropriate to approve Queensland Rail's five-year term in the 2020 DAU.

Addressing the expiry of the declaration of the service

Queensland Rail's proposal could result in a term of less than five years if the undertaking is withdrawn in accordance with the QCA Act or if the service (or part of the service) is no longer declared.

The current declaration of the Queensland Rail service, which is described in s. 250(1)(b) of the QCA Act, will expire on 8 September 2020. The QCA is undertaking a review for the purposes of

¹⁴⁵ See, for instance, QCA, *Declaration reviews: Aurizon Network, Queensland Rail and DBCT, Part B: Queensland Rail declaration review*, draft recommendation, December 2018: 16–20.

¹⁴⁶ See also the associated definition of 'Terminating Date' in cl. 7.1.

¹⁴⁷ Queensland Rail, sub. 2: 59.

¹⁴⁸ New Hope, sub. 15: 8; Pacific National, sub. 17: 7.

providing a recommendation to the relevant Minister about whether the Queensland Rail service, or part of the service, should remain declared following the expiry of the existing declaration.¹⁴⁹

The QCA's draft recommendation in that review was that the following parts of the service, each of which is itself a service, should be declared for a period of 15 years: the North Coast Line service, the Mount Isa Line service, the West Moreton system service and the Metropolitan system service.¹⁵⁰ The QCA must provide its final recommendations to the Minister by March 2020 and the Minister will ultimately decide whether to declare the Queensland Rail service or part of the service.

Queensland Rail's proposal to address the expiry of the declaration is appropriate, as it removes any uncertainty about whether the undertaking would automatically cease to apply if any parts of the service that are currently declared cease to be declared. This is in the interests of Queensland Rail, access seekers, access holders and other parties (ss. 138(2)(b), (e), (h)).¹⁵¹

However, Queensland Rail's proposed drafting is not appropriate to approve. Queensland Rail should amend the proposed definition of 'terminating date' (cl. 7.1) to clarify that the undertaking would continue to apply to any parts of the service that continue to be taken to be declared.^{152,153} This is in the interests of all parties (ss. 138(2)(b), (d), (e), (h)).

We note that there are direct links between Queensland Rail's 2020 DAU and s. 250(1)(b) of the QCA Act in some instances.¹⁵⁴ Irrespective of any decision by the Minister to make a new declaration, s. 250(1)(b) will automatically expire in September 2020, so this discrepancy may cause unforeseen issues with the operation of the undertaking. Therefore, we consider that Queensland Rail should amend its proposal to include a new clause (cl. 6.3), which refers to any new declaration by the Minister. The amendments we consider appropriate are set out in Appendix B.¹⁵⁵

¹⁴⁹ The QCA must also provide recommendations on the other services declared under s. 250, which are provided by Aurizon Network and DBCT Management.

¹⁵⁰ QCA, *Declaration reviews, Part B: Queensland Rail declaration review*, draft recommendation, December 2018: 6–7.

¹⁵¹ Pacific National argued that Queensland Rail's proposal with regard to the terminating date was unnecessary at this stage and should be reviewed when there was more certainty as to the outcome of the QCA's declaration review (Pacific National, sub. 17: 12–13). In our view, it is appropriate to account for the possibility that a decision on the declarations is not made before the QCA makes its final decision on Queensland Rail's 2020 DAU.

¹⁵² New Hope, sub. 15: 17–18.

¹⁵³ The process under Part 5, division 2, subdivisions 4 and 4A of the QCA Act involves the Minister making a new declaration under s. 84 of the QCA Act.

¹⁵⁴ For example, the preamble and definition of 'Network'.

¹⁵⁵ It may also be appropriate to make consequential amendments to the definition of 'Network' in the proposed SAA.

Summary 6.2

The QCA's draft decision is that the appropriate way for Queensland Rail to amend the 2020 DAU is to clarify the undertaking will continue to apply to the service, or part of the service, that is declared under Part 5 of the QCA Act by:

- (1) amending the definition of 'terminating date' in cl. 7.1
- (2) adding a new clause (cl. 6.3), which refers to any new declaration by the Minister.

The amendments the QCA considers appropriate are set out in Appendix B.

6.3 Extensions and network connections (cl. 1.4 and other clauses)

Queensland Rail's proposal contains various provisions relating to the negotiation, development and funding of extensions.¹⁵⁶ An 'extension' includes an enhancement, expansion, augmentation, duplication or replacement of all or part of the network, but excludes private infrastructure (cl. 7.1).

Pacific National said it was concerned the 2020 DAU did not explicitly apply to network connections (or include an associated provision for dispute resolution).¹⁵⁷ In our decision on the 2015 DAU, we considered that rail connections were a form of 'extension' and that the provisions relating to 'extensions' would apply.¹⁵⁸ However, to avoid uncertainty, a clarifying amendment to the definition of 'extension' should be made to explicitly include network connections.

Pacific National's suggested that a standard connection agreement should be developed.¹⁵⁹ However, Pacific National did not justify its position and the issue was not raised by other stakeholders. We have not been presented with evidence to suggest that the provisions proposed by Queensland Rail in relation to developing extensions are insufficient, such that the benefits of developing a standard connection agreement would outweigh the associated costs. If a dispute is referred to the QCA in relation to negotiating a connection agreement, the QCA is likely to, amongst other relevant factors, have regard to the standard connection agreement contained in the Aurizon Network undertaking to the extent it provides relevant information.

Pacific National was also concerned about access to dispute resolution in relation to network connections. We have made a draft decision that access to the general dispute resolution mechanism in Part 6 should extend to any party who receives the benefit of an obligation in the undertaking, rather than being limited to access seekers as proposed by Queensland Rail (see Chapter 11).

Our draft decision appropriately balances the rights and interests of Queensland Rail, access seekers and access holders (ss. 138(2)(b), (e), (h)).

¹⁵⁶ See, for instance, cls. 1.4 and 2.7.2, and schedules A and I of the 2020 DAU.

¹⁵⁷ Pacific National, sub. 17: 7.

¹⁵⁸ QCA, *Queensland Rail's draft access undertaking*, decision, June 2016: 5.

¹⁵⁹ Pacific National, sub. 17: 7.

Summary 6.3

The QCA's draft decision is that the appropriate way for Queensland Rail to amend the 2020 DAU is to clarify that network connections are included in the definition of 'extension' (cl. 7.1). The amendments the QCA considers appropriate are set out in Appendix B.

6.4 Master planning provisions (cl. 1.5)

The 2016 undertaking sets out a process for Queensland Rail to develop master plans covering proposed expansion projects for each of the West Moreton, Mount Isa and North Coast systems. During the term of the undertaking, Queensland Rail would develop a master plan for each system if stakeholders agree to fund the plan. Queensland Rail is not obliged to develop a plan if stakeholders do not agree to fund it.

In the 2020 DAU, Queensland Rail proposed some changes to the existing arrangements, which it argued would make the process more fit for purpose (cl. 1.5). The key changes are:¹⁶⁰

- A master plan will only be prepared on request.
- Stakeholders can no longer request a master plan for the North Coast system because the authority for planning and funding for the system has moved to the Department of Transport and Main Roads.

While Aurizon Bulk advised that it did not have any concerns with Queensland Rail's proposal in principle¹⁶¹, other stakeholders raised concerns about the proposed changes to the existing arrangements and to the process for developing plans, including consultation with the regional network planning group.¹⁶² Queensland Rail proposed to continue to consult with stakeholders to resolve issues raised about the clarity of the process for developing plans.¹⁶³

The key issues around master planning provisions are:

- funding arrangements
- systems covered
- master plan development process.

Funding arrangements

Some stakeholders argued that Queensland Rail should fund master plans, at least for major systems¹⁶⁴, because planning for future investment should be an ordinary business activity.¹⁶⁵ We consider that it is appropriate that the funding arrangements are subject to negotiation and do not consider it appropriate to impose an obligation on Queensland Rail to develop a plan if the parties that stand to benefit from its development do not agree to fund it. Queensland Rail's

¹⁶⁰ Queensland Rail, sub. 2: 58–60.

¹⁶¹ Aurizon Bulk, sub. 11.

¹⁶² Yancoal, sub. 16: 19; New Hope, sub. 15: 8–9; Pacific National, sub. 17: 7.

¹⁶³ Queensland Rail, sub. 18: 20–21.

¹⁶⁴ Yancoal, sub. 16: 19; Pacific National, sub. 17: 7; New Hope, sub. 15: 8–9. New Hope and Yancoal also noted Aurizon Network and DBCT Management both undertook master planning without requiring customer funding.

¹⁶⁵ Yancoal, sub. 16: 19; New Hope, sub. 15: 8–9. Pacific National also considered that Queensland Rail should fund master plans, but did not provide reasons (Pacific National, sub. 17: 7).

proposal that it is only required to prepare a plan on request is consistent with the funding requirement.

Our draft decision is that Queensland Rail's proposal is appropriate, having regard to the public interest, the interests of access holders and access seekers and Queensland Rail's legitimate business interests (ss. 138(2)(b), (d), (e), (h)).

Summary 6.4

The QCA's draft decision is that it is appropriate to approve Queensland Rail's provisions on the funding arrangements for master plans in the 2020 DAU (cl. 1.5).

Systems covered

Queensland Rail proposed that the master planning process would apply only to the West Moreton and Mount Isa systems. New Hope, on the other hand, suggested that customers should have access to the master planning process on systems with little or no commercial traffic to the extent there is customer demand for expansions.¹⁶⁶

Having regard to the factors in s. 138(2), our draft decision is that Queensland Rail's proposal is not appropriate to approve because it unnecessarily restricts access to the master planning process to certain systems. We consider it is appropriate to amend the 2020 DAU to extend access to the master planning process for other systems. This will provide flexibility to deal with changing circumstances, including potential increases in demand on systems that are currently underutilised. Our draft decision is in the interests of access seekers and access holders and does not adversely affect the legitimate business interests of Queensland Rail, because Queensland Rail is only required to develop plans on request and if stakeholders agree to fund them (ss. 138(2)(b), (e), (h)).

However, specific provisions should apply to the North Coast system, given that, as Queensland Rail advised, it is no longer responsible for the planning and funding of that system. There should be a provision to include the North Coast system if Queensland Rail resumes planning and funding of that system during the term of the undertaking.¹⁶⁷

¹⁶⁶ New Hope, sub. 15: 9.

¹⁶⁷ Pacific National, sub. 17: 7. New Hope considered that customers should still have access to plans for future investments and expansions of the North Coast Line (New Hope, sub. 15: 8). However, an undertaking could not impose obligations on the Department of Transport and Main Roads.

Summary 6.5

The QCA's draft decision is that the appropriate way for Queensland Rail to amend the provisions about the systems covered by the master planning process in the 2020 DAU (cl. 1.5) is to:

- (1) provide access to the master planning process for all systems, except the North Coast system
- (2) include a provision to incorporate the North Coast system if Queensland Rail resumes planning and funding of that system.

Master plan development process

Yancoal and New Hope argued that the process for developing master plans should be improved, including by adding a requirement for Queensland Rail to prepare a scope, budget and timeframe for developing the plan.¹⁶⁸ New Hope also considered it was appropriate to include an obligation for Queensland Rail to negotiate with the regional network planning group in good faith¹⁶⁹, while Yancoal argued that there should be protections from cost overruns.¹⁷⁰

Our draft decision is that Queensland Rail's proposal is not appropriate to approve because it does not provide stakeholders with sufficient oversight of the process, particularly if they are funding the plan. We do not consider that Queensland Rail's proposal provides an appropriate balance between the rights and interests of access seekers, access holders and Queensland Rail (ss. 138(2)(b), (e), (h)).

However, Queensland Rail has acknowledged stakeholders' concerns about the process for developing plans and advised that it would continue to consult with stakeholders in an attempt to resolve many of the issues raised.¹⁷¹ We support Queensland Rail's proposed approach of continuing to consult with stakeholders and encourage Queensland Rail to submit a revised approach for consideration by the QCA.

Summary 6.6

The QCA's draft decision is that it is not appropriate to approve the master plan development process in the 2020 DAU (cl. 1.5). The QCA supports Queensland Rail's proposed approach of continuing to consult with stakeholders and encourages Queensland Rail to submit a revised approach for consideration by the QCA.

¹⁶⁸ Yancoal, sub. 16: 19; New Hope, sub. 15: 9.

¹⁶⁹ New Hope, sub. 15: 9.

¹⁷⁰ Yancoal, sub. 16: 19.

¹⁷¹ Queensland Rail, sub. 18: 20–21.

7 NEGOTIATION PROCESS (PART 2 AND SCHEDULES B AND C)

A framework for how Queensland Rail and access seekers should negotiate access and provide information is provided in Part 2 of the 2020 DAU. Amongst other matters, the framework addresses:

- the responsibilities of the negotiating parties and issues to be addressed during negotiations
- rules to deal with access seekers competing for limited available capacity
- Queensland Rail's obligations to provide preliminary and capacity information (in conjunction with sch. A)
- access seekers' obligations to provide certain information in access applications (in conjunction with sch. B).

The provisions are largely unchanged from the 2016 undertaking, but Queensland Rail has proposed some changes.

Overview of the draft decision

While our draft decision is to require Queensland Rail to make some amendments to Part 2 of the 2020 DAU, there are many provisions we consider appropriate to be approved.

Negotiation process (Part 2)—summary

<i>Queensland Rail proposal</i>	<i>Clause</i>	<i>QCA draft decision</i>
Access requests in different forms		
If Queensland Rail agrees, a request for access rights does not need to be in the form of an access application.	2.1.1(a)	The proposal is largely appropriate to be approved. However, amendments are appropriate to clarify that applications in different forms are treated as access applications for the purposes of the undertaking (see section 7.1)
Information exchanged in preliminary stages of negotiations		
Information provided, and discussions held, in the preliminary stages of access negotiations are not binding on the negotiating parties.	2.1.2(a)–(b)	The proposal is appropriate to be approved (see section 7.2).
Queensland Rail will keep preliminary information current and accurate	2.1.2(c)	The proposal is not appropriate to be approved. Amendments are appropriate to require Queensland Rail to also keep capacity information current and accurate (see section 7.2).
Permitted disclosures in confidentiality agreements		
Confidentiality agreements must permit disclosure of confidential information to certain parties and as required by law.	2.2.2(d)	The proposal is not appropriate to be approved. Amendments are appropriate to apply the same exceptions to the disclosure of confidential information that apply in cl. 2.2.1(b)(ii) (see section 7.3).
Contract renewal rights		
Eligible access holders can renew their access rights without joining a queue.	2.7.2, 2.9.3	The proposal, which is considered in conjunction with the renewal pricing arrangements proposed in Part 3 of the 2020 DAU, is not considered

<i>Queensland Rail proposal</i>	<i>Clause</i>	<i>QCA draft decision</i>
		appropriate to be approved (see section 8.3 in Chapter 8).
Other matters		
Other provisions in Part 2 have been identified for further consideration.	Various	Our draft decision on each provision is provided in Table 21 in section 7.4.

7.1 Access requests in different forms (cl. 2.1.1(a))

Queensland Rail's proposed that a request for access rights must be in the form of an access application that includes the information specified in schedule B, unless Queensland Rail agrees otherwise. Compared to the 2016 undertaking, Queensland Rail considered that its proposed approach would improve the efficiency and flexibility of the application process, because Queensland Rail could agree to accept requests for access in different forms.¹⁷²

Stakeholders generally supported greater flexibility when applying for access.¹⁷³ However, some stakeholders considered that the definition of 'access application' should be amended so that applications made in different forms will be treated as access applications for the purposes of the undertaking.¹⁷⁴ In response to stakeholders' concerns, Queensland Rail said that it was important to be able to distinguish between new applications for access rights and requests for renewing or extending existing agreements, because this would avoid disputes about the proper position of any party in a queue formed later. Queensland Rail advised that it planned to consult with stakeholders about possible drafting amendments.¹⁷⁵

We note that the access application information requirements in schedule B already provide for more limited information to be provided in certain circumstances, including where the application is for the renewal of access rights. And, while the application process should be flexible, our draft decision is that Queensland Rail's proposal is not appropriate to approve because the definition of 'access application' is too narrow. The term 'access application' is used throughout the 2020 DAU and we do not consider it appropriate for applications in different forms to fall outside the definition of access application, because this could adversely affect the operation of the undertaking and the rights of access seekers. Our draft decision is appropriate, having regard to the legitimate business interests of Queensland Rail and the interests of access seekers (ss. 138(2)(b), (e)).

We consider that Queensland Rail should amend the definition of 'access application' to include applications in different forms, in addition to applications that meet the schedule B information requirements. Our preliminary view is that the definition should reflect that applications in different forms are to include such information as agreed by Queensland Rail, provided that the information is appropriate for the circumstances and sufficient for the operation of the undertaking (including the queuing mechanism in cl. 2.9.2). However, we support Queensland Rail's intention to consult with stakeholders about possible drafting amendments.

¹⁷² Queensland Rail, sub. 2: 58, 60.

¹⁷³ New Hope, sub. 15: 9–10; Aurizon Bulk, sub. 11; Pacific National, sub. 17: 8.

¹⁷⁴ New Hope, sub. 15: 9–10; Yancoal, sub. 16: 19.

¹⁷⁵ Queensland Rail, sub. 2: 60; Queensland Rail, sub. 18: 19.

Summary 7.1

The QCA's draft decision is that the appropriate way for Queensland Rail to amend the 2020 DAU is to extend the definition of 'access application' to include applications in different forms. The QCA supports Queensland Rail's intention to consult with stakeholders about possible drafting amendments.

7.2 Information exchanged in preliminary stages of negotiations (cl. 2.1.2)

Under Queensland Rail's proposal, information provided and discussions held in the preliminary stages of access negotiations will not be binding on the access seeker or Queensland Rail (cl. 2.1.2(a), (b)).¹⁷⁶

Some stakeholders opposed introducing this provision, which is not in the 2016 undertaking.¹⁷⁷ Yancoal was concerned that the quality of the information may deteriorate¹⁷⁸, while New Hope considered that Queensland Rail could explain any assumptions or estimations relied on to produce the information.¹⁷⁹ Aurizon Bulk, on the other hand, considered the provisions provided clarification, noting that Queensland Rail must keep preliminary information current and accurate and that indicative access proposals were also indicative and non-binding.¹⁸⁰

In our view, Queensland Rail's proposed amendments (cl. 2.1.2(a), (b)) are likely to clarify rather than change Queensland Rail's obligations. Our draft decision is that the amendments are appropriate to approve. Binding the parties to discussions or information provided in the early stages of access negotiations could hinder negotiations and incentivise parties to withhold information, which is not in the interests of the negotiating parties. Nevertheless, the parties remain obligated to negotiate in good faith (s. 100(1) of the QCA Act).

However, the requirement to keep preliminary information current and accurate does not also apply to capacity information. Our draft decision is that it is not appropriate to approve the proposed cl. 2.1.2(c). Amendments are appropriate to apply the same requirements to both preliminary information and capacity information.

Our draft decision is appropriate, having regard to the interests of Queensland Rail and access seekers (ss. 138(2)(b), (e)).

¹⁷⁶ Queensland Rail, sub. 2: 58, 60–61.

¹⁷⁷ Yancoal, sub. 16: 19; New Hope, sub. 15: 10.

¹⁷⁸ Yancoal, sub. 16: 19.

¹⁷⁹ New Hope, sub. 15: 10.

¹⁸⁰ Aurizon Bulk, sub. 11.

Summary 7.2

The QCA's draft decision is that it is appropriate to approve the provisions on information exchanged in the preliminary stages of access negotiations in cl. 2.12(a) and (b) of the 2020 DAU, but the provisions in cl. 2.12(c) are not appropriate to be approved. The appropriate way for Queensland Rail to amend cl. 2.1.2(c) is to require Queensland Rail to also keep capacity information current and accurate.

7.3 Permitted disclosures in confidentiality agreements (cl. 2.2.2)

Under Queensland Rail's proposal, any confidentiality agreement between Queensland Rail and an access seeker must permit the disclosure of information to the QCA, Queensland Rail's board members and employees, and as required by law (cl. 2.2.2(d)). This clause was not included in the 2016 undertaking, but Queensland Rail considered it should be included to accommodate Queensland Rail's structure and reporting obligations.¹⁸¹

Aurizon Bulk did not oppose Queensland Rail's proposal.¹⁸² New Hope and Yancoal accepted Queensland Rail's proposal, subject to access seekers also being permitted to make disclosures to members of their board, senior management and related bodies corporate.¹⁸³ Yancoal also suggested adding joint venturers.¹⁸⁴

Under Queensland Rail's proposal, access seekers do not have reciprocal rights to disclose confidential information within their organisations. Therefore, Queensland Rail's proposal does not provide an appropriate balance between the rights and interests of Queensland Rail and access seekers (ss. 138(2)(b), (e)). Our draft decision is that it is not appropriate to approve Queensland Rail's proposal. Amendments are appropriate for consistency with the confidentiality exceptions that apply to the general provision of confidential information under cl. 2.2.1(b)(ii). This would permit the disclosures proposed by Queensland Rail, as well as providing reciprocal disclosure rights to access seekers, including permitting disclosures to a related body corporate of the access seeker. In our view, any additional exceptions (for instance allowing disclosures to joint venturers, as suggested by Yancoal) should be subject to agreement between the parties.

We disagree with Pacific National's suggestion that Queensland Rail should only be permitted to disclose confidential information to board members and senior executives.¹⁸⁵ Pacific National did not justify this position and we consider this would be an overly restrictive requirement that does not reflect the practical realities of dealing with information within organisations.

¹⁸¹ Queensland Rail, sub. 2: 58, 61.

¹⁸² Aurizon Bulk, sub. 11.

¹⁸³ New Hope, sub. 14: 11; Yancoal, sub. 16: 19.

¹⁸⁴ Yancoal, sub. 16: 19.

¹⁸⁵ Pacific National, sub. 17: 8. Pacific National also submitted that the disclosure requirements must be made explicit in a confidentiality agreement, not just contained in an undertaking. However, the proposed clause already allows for this as it sets out the permitted disclosures that must be contained in a confidentiality agreement.

Summary 7.3

The QCA's draft decision is that the appropriate way for Queensland Rail to amend the requirements relating to confidentiality agreements in the 2020 DAU is to permit the disclosure of confidential information where disclosure would be allowed under a confidentiality exception in cl. 2.2.1(b)(ii), unless the parties agree otherwise (cl. 2.2.2(d)). The amendments the QCA considers appropriate are set out in Appendix B.

7.4 Other matters

The following table provides the QCA's analysis and draft decisions in respect of other matters, not discussed in the sections above.

Table 21 Other Part 2 matters—draft decision

<i>Issue</i>	<i>QCA analysis and draft decision</i>
Cl. 2.1.1(a)—Queensland Rail proposed that access applications be sent to the address nominated on its website.	Queensland Rail's proposal is appropriate to be approved. Aurizon Bulk and Pacific National supported this proposal, but Pacific National suggested amendments to reflect that a Queensland Rail officer is typically assigned to manage the application after the initial application is submitted. ¹⁸⁶ We do not consider it necessary to specify a requirement regarding subsequent correspondence, as this is a matter that could be agreed between the parties.
Cl. 2.5.1(b)—Queensland Rail proposed that an access seeker would be required to promptly advise if it does not intend to proceed with its access application on the basis of the indicative access proposal.	Queensland Rail's proposal is appropriate to be approved. New Hope supported this requirement, as long it is made clear that the access seeker had formed the intention not to proceed. ¹⁸⁷ We consider the proposed clause makes it clear that the access seeker only needs to advise Queensland Rail if it does not intend to proceed. As New Hope stated ¹⁸⁸ , the requirement is reasonable to facilitate access to genuine access seekers. Our draft decision is appropriate, having regard to the interests of Queensland Rail and access seekers (ss. 138(2)(b), (e)).
Cl. 2.8.3(a)(ii)(A)—Queensland Rail proposed changing '2008 undertaking' to 'AU1'.	Queensland Rail's proposal is appropriate to be approved. Stakeholders accepted the proposed amendment ¹⁸⁹ and we consider the amendment is appropriate to update the undertaking.

¹⁸⁶ Aurizon Bulk, sub. 11; Pacific National, sub. 17: 8.

¹⁸⁷ New Hope, sub. 15: 11.

¹⁸⁸ New Hope, sub. 15: 11.

¹⁸⁹ Aurizon Bulk, sub. 11; New Hope, sub. 15: 11.

8 PRICING RULES (PART 3)

Access charges for non-reference tariff services are determined in accordance with the pricing rules in Part 3 of the 2020 DAU. The proposed pricing rules for non-reference tariff services are largely consistent with the rules in the 2016 undertaking, although Queensland Rail proposed amendments to the application of the floor revenue limit and the limitations on price differentiation. Other provisions in Part 3 of the 2020 DAU are relevant to both reference tariff services and non-reference tariff services. These include contract renewal provisions—which are more restrictive than the provisions in the 2016 undertaking—and the QCA levy component of access charges.¹⁹⁰

Overview of the draft decision

While our draft decision is that it is appropriate for Queensland Rail to make some amendments to Part 3 of the 2020 DAU, there are many provisions we consider appropriate to be approved.

Pricing rules (Part 3)—summary

<i>Queensland Rail proposal</i>	<i>Clause</i>	<i>QCA draft decision</i>
Pricing limits rule		
Access charges will be set so that expected revenue does not exceed the ceiling revenue limit and, unless approved by the QCA, fall below the floor revenue limit.	3.2	The proposal is largely appropriate to be approved. However, amendments are appropriate to clarify the application of the floor revenue limit and the definition of the weighted average cost of capital in the formula to calculate the ceiling revenue limit (see section 8.1).
Price differentiation rule		
Queensland Rail will have regard to a range of factors when formulating access charges, but will not differentiate between access seekers where the characteristics of the train service are alike and the access seekers operate in the same end market.	3.3	The proposal is largely appropriate to be approved. However, amendments are appropriate to extend the limitation on price differentiation in cl. 3.3(d) to capture access holders and to make consequential amendments, as required (see section 8.2).
Contract renewal rights		
Contract renewal provisions are available to eligible access holders.	2.7.2, 2.9.3, 3.3(h)–(j)	The proposal is not appropriate to be approved. Amendments are appropriate to remove automatic renewal rights for new access seekers and expand renewal rights for existing access holders who have made substantial sunk investments. We invite further submissions on an appropriate approach for existing access holders (see section 8.3).
QCA levy		
Queensland Rail can charge access holders a QCA levy to recover the annual fees it pays the QCA.	3.7	The proposal is not appropriate to be approved. Amendments are appropriate to simplify the process, reduce the regulatory burden and improve certainty (see section 8.4).

¹⁹⁰ Some provisions in Part 3 apply only to reference tariff services. Our considerations and draft decisions on matters relating to reference tariffs are provided in Chapters 2 to 5.

8.1 Pricing limits rule (cl. 3.2)

Under Queensland Rail's proposed pricing limits rule, access charges will be set so that expected revenue does not:

- unless approved by the QCA, fall below the floor revenue limit, which is the incremental cost of providing access to any train service (or group of train services)
- exceed the ceiling revenue limit, which is the standalone cost of providing access to any train service (or group of train services).

Queensland Rail's proposed pricing limits rule is unchanged from the 2016 undertaking, except for an amendment to account for Transport Service Contract (TSC) subsidy payments when determining whether access charges fall below the floor revenue limit (cl. 3.2.2).

Floor revenue limit (cl. 3.2.2)

Queensland Rail advised that, except for the West Moreton system, its rail systems were significantly underutilised and they were either supported by government subsidies (TSC payments) or, in the case of the Mount Isa line, received access revenue only marginally above the floor revenue limit.¹⁹¹ Queensland Rail said that the floor revenue limit would be breached for many parts of the network unless TSC payments were taken into account.¹⁹² While Aurizon Bulk had no concerns with Queensland Rail's proposal¹⁹³, New Hope said the proposal should be considered further and noted the lack of transparency over the level of TSC payments and resultant price impacts.¹⁹⁴

Subsidising Queensland Rail's below-rail services through TSC payments is a government policy matter and we understand that details of the subsidy arrangements are not publicly available.¹⁹⁵ We consider that Queensland Rail's proposal is generally appropriate, although amendments are appropriate to clarify that the relevant TSC payments are those reasonably expected to be received by Queensland Rail in respect of the relevant part of the network. This is consistent with the treatment of TSC payments in setting the ceiling revenue limit (cl. 3.2.3(a)(ii)). Having regard to the s. 138(2) matters, including the object of Part 5 and the pricing principles, our draft decision is appropriate because it would result in the combination of access charges and government subsidies for each part of the network being at least sufficient to meet the incremental cost of providing access (ss. 138(2)(a), (g)).

¹⁹¹ Queensland Rail, sub. 2: 2; Queensland Rail, sub. 5: 10; Queensland Rail, sub. 18: 22–23.

¹⁹² Queensland Rail, sub. 2: 55–56.

¹⁹³ Aurizon Bulk, sub. 11.

¹⁹⁴ New Hope, sub. 15: 13.

¹⁹⁵ In 2017–18, TSC payments for Queensland Rail's rail systems and passenger operations were around \$1.6 billion, or almost 85 per cent of Queensland Rail's total revenue (Queensland Rail, *Financial report for the year ended 30 June 2018*, September 2018: 7).

Summary 8.1

The QCA's draft decision is that the appropriate way for Queensland Rail to amend the floor revenue limit provisions in the 2020 DAU (cl. 3.2.2) is to clarify that the relevant TSC payments are those that Queensland Rail reasonably expects to receive in respect of the relevant part of network.

Ceiling revenue limit (cl. 3.2.3)

Queensland Rail proposed to continue to apply the approach to calculating the ceiling revenue limit that applies in the 2016 undertaking. However, Aurizon Bulk argued that the approach was irrelevant in its current form, because it contemplated access charges that were substantially higher than what the market could bear. In noting Queensland Rail's claims that prices are set closer to the floor revenue limit than the ceiling revenue limit on the Mount Isa line, Aurizon Bulk said that access charges on that line meant that road was sometimes a viable alternative to rail. It said multiple rail hauls had moved to road since the start of the current undertaking period in October 2016.¹⁹⁶

In response to Aurizon Bulk's submission, Queensland Rail argued that further constraints on prices were not necessary, noting that it must take into account a range of competing considerations when setting access charges, including:

- competition with road transport and the objective of maximising rail freight volumes
- the ongoing financial viability of the system, achieved by recovering at least system floor costs
- recovering sufficient revenue for investment to support the competitiveness of rail
- not contravening the price differentiation provisions.¹⁹⁷

We consider that Queensland Rail's proposal is appropriate to approve, because it sets the bounds for price negotiations, while also providing flexibility to accommodate changes in market conditions of each rail system over time. It is appropriate that the upper bound is retained as a constraint in the event that rail volumes increase and system utilisation improves. If the parties fail to reach agreement on access charges, they could raise a dispute through the provisions in the QCA Act or the undertaking. If called on to resolve a dispute, the QCA must not make a determination that is inconsistent with the undertaking, including the pricing rules. But the QCA is not required to accept any price that is consistent with the pricing rules; rather it must make a determination having regard to the matters in s. 120 of the QCA Act.

However, we consider it is not appropriate to approve the following proposed definition of 'weighted average cost of capital (WACC)' that is used in the formula to calculate the ceiling revenue limit (cls. 3.2.3(a), 7.1):

WACC means the weighted average cost of capital which from 1 July 2020 until 30 June 2025 is 7.47% per annum nominal post-tax.

Our draft decision only estimates a WACC for the purposes of calculating a reference tariff for coal services on the West Moreton and Metropolitan systems (see Chapter 3), not for other services. Consistent with the definitions of other components of the ceiling revenue limit formula,

¹⁹⁶ Aurizon Bulk, sub. 11.

¹⁹⁷ Queensland Rail, sub. 18: 21–23.

the definition of WACC should reflect the high-level principles or objectives to be achieved. Therefore, our draft decision is that it is appropriate to amend the proposed definition of WACC in a manner similar to the following: 'WACC means the weighted average cost of capital, which is the return on investment commensurate with the regulatory and commercial risks of providing Access for the Train Service(s) in respect of the relevant part of the Network'.

Our draft decision achieves an appropriate balance between the factors in s. 138(2), including the object of Part 5, the pricing principles, and the rights and interests of Queensland Rail, access seekers and access holders (ss. 138(2)(a), (b), (e), (g), (h)).

Summary 8.2

The QCA's draft decision is that the appropriate way for Queensland Rail to amend the ceiling revenue limit formula in the 2020 DAU is to amend the definition of WACC (cl. 3.2.3(a)). The amendments the QCA considers appropriate are explained in section 8.1 of this draft decision.

8.2 Price differentiation rule (cl. 3.3)

Queensland Rail proposed to largely adopt the price differentiation provisions in the Australian Rail Track Corporation (ARTC) interstate rail network access undertaking in place of the provisions in the 2016 undertaking (cls. 3.3(a), (b), (d), (e)).¹⁹⁸ Under the proposal, the factors Queensland Rail would have regard to in formulating access charges include (cls. 3.3(a), (b)):

- characteristics of the train service
- commercial and logistical impacts on Queensland Rail's business
- capital or other contributions by the access seeker
- cost of any additional capacity.

Queensland Rail would not have regard to the identity of the access seeker in formulating access charges and would not differentiate between access seekers, where the characteristics of the train service are alike and the access seekers are operating in the same end market (cls. 3.3(b), (d), (e)).

The provisions of the 2016 undertaking do not allow Queensland Rail to set different access charges in respect of train services for the same commodity in the same geographical area, except in the case of:

- differences in the cost or risk to Queensland Rail of providing access
- insufficient capacity to meet the requests of all access seekers.¹⁹⁹

Queensland Rail argued that its proposal in the 2020 DAU provided greater scope for efficient price discrimination relative to the rules in the 2016 undertaking.²⁰⁰ Queensland Rail engaged Houston Kemp to assess its proposal against the assessment criteria in the QCA Act. Houston

¹⁹⁸ Queensland Rail, sub. 2: 52.

¹⁹⁹ Clause 3.3(b) of the 2016 undertaking.

²⁰⁰ Queensland Rail, sub. 2: 50–53; Queensland Rail, sub. 18: 23–24.

Kemp considered that Queensland Rail's proposal would promote more efficient outcomes than the current price differentiation provisions.²⁰¹

Greater pricing flexibility would allow Queensland Rail to seek to increase its revenue from access charges (subject to the ceiling revenue limit) and reduce the subsidy, while limiting the effects on consumption decisions of its customers. Greater pricing flexibility would improve the efficient usage of rail infrastructure, by enabling Queensland Rail to adjust prices to respond to competition from alternative modes of transport (particularly road for some types of freight). Queensland Rail could also potentially expand the demand for its service by targeting customers that are more price sensitive, although we acknowledge that insufficient information about customers' willingness to pay may limit the extent to which Queensland Rail is able to effectively differentiate.²⁰²

Aurizon Bulk supported greater pricing flexibility, but was also concerned that Queensland Rail would develop a process that supported the highest bidder. It considered there should be rules to improve pricing certainty.²⁰³ As noted above, the purpose of the pricing rules is to establish bounds to guide negotiations, not to determine specific pricing outcomes. If the parties fail to reach agreement, they may access the dispute resolution provisions in the QCA Act or the undertaking.

We acknowledge that monopolies can sometimes use price discrimination to increase their monopoly profits or provide favourable treatment to related parties in dependent markets. However, the ceiling revenue limit (cl. 3.2.3) should prevent Queensland Rail from earning monopoly profits and Queensland Rail is not vertically integrated into above-freight operations and, therefore, cannot favour a related party. Queensland Rail also proposed restrictions on differentiating between access seekers where the characteristics of the train service are alike and the access seekers are competing in same end market (cl. 3.3(d)). Although, we consider that it is appropriate to extend this provision to capture access holders, not just access seekers.

Having regard to the factors in s. 138(2), including the object of Part 5, the public interest and the pricing principles, our preliminary view is that most aspects of Queensland Rail's proposal are appropriate to approve (ss. 138(2)(a), (d), (g)). However, we consider that the following amendments are appropriate to improve the clarity and workability of the clauses:

- As noted above, amend cl. 3.3(d) to extend the provision to include access holders, not just access seekers.
- As a result of Queensland Rail's proposed amendments to cl. 3.3, make consequential amendments as may be required.

²⁰¹ Queensland Rail, sub. 2: 53; Queensland Rail, sub. 9: 11–15; Queensland Rail, sub. 18: 23–24.

²⁰² Productivity Commission, *National Access Regime*, inquiry report no. 66, October 2013: 79; ACCC, *Australian Rail Track Corporation, Access Undertaking – Interstate Rail Network*, final decision, July 2008: 132.

²⁰³ Aurizon Bulk, sub. 11.

Summary 8.3

The QCA's draft decision is that the appropriate way for Queensland Rail to amend the price differentiation rule in the 2020 DAU is to extend the provision in cl. 3.3(d) to include access holders and to make consequential amendments as may be required.

8.3 Contract renewal rights (cls. 2.7.2, 2.9.3, 3.3)

Queensland Rail proposed that eligible access holders have the following rights, consistent with those in the 2016 undertaking, when renewing their access agreements:

- *Access rights*—a renewing access holder would have priority over a new access seeker to negotiate an access agreement when they are competing for the same access rights (cl. 2.9.3).
- *Pricing rights*—if a reference tariff applies, access charges would continue to be set in accordance with the reference tariff. If no reference tariff applies, access charges could only be varied from those that apply in the expiring access agreement to reasonably reflect differences in the nature of, or actual changes in, the cost and risk between the expiring and renewed access agreement (cls. 2.7.2(e), 3.3(h)).

However, Queensland Rail proposed to apply more restrictive eligibility criteria for those renewal rights than provided for in the 2016 undertaking. To be eligible for renewal rights, access holders must meet all of the following criteria (cls. 2.9.3, 3.3):

- The current access rights are for coal or other bulk-mineral-carrying train services.
- The access holder can only renew its access rights once (although the drafting is unclear as to whether the one-off right applies specifically to renewals for the remaining life of the mine or whether it applies to all renewals).²⁰⁴
- The term of the existing access agreement is between five and ten years and a maximum renewal term of five years can be sought.

Queensland Rail said the first two changes would bring into effect the rights originally intended by the QCA's decision on the 2015 DAU, while the last change 'reflects the diversity of contracts that Queensland Rail has in place'.²⁰⁵ Reflecting advice from Houston Kemp, Queensland Rail argued that its proposal would:

- better promote economic efficiency by providing Queensland Rail with more flexibility to allocate capacity to those that value it the highest and shift closer to efficient costs (limiting the subsidy)
- limit barriers to entry in dependent markets by reducing the advantage that renewing access holders have over new access seekers.²⁰⁶

Queensland Rail said its proposed changes were designed to provide a balance between its interests and the interests of its customers.²⁰⁷

²⁰⁴ See cls. 2.9.3(c)(iv) and 3.3(h)(iv), including the footnotes to each clause.

²⁰⁵ Queensland Rail, sub. 2: 54.

²⁰⁶ Queensland Rail, sub. 2: 54–55; Queensland Rail, sub. 10: 11–14.

²⁰⁷ Queensland Rail, sub. 18: 20.

Stakeholders did not support Queensland Rail's proposal to restrict renewal rights.²⁰⁸ Yancoal and New Hope argued that evergreen or ongoing renewal rights were important for investment certainty.²⁰⁹ Queensland Rail responded that it was concerned about the competitive impacts of providing ongoing renewal rights, because in the event that rail capacity was constrained, it would not be possible to allocate that capacity to a new entrant, even if they placed a higher value on that capacity than the renewing access holder.²¹⁰

Renewal rights for new access seekers

We note Queensland Rail's concerns that the current renewal mechanism is inflexible and may have adverse effects on efficiency and competition. Rather than prescribing renewal provisions in the undertaking, we consider that access seekers may be best placed to negotiate appropriate contractual provisions with Queensland Rail to address the risks they face when entering the market, including in relation to recovering sunk investments. This could include negotiating renewal provisions within contracts or negotiating long-term contracts that align the length of the contract with the life of their investment.²¹¹ Queensland Rail indicated it was open to negotiating long-term contracts with access seekers.²¹²

Access seekers are likely to have bargaining power when negotiating their initial contracts, because:

- Negotiations would be conducted within the parameters of Part 5 of the QCA Act and the access undertaking, including the pricing rules, which limit the extent to which Queensland Rail could exercise market power.²¹³
- Access seekers may be able to credibly signal that they will not enter the market unless they are satisfied that they have negotiated a contract with Queensland Rail that sufficiently protects their investment, while Queensland Rail is likely to have an incentive to reach agreement with access seekers to encourage market entry, particularly where there is spare capacity.
- Access seekers could bring a dispute under the QCA Act or the undertaking if they fail to reach agreement with Queensland Rail about access prices or other terms and conditions.

New Hope and Yancoal said Queensland Rail's concerns about the current renewal arrangements delivering inefficient outcomes did not apply to the West Moreton system, because a reference tariff applied.²¹⁴ The reference tariff is calculated for a 'reference train service', which is a train service with a particular set of characteristics, including that it operates in accordance with the terms and conditions of the standard access agreement.²¹⁵ However, there is scope to adjust the reference tariff to reflect differences in the cost or risk of providing access in accordance with:

- the standard access agreement

²⁰⁸ Aurizon Bulk, sub. 11; Yancoal, sub. 16: 19–20; New Hope, sub. 15: 11–12; Pacific National, sub. 17: 6, 9.

²⁰⁹ Yancoal, sub. 16: 19–20; New Hope, sub. 15: 11–12.

²¹⁰ Queensland Rail, sub. 18: 20.

²¹¹ Houston Kemp made a similar point in its report for Queensland Rail (Queensland Rail, sub. 10: 5, 12).

²¹² Queensland Rail, sub. 18: 20.

²¹³ Negotiations at renewal time are also subject to the parameters of Part 5 of the QCA Act and the undertaking.

²¹⁴ New Hope, sub. 15: 12; Yancoal, sub. 16: 19–20.

²¹⁵ Clause 3.0; sch. D, cl. 2.1(f).

- an agreement with negotiated terms and conditions.²¹⁶

In our view, this provision may provide sufficient flexibility to adjust the reference tariff to reflect negotiated renewal provisions.

Having regard to the matters in s. 138(2), we do not consider it appropriate to approve Queensland Rail's proposal to prescribe renewal rights for new access seekers. We consider that these rights are more appropriately determined through commercial negotiations between Queensland Rail and the access seeker and this approach is likely to deliver more efficient outcomes than a prescribed approach in the undertaking.²¹⁷ Our draft decision promotes the efficient use of and investment in rail infrastructure and appropriately balances the interests of Queensland Rail, access seekers and access holders (ss. 138(2)(a), (b), (e), (h)).

Summary 8.4

The QCA's draft decision is that the appropriate way for Queensland Rail to amend the 2020 DAU is to remove access to automatic renewal rights (both the pricing and access aspects) for new access seekers.

Renewal rights for existing access holders

While we consider that renewal rights are more appropriately determined through commercial negotiations between Queensland Rail and access seekers, access undertakings have explicitly provided renewal rights to Queensland Rail's mining customers for more than a decade.²¹⁸ Customers may have entered into contracts and made substantial sunk investments based on an expectation that renewal rights would continue to be specified in the undertaking. Removing renewal rights from the undertaking without transitional provisions for these existing customers may distort incentives to invest and adversely affect competition in dependent markets.

Queensland Rail's proposal to limit access to the renewal mechanism to access holders with contract terms of between five and ten years would exclude some access holders that have made substantial sunk investments from accessing the mechanism. Furthermore, even if an access holder could access the mechanism, Queensland Rail's proposed maximum renewal term of five years may not be sufficient to align with the term of the access holder's investment. Therefore, we consider that Queensland Rail's proposal is not appropriate to approve for existing access holders, because it does not promote investment certainty; it may adversely affect competition in dependent markets; and it does not appropriately balance the legitimate business interests of Queensland Rail with the interests of access holders (ss. 138(2)(a), (b), (d), (h)).

Queensland Rail should amend its proposed renewal mechanism so that existing access holders that have made substantial sunk investments can obtain reasonable price and access security for the remaining life of their investments. Nevertheless, the amended mechanism should not deliver more benefits to access holders than what is required to achieve this objective, because this may increase barriers to entry in dependent markets for new access seekers.

²¹⁶ Clause 3.3(c); sch. D, cl. 2.1(f).

²¹⁷ Given that negotiations would be conducted within the parameters of Part 5 of the QCA Act and the undertaking, including avenues for dispute resolution.

²¹⁸ For example, QR Limited's 2006 undertaking (cl. 7.5.1), QR Network's 2008 undertaking (cl. 7.5.1) and Queensland Rail's 2016 undertaking (cls. 2.7.2, 2.9.3, 3.3), all of which applied or apply to what is now the declared portion of Queensland Rail's business.

A possible approach may be to provide existing coal and bulk mineral access holders with a final one-off right of renewal for each access agreement. This would encourage the access holder to either match the term of the new contract with the remaining life of the mine, or to negotiate a further right of renewal with Queensland Rail in its new contract. However, we invite further submissions from stakeholders on an appropriate approach.

We acknowledge the concerns of Aurizon Bulk that some access holders operate mines and/or transport products (for example, fertiliser and sulphuric acid) that may not meet the definition of 'bulk mineral'.²¹⁹ Pacific National considered that access holders transporting non-mineral bulk products and using intermodal services related to bulk production should also have access to renewal rights, but did not elaborate on this position.²²⁰ We seek further information from stakeholders about which access holders they consider should have access to renewal rights, including justification for their positions, and possible drafting amendments and appropriate terminology.

Summary 8.5

The QCA's draft decision is that it is appropriate for Queensland Rail to amend the 2020 DAU to expand renewal rights for existing access holders who have made substantial sunk investments. The QCA invites further submissions from stakeholders on an appropriate approach.

8.4 QCA levy (cl. 3.7)

The 2020 DAU provides for Queensland Rail to charge its access holders a QCA levy to recover the annual fees it pays the QCA (cl. 3.7). This provision, which is carried over unchanged from the 2016 access undertaking, is:

An Access Charge for a Train Service may include a QCA Levy component to be collected for the QCA by Queensland Rail. This component will, where applicable, be determined from year to year based on the QCA Levy levied by the QCA to Queensland Rail and allocated amongst Train Service types in a manner approved by the QCA.

While the intent of the clause can be discerned, the wording is unclear. In considering applications from Queensland Rail under cl. 3.7 of the 2016 undertaking, the QCA has sought to make it clear that the QCA levy is a tariff component charged by Queensland Rail, which recovers the QCA fee Queensland Rail pays to the QCA for regulatory services.²²¹



After considering all relevant matters, the QCA does not consider that cl. 3.7 as proposed by Queensland Rail is appropriate to approve.

²¹⁹ Aurizon Bulk, sub. 11.

²²⁰ Pacific National, sub. 17: 6, 9.

²²¹ The QCA's decisions on Queensland Rail's QCA levy applications can be found on the QCA's website, <http://www.qca.org.au/Rail/Queensland-Rail/More-on-QLD-Rail/2016-Access-Undertaking/Ongoing-Compliance/Queensland-Rail-QCA-Levy>.

The QCA's recent decisions on the QCA levy have largely revolved around determining whether the proportions of the fee allocated by Queensland Rail to different types of services when calculating the levy are appropriate. Once the allocations have been determined, the calculation of the levy amounts required to recover the allocated fee from each service is mechanical.

We consider there is an unnecessary regulatory burden in reconsidering the allocation proportions each year. It would be simpler and provide greater certainty if the allocations among the service types are provided in a schedule to the undertaking. There would still be scope for the allocations to be changed via a DAAU, and they would be reconsidered as part of the DAU process before each new undertaking period.

Queensland Rail could then calculate the resulting QCA levy charges, and publish the updated amounts and the way they were derived on its website. The QCA proposes that Queensland Rail be required to publish the levy amounts within 30 days of receiving the QCA's fee estimate notice for the relevant year. The levies for the various services would therefore be known early in the financial year, as the QCA typically sends the fee estimate notice in May or early June.²²²

The QCA also proposes that, for the 2020 DAU period, Queensland Rail adopt the allocation percentages approved in the QCA's December 2018 decision on the 2018–19 QCA levy. These allocation percentages were approved after a comprehensive review, which included two rounds of consultation and a draft decision. The allocations are:

- 67.4 per cent for coal users on the West Moreton system
- 18.3 per cent for freight and minerals users on the Mount Isa system
- 13.1 per cent for freight and minerals users on the North Coast and West Moreton systems
- 1.2 per cent for long-distance passenger services.

We consider that these allocations appropriately reflect the high proportion of the regulatory work that arises from the West Moreton coal reference tariff, while also having regard to the share of Queensland Rail's commercial access revenue that comes from the Mount Isa and North Coast systems.

The certainty and reduced regulatory burden of determining the allocations in advance of the regulatory period would be in the interests of Queensland Rail, access seekers and access holders (ss. 138(2)(b), (e), (h)).

²²² The QCA sends a final fee notice in September or October of the financial year to which it applies.

Summary 8.6

The QCA's draft decision is that the appropriate way for Queensland Rail to amend the QCA levy provision in the 2020 DAU is to:

- (1) correct the drafting of cl. 3.7 to specify that the QCA levy recovers the QCA fee paid by Queensland Rail
- (2) add a requirement to cl. 3.7 that Queensland Rail's QCA levy be published on Queensland Rail's website within 30 days of Queensland Rail receiving its fee notice from the QCA
- (3) provide for the calculation of the levy amounts to be specified in a schedule to the undertaking that includes:
 - (a) the allocation proportions approved by the QCA in its final decision on the 2018–19 QCA levy application
 - (b) the units and calculation methodology for the QCA levy for each service type.

9 OPERATING REQUIREMENTS (PART 4 AND SCHEDULE F)

Part 4 of the 2020 DAU provides for the operating requirements that govern how Queensland Rail delivers train service entitlements (TSEs). These include:

- the network management principles (NMPs) for Queensland Rail to schedule, manage, and demonstrate capacity for train services (sch. F)
- the operating requirements manual (ORM), which prescribes rules for how train operators gain access to and operate on the network.

Queensland Rail proposed to omit the ORM (sch. G in the 2016 undertaking) from the 2020 DAU and add a new category of possessions called 'ad hoc planned possessions'.

Overview of the draft decision

While our draft decision is to require a number of amendments to Queensland Rail's proposed Part 4 and schedule F, there are many provisions we consider appropriate to approve. We suggest that Queensland Rail could implement an 'appeals-based' approach for amending the ORM. Queensland Rail should also explain why it is proposing a new category of track closures (ad hoc planned possessions).

Operating requirements (Part 4)—summary

<i>Queensland Rail proposal</i>	<i>Clause</i>	<i>QCA draft decision</i>
Operating requirements manual		
Remove the ORM from the access undertaking. Require consultation before amendments are made to the ORM.	4.3(c); sch. G	The proposal is not appropriate to be approved. Amendments are appropriate to revise the way the ORM is reviewed and altered (see section 9.1.1).
Network management principles		
Create a new category of possessions called 'Ad hoc planned possessions'.	7.1 (definitions); sch. F	The proposal is not appropriate to be approved. It is appropriate to provide further detail on the purpose of ad hoc planned possessions and keep track of all possessions and disruptions in a public document (see section 9.2.1).
Permit variations to the daily train plan (DTP) on short notice to accommodate special events.	sch. F, cl. 2.2(f)(i)	The proposal is not appropriate to be approved. Amendments are appropriate so Queensland Rail makes reasonable endeavours to consult and promptly updates a public document that keeps track of special events (see section 9.2.1).
Maintain approach for modifying a master train plan (MTP), save to update to account for ad hoc planned possessions.	sch. F, cl. 2.1(m)(ii)	The proposal is not appropriate to be approved. Amendments are appropriate such that there is certainty regarding an access holder's TSE when modifying a MTP/scheduling an ad hoc planned possession (see section 9.2.1).
Remove the requirement that a planned possession that is subject to a dispute raised by an access holder be delayed until that dispute is resolved.	sch. F, cl. 2.4	The proposal is not appropriate to be approved. Amendments are appropriate so that access holders and operators are required

<i>Queensland Rail proposal</i>	<i>Clause</i>	<i>QCA draft decision</i>
		to raise the dispute at least 60 days before the possession (see section 9.2.2).
Maintain the Traffic Management Decision Making Matrix from the 2016 access undertaking.	sch. F, cl. 3(g)	The proposal may not be appropriate to approve. We invite comment from stakeholders on the viability of extending on-time windows for freight rail (see section 9.2.3).
Maintain the principles for managing deviations from a DTP.	sch. F, cl. 3(i)(i)(B)	The proposal is appropriate to be approved (see section 9.2.3).

9.1 Operating requirements manual (cl. 4.3)

The ORM sets out practices, standards, systems, protocols, requirements, rules, policies and other information relating to network control and access to, and use of, the network by train operators. It also includes interface management and coordination requirements, safeworking procedures, safety standards, emergency and investigation procedures, requirements for the management of network incidents, and environmental requirements.²²³

Much of the content of the ORM was in the standard access agreements in the 2008 QR Network undertaking that applied to Queensland Rail before the 2016 undertaking took effect. During the approval process for the 2016 undertaking, Queensland Rail argued that having the ORM provisions in a separate document outside the SAAs would make it easier to change the provisions in the ORM without having to renegotiate access agreements with multiple access holders.²²⁴ The QCA proposed an amendment process in its draft decision on Queensland Rail's 2013 DAU that would offer flexibility to Queensland Rail, while providing some protections to access holders. The QCA said:

The possibility for amendments to the operating requirements imposes significant uncertainty and potentially large compliance costs onto the train operator (the access holder). Given this, it is reasonable for the operator to be informed of potential amendments and for there to be a clearly defined dispute resolution process that provides operators with protection and certainty by allowing all affected parties to challenge proposed amendments.²²⁵

Queensland Rail proposed in its 2015 DAU to have the ORM as a schedule to the undertaking. The QCA accepted this proposal, and the ORM now forms schedule G to the 2016 undertaking.

9.1.1 Removing the manual from the DAU

Queensland Rail proposed not to include the ORM as a schedule to the 2020 undertaking. Queensland Rail submitted that:

Under AU1 Queensland Rail is required to submit a draft amending access undertaking to the QCA for approval for any changes to the ORM as the ORM is part of the AU1, which is a burdensome and time consuming process for both Queensland Rail and Access Holders.²²⁶

²²³ Queensland Rail, *Operating Requirements Manual*, October 2015: 1.

²²⁴ Queensland Rail, *Queensland Rail's Draft Access Undertaking 1*, explanatory submission, February 2013: 16–17.

²²⁵ QCA, *Queensland Rail's 2013 Draft Access Undertaking*, draft decision, October 2014: 75.

²²⁶ Queensland Rail, sub. 1: 61.

In omitting the ORM from the 2020 DAU, Queensland Rail proposed to maintain the ORM itself and make it available as well as consult with access holders and nominated rollingstock operators before amending it.^{227,228}

Yancoal, New Hope, Aurizon Coal and Pacific National all disagreed with Queensland Rail's proposal to omit the ORM from the undertaking.²²⁹ Aurizon Coal said:

QR's proposal removes QCA oversight of a document that is integral to understanding pre-conditions of access (such as interface risk management) and also operational procedures (such as network control), changes to which can have significant impacts on Aurizon Coal as an above rail operator. The proposal to replace this oversight with a requirement to merely consult is not sufficient, particularly in light of Aurizon Coal's historical experience with QR consultations and unwillingness on QR's part to adequately consider and respond to feedback provided by supply chain participants.²³⁰

New Hope said the ORM was important, as it provided detail on issues that needed to be resolved as a precondition to obtaining access. These included interface and environmental risk assessments, as well as operational matters such as network control and communication.²³¹

We consider it is not appropriate to approve the consult-only process proposed by Queensland Rail for amending the ORM, as it gives stakeholders limited opportunity to contest changes. Access holders need not have the veto power they had when much of what is now in the ORM was part of the SAAs. However, they should have the opportunity to seek review of proposed changes that they consider will materially affect them, and jeopardise their ability to receive their TSEs. Consequently, we do not consider Queensland Rail's proposal provides an appropriate balance between the rights and interests of access seekers, access holders, operators and Queensland Rail (ss. 138(2)(b), (e), (h)).

Amendment process

Stakeholders said it was important that the ORM remained transparent and subject to regulatory oversight. However, Aurizon Coal acknowledged that removing the ORM from the undertaking would allow Queensland Rail greater flexibility. Aurizon Coal said:

Aurizon Coal understands that removing the ORM from the Undertaking allows for minor changes to the ORM to be implemented without a Draft Amending Access Undertaking.²³²

Although Aurizon Bulk did not support the amendment process as set out by Queensland Rail, it identified what it considered would be best practice for amending the ORM:

Best practice would ordinarily require QR to consult with Operators and Access Holders prior to any amendment to an ORM being contemplated and submitted to the QCA for consideration. So long as this process is conducted in a way that considers the implication on Access Holders and Operators through consultation ought to lead to a smooth outcome with the QCA.²³³

Queensland Rail responded to these comments, saying it was:

²²⁷ Under Queensland Rail's proposal, the ORM as set out in schedule G of the 2016 access undertaking will apply until Queensland Rail amends it.

²²⁸ Queensland Rail, sub. 1: 45.

²²⁹ Yancoal, sub. 16: 20; New Hope, sub. 15: 3; sub. 15: 4; Aurizon Coal, sub. 12: 2; sub. 12: 3; Pacific National, sub. 17: 9; sub. 17: 10.

²³⁰ Aurizon Coal, sub. 12: 2; sub. 12: 3.

²³¹ New Hope, sub. 15: 3; sub. 15: 4.

²³² Aurizon Coal, sub. 12: 2.

²³³ Aurizon Bulk, sub. 11: 18.

committed to working with industry to seek a resolution that balances the perceived need for QCA 'oversight' with administrative and operational efficiency.²³⁴

Key concerns expressed by stakeholders in their submissions are that:

- changes to the ORM should remain transparent
- the QCA should provide regulatory oversight, particularly in instances where stakeholders do not agree with Queensland Rail's proposed amendments.

Our view is that these objectives may be achieved without requiring the ORM to be included as a schedule of the new undertaking. Requiring Queensland Rail to submit a DAAU to make minor adjustments to the ORM may create unnecessary regulatory burden.

An alternative way forward for amending the ORM could be to adopt a similar approach to that used for System Rules in Aurizon Network's 2017 access undertaking (UT5) (cls. 7A.2.4–7A.2.6). The System Rules act as an extension to Aurizon Network's network management principles (NMPs) and govern a range of operational matters. As the System Rules sit outside the undertaking, a DAAU is not required to make any amendments. Yet Aurizon Network does not have unilateral power to amend the System Rules, as the access undertaking sets out a process that it must follow to make amendments, including consultation with stakeholders and oversight from the QCA.²³⁵

We are of the view that the System Rules process could be adapted to suit the nature of the ORM, including limiting the QCA's role to instances where stakeholders and Queensland Rail are unable to agree on a proposed change. This review-based approach would likely reduce the regulatory burden faced by Queensland Rail, compared with having the ORM as a schedule to the undertaking, where Queensland Rail would be required to submit a DAAU to make changes. Additionally, we do not consider this suggested approach would erode the transparency of the ORM and the QCA oversight that stakeholders are requesting. Indeed, this approach is likely to align quite closely with what Aurizon Coal considers is best practice for amending the ORM. Furthermore, this approach might be consistent with Queensland Rail's aim to find a solution that balances the perceived need for QCA oversight with administrative and operational efficiency.

The review-based approach we have outlined is likely to achieve an appropriate balance of the interests of Queensland Rail, access seekers, access holders, train operators, and to enhance the efficient operation of the network (ss. 138(2)(a), (b), (d), (e), (h)). However, we acknowledge that neither Queensland Rail nor other stakeholders have proposed this as a solution, and seek stakeholders' comments on whether this type of approach might be an appropriate way for Queensland Rail to amend the ORM.

²³⁴ Queensland Rail, sub. 18: 21.

²³⁵ For more detail on the Aurizon Network System Rules, refer to Aurizon Network's 2017 access undertaking (UT5, cls. 7A.2.4–7A.2.6).

Summary 9.1

The QCA considers that it may be appropriate for Queensland Rail to amend the 2020 DAU to establish a transparent process for amending the ORM that provides for QCA oversight when stakeholders and Queensland Rail are unable to agree on a proposed change. The QCA invites further submissions from Queensland Rail and stakeholders on an appropriate approach.

9.2 Network management principles (schedule F)

The NMPs set out how Queensland Rail will coordinate maintenance and other track restrictions, schedule and operate trains, and demonstrate available capacity. The two main documents prescribed by the NMPs are the master train plan (MTP) and the daily train plan (DTP) (see Box 3).

Box 3 Train scheduling and planning—the master and daily train plans

Queensland Rail's proposed NMPs in the 2020 DAU prescribe two documents:

- the **master train plan (MTP)**—which details the scheduled times as advised by Queensland Rail for all train services and any planned possessions where scheduled times are unchanged from week to week
- the **daily train plan (DTP)**—which is derived from the MTP and shows the actual expected schedule on the day of operation (a short-term planning document).

Queensland Rail can amend its scheduling and planning documents prior to the day of operation and prior to the DTP being scheduled. This can be done either by agreement with access holders or for operational constraints, which may include track closures for maintenance and construction activities or restrictions on train weights or speeds. Operational constraints for maintenance and construction are broken down into:

- **emergency possessions**—correcting 'dangerous or potentially dangerous' faults or 'severe speed restrictions' within five days after they are detected
- **urgent possessions**—correcting 'potentially dangerous' problems less than three months after they are detected
- **planned possessions**—closures that are typically known between three months and two years in advance of the day of operation.

Queensland Rail can amend the DTP after the DTP has been scheduled if requested by an access holder—and the change would not affect another access holder's train service entitlement—or for an emergency possession.

9.2.1 Changes to train plans

Ad hoc planned possessions

Queensland Rail proposed to implement a new type of possession called an 'ad hoc planned possession', which it defined as:

a possession (other than an urgent possession, an emergency possession or a planned possession) that is not entered into the MTP because it is not a regularly scheduled possession, and adversely affects the operation of train services.²³⁶

Queensland Rail proposed to publish the MTP and ad hoc planned possessions on its website and to update these items at half-yearly intervals.

Yancoal, New Hope, Aurizon Coal, Aurizon Bulk, and Pacific National all objected to creating a new category of possessions. They considered that the already existing categories of planned, urgent, and emergency possessions sufficiently accounted for all contingencies. Stakeholders also questioned the extent to which a possession could be both ad hoc and planned.²³⁷

²³⁶ Queensland Rail, sub. 1: 63.

²³⁷ Yancoal, sub. 16: 20; New Hope, sub. 15: 3; sub. 15: 4; Aurizon Coal, sub. 12: 2; sub. 12:3; Aurizon Bulk, sub. 11: 18; Pacific National, sub. 17: 9; sub. 17: 10.

Queensland Rail provided limited rationale in its explanatory documents for creating a new category of planned possessions. Therefore, at this stage we are not aware how Queensland Rail's proposed amendments would provide additional benefit to relevant parties.

We do know that the MTP in the 2016 undertaking, which is also proposed in the 2020 DAU, is defined as:

a plan detailing the scheduled times as advised by Queensland Rail from time to time for all Train Services and any Planned Possessions on a specified part of the Network, where such scheduled times remain unchanged from week to week.²³⁸

It is our understanding that because the MTP specifies that scheduled times remain unchanged from week to week, Queensland Rail considered that a large portion of its planned possessions should not be entered into the MTP—because they occur at irregular intervals. Queensland Rail therefore proposed a new category of planned possession—ad hoc planned possessions—to address this problem. Ad hoc planned possessions would not be entered into the MTP but, under Queensland Rail's approach, customers would be afforded the same forewarning and protections for an ad hoc planned possession as they are for a planned possession. Furthermore, Queensland Rail proposed to publish ad hoc planned possessions on its website, alongside the MTP.

For access holders and train operators, it is important to have a high degree of transparency over train scheduling and any factor that might disrupt the normal operation of train services. This enables them to plan their train services and cope with necessary disruptions. Given that Queensland Rail has not provided a rationale for introducing ad hoc planned possessions, and has not explained how the interests of access holders will be addressed, we do not consider it appropriate to approve Queensland Rail's proposed amendments. This view has regard to the interests of Queensland Rail, access seekers/holders, train operators, and the efficient operation of the network (ss. 138(2)(a), (b), (d), (e), (h)).

Queensland Rail needs to set out clearly why it is appropriate to include ad hoc planned possessions in the 2020 DAU, particularly since there appears to have been limited communication between Queensland Rail and stakeholders on this issue. To assist in progressing this matter, we suggest some preliminary ideas (below) for implementing ad hoc planned possessions that may address the concerns of Queensland Rail and other affected parties.

While Queensland Rail proposed to publish ad hoc planned possessions on its website, it did not specify how this would occur. Queensland Rail already prepares a planning document that it publishes alongside the MTP, called the Western Corridor Alignment Calendar (the 'alignment calendar'). Amongst other things, the alignment calendar lists track closures, 'no train' periods, network maintenance and recent changes to the network. As such, we consider that both planned possessions and ad hoc planned possessions could be added to the alignment calendar, alongside special events (see separate discussion below). We would consider it reasonable if the alignment calendar was updated monthly, save for special events—Queensland Rail should make reasonable endeavours²³⁹ to keep the alignment calendar updated for special events. Having a regularly updated central document that tracks all planned disruptions and possessions on the network is likely to lead to a greater level of transparency and promote the alignment of disruptions and maintenance across the entire supply chain.

²³⁸ Queensland Rail, sub. 1: 80.

²³⁹ Reasonable endeavours may be dependent on the nature of the special event. For a sporting finals event that is scheduled at a week's notice, the QCA would expect Queensland Rail to update the possessions and disruptions register much more promptly than for a special event that was still many months away.

Updating the alignment calendar in such a manner is likely to achieve a reasonable and appropriate balance of the interests of Queensland Rail, access seekers, access holders, train operators, and to enhance the efficient operation of the network (ss. 138(2)(a), (b), (d), (e), (h)). However, in acknowledging that neither Queensland Rail nor other stakeholders have proposed this specific approach, we invite further submissions on the matter.

In addition, we recommend that Queensland Rail consider changing what is currently known as a planned possession to a 'regular planned possession', and what Queensland Rail has proposed as an 'ad hoc planned possession' to a 'planned possession'. These names would better reflect the characteristics of the possessions, in that both categories of possessions are planned, but only the 'regular planned possessions' would occur at consistent intervals and be recorded in the MTP.

Summary 9.2

The QCA's draft decision is that it may be appropriate to amend Queensland Rail's 2020 DAU to provide that ad hoc planned possessions (using Queensland Rail terminology) are recorded in the alignment calendar that is published monthly. The QCA invites further submissions from stakeholders on an appropriate approach.

Special events

Queensland Rail introduced a definition in the 2020 DAU for 'special events'.²⁴⁰ Queensland Rail defined special events to include events or occasions for which Queensland Rail is required to provide passenger services in addition to the then scheduled passenger timetable.²⁴¹ In creating this definition, Queensland Rail amended the 2020 DAU to allow for varying the DTP from the MTP at least two business in advance, to accommodate a special event (sch. F, cl. 2.2(f)).²⁴²

New Hope and Yancoal did not support the proposed treatment of special events. They considered a two days' notice period for changes to the MTP was not sufficient, particularly for events for which the date was known well in advance. Pacific National also did not support the drafting of special events within the Queensland Rail 2020 DAU. Yancoal, New Hope, and Pacific National all considered special events should be incorporated into the MTP.²⁴³

A large number of the events listed in the special events definition are known far in advance. Very few—such as sporting finals events—are in fact likely to occur at short notice. Queensland Rail has not made any reference to special events in its explanatory documents, but it appears the reason Queensland Rail proposed to not include events such as New Year's Eve and Anzac Day in the MTP is because, although they occur with known regularity, they occur so infrequently (once a year) that they do not fit within the definition of what should be entered into the MTP. Still, it is not appropriate that stakeholders might only have two days' notice for events known months or years in advance. As such, Queensland Rail's amendments to cl. 2.2(f) in relation to special events are not in the interests of access seekers and access holders (ss. 138(2)(e), (h)).

Whether or not some of these special events belong in the MTP, our view is that Queensland Rail should make best endeavours to notify stakeholders well ahead of time, where possible. As such,

²⁴⁰ 'Special Events' as a category does not exist in the 2016 undertaking.

²⁴¹ Queensland Rail, sub. 1: 88.

²⁴² Queensland Rail, sub. 1: 153.

²⁴³ Yancoal, sub. 16: 21; sub. 16: 21; New Hope, sub. 15: 17; Pacific National, sub. 17: 13; sub. 17:14.

it is appropriate for Queensland Rail to make reasonable endeavours to consult with the affected parties when scheduling a DTP that varies from the MTP to accommodate a special event.

We also consider that the special events, as outlined by Queensland Rail, could be added to the alignment calendar, alongside ad hoc planned possessions and planned possessions (see the previous section). Our view is that the alignment calendar is well suited to keeping track of special events, and Queensland Rail should make reasonable endeavours to keep the alignment calendar updated.

Adopting our outlined approach will still provide Queensland Rail with flexibility to schedule variations in the DTP from the MTP for events that are outside its control²⁴⁴, while also providing a high level of transparency to stakeholders. This alignment calendar approach may not be in the interest of Queensland Rail, as it limits its discretion to change train schedules at short notice (s. 138(2)(b)). However, the approach is likely to promote efficient operation of the network and the public interest and be in the interests of access seekers/holders and train operators (ss. 138(2)(a), (d), (e), (h)). Therefore, on balance, it may be appropriate to use the alignment calendar to provide sufficient notice and transparency about track closures for special events. However, as neither Queensland Rail nor other stakeholders have proposed this specific approach, we seek further comment from stakeholders.

Summary 9.3

The QCA's draft decision is that the appropriate way for Queensland Rail to amend the treatment of special events in the 2020 DAU is that Queensland Rail should be required to:

- (1) make reasonable endeavours to consult with affected stakeholders; and
- (2) make reasonable endeavours to promptly update a public document (such as the alignment calendar) that keeps track of special events.

The QCA invites further submissions from stakeholders on an appropriate approach.

Master train plan modification consultation

Queensland Rail proposed to provide for ad hoc planned possessions in the rules for consulting about modifying a MTP (sch. F, cl. 2.1(m)(ii)). The drafting was otherwise similar to that in the 2016 undertaking.

Aurizon Coal considered the drafting of cl. 2.1(m) in the 2016 undertaking and 2020 DAU was not sufficiently clear on when Queensland Rail was required to obtain agreement from access holders for variations to the MTP and planned possessions. Aurizon Coal said the current drafting of cl. 2.1(m)(ii) was illogical, as it was not clear how a modification could be either within or not within the scope of an access holder's TSE. Aurizon Coal suggested that the drafting should be updated to reflect that an access holder must agree to the MTP variation where that variation would result in scheduled train services not being met.²⁴⁵

We consider that the wording of cl. 2.1(m)(ii) is not sufficiently clear and that there may be confusion as to whether a modification of a MTP, or the scheduling of an ad hoc planned possession is not within the scope of an access holder's TSE. As such, the proposed wording of cl. 2.1(m)(ii) brings about legal uncertainty. We do not consider it appropriate to accept

²⁴⁴ This flexibility is appropriate where it is not reasonable to expect that these events be entered into the MTP.

²⁴⁵ Aurizon Coal, sub. 12: 3.

Queensland Rail's proposed drafting of cl. 2.1(m)(ii). Queensland Rail should amend this clause so that there is certainty regarding an access holder's TSE when modifying an MTP or scheduling an ad hoc planned possession.

The clause is intended to apply where an access holder's TSE may be adversely affected by a modification or relevant possession. The clause should be amended to more clearly reflect this intention. Having regard to the factors in s. 138(2), we consider clearer drafting to be in the interests of Queensland Rail and access holders, and of public benefit (ss. 138(2)(b), (d), (h)).

Summary 9.4

The QCA's draft decision is that it is appropriate for Queensland rail to amend the process in the 2020 DAU for modifying a MTP or scheduling an ad hoc planned possession (sch. F, cl. 2.1(m)(ii)), so that it is clear that the clause applies where an access holder's TSE may be adversely affected when Queensland Rail is modifying a MTP or scheduling an ad hoc (using Queensland Rail terminology) planned possession.

9.2.2 Disputes over planned possessions

Queensland Rail proposed to remove the requirement in the 2016 undertaking that a planned possession that is subject to a dispute raised by an access holder be delayed until this dispute is resolved (sch. F, cl. 2.4). Queensland Rail considered that:

Queensland Rail may have multiple contracts in place with external contractors over several worksites across the network linking into one Planned Possession. Requiring Queensland Rail to stop the work right up until the day of the possession is not reasonable or effective, and in many cases would result in reputational damage and financial compensation to external contractors potentially in the order of millions of dollars.²⁴⁶

New Hope, Yancoal, Aurizon Bulk and Pacific National opposed removing the clause. New Hope and Yancoal submitted that they should have a right to dispute variations to the MTP, given that variations can result in cancellations, demurrage and take-or-pay costs. Aurizon Bulk wanted cl. 2.4 to be reinstated and expanded to include operators. Pacific National acknowledged that the current drafting in the 2016 access undertaking might create problems for Queensland Rail, and suggested that cl. 2.4 could be amended to require any dispute to be lodged at least 30 days before the start of the possession.

It is possible under cl. 2.4—as drafted in the 2016 undertaking—for an access holder to raise a dispute just before the start of a planned possession, which could potentially lead to significant negative consequences for Queensland Rail. However, this type of behaviour is unlikely to occur, because foregoing required maintenance could have the potential to lead to more significant track issues and as a consequence, a long-term reduction in railings. Indeed, when requested, Queensland Rail did not supply any evidence of instances where it had been negatively impacted by a dispute raised in relation to a planned possession.

Because a planned possession has the potential to significantly disrupt train services, and thereby negatively affect access holders and operators, it would not be appropriate to remove cl. 2.4 entirely. Queensland Rail's proposal is not appropriate, having regard to the factors in s. 138(2), including the interests of access seekers, access holders, train operators and the public interest (ss. 138(2)(c), (d), (e), (h)).

²⁴⁶ Queensland Rail, sub. 2: 64.

While it is unlikely for a dispute to be raised just before the start of a planned possession, we recognise Queensland Rail's concern that the drafting in the 2016 undertaking allows for the possibility to occur. As stakeholders are informed of a planned possession at least 90 days before it is scheduled, it would not be reasonable for stakeholders to raise disputes just before a planned possession. Clause 2.4 of the 2016 undertaking should be reinstated and amended so that stakeholders have a fixed period of time before a planned possession within which to file a dispute. By requiring stakeholders to lodge a dispute at least 60 days before, stakeholders will still have adequate time (at least 30 days) to file a dispute. This requirement will also significantly increase the likelihood that a dispute, should it occur, is resolved before the scheduled date of the planned possession.

We consider that Queensland Rail should amend the reinstated cl. 2.4 to account for both ad hoc planned possessions and planned possessions (using Queensland Rail terminology).²⁴⁷ Additionally, as operators have the potential to be adversely impacted by the scheduling of relevant planned possessions²⁴⁸, we consider it appropriate that cl. 2.4 be extended to include operators, in addition to access holders.

This approach is appropriate, having regard to the interests of Queensland Rail, access seekers and access holders, and the public interest (ss. 138(2)(b), (d), (e), (h)).

Summary 9.5

The QCA's draft decision is that the appropriate way for Queensland Rail to amend the 2020 DAU is to provide that access holders and operators are required to raise a dispute over a planned possession at least 60 days before the start of the possession.

9.2.3 Network control principles

The prime objective of network control is to facilitate the safe running of train services, and the start and finish of possessions, as scheduled in the DTPs. Clause 3(g) of schedule F states that:

In the context of the Traffic Management Decision Making Matrix, the meaning of "On Time", "Ahead" and "Late" are determined by the scheduling of paths in the relevant DTP. For example, if a Train Service is travelling in accordance with the path allocated to it in the relevant DTP, it is running "On Time".

On-time windows

Pacific National said Queensland Rail's current practice was that a train that was not on time to the minute was classified as either 'ahead' or 'late', which meant that under the Traffic Management Decision Matrix, such a train could be disadvantaged. Pacific National considered that for freight trains travelling up to 1700 kilometres, such precision for defining 'on-time' services was unrealistic. Furthermore, Pacific National said Queensland Rail provided a much more generous definition of 'on time' when reporting its own performance—for instance Queensland Rail proposed in the 2020 DAU to be required to report on the number and percentage of possessions that did not start or finish within 30 minutes of their scheduled time (see section 10.1 of this draft decision).²⁴⁹

²⁴⁷ This is contingent on Queensland Rail making amendments to ad hoc possessions, such that they are appropriate to approve. See section 9.2.1.

²⁴⁸ One such impact could be on the scheduling of train crews.

²⁴⁹ Pacific National, sub. 17: 14–15.

Requiring trains to be on time to the minute, to be classified as 'on time', might seem unreasonable for freight trains travelling long distances, but freight traffic travelling on the Queensland Rail network will also travel on the Metropolitan system. For trains travelling on the Metropolitan system, a higher degree of accuracy is required, because it is a more congested passenger network. While we are not opposed to the idea of potentially extending the on-time window for freight traffic, we are conscious that nominating a specific on-time window could have negative implications on the efficient running of the network. As such, we seek submissions from stakeholders regarding the viability of extending the on-time window for freight traffic on the Queensland Rail network.

Summary 9.6

The QCA's draft decision is that it may be appropriate to amend the 2020 DAU to extend the on-time windows for freight rail, subject to stakeholder comment.

Train priority

Aurizon Bulk said Queensland Rail had not proposed in the 2020 DAU to change the existing Traffic Management Decision Matrix in cl. 3 of the NMP (sch. F), that is in the 2016 undertaking. Aurizon Coal considered:

The rules provided are relatively clear, but Network Controllers are provided with the flexibility under the "Principles for managing deviations from a DTP" that muddy the waters in the application of these decisions.²⁵⁰

Aurizon Bulk said that cl. 3(i)(i)(B) of schedule F in particular allowed for a network controller to 'remedy, or to mitigate or avoid, the operation of Train Services on any part of the Network being congested, prevented or otherwise materially adversely affected'. Aurizon Bulk considered that, aside from safety reasons, 'healthy' (i.e. on-time) trains should always be given priority ahead of unhealthy trains, in accordance with the decision-making matrix.²⁵¹

The 2016 access undertaking process introduced a number of principles for managing deviations from a DTP, including the principle outlined by Aurizon Bulk. While cl. 3(i)(i)(B) of schedule F provides network controllers with the discretion to favour an unhealthy train over a healthy train²⁵², the undertaking requires that this discretion is applied 'if it is reasonably necessary'. We are not aware of circumstances to date in which this clause has been applied unreasonably. Therefore, while we generally support healthy trains receiving priority over unhealthy trains, we consider that it is appropriate to retain cl. 3(i)(i)(B) of schedule F. The relevant provisions are appropriate, having regard to the factors in s. 138(2), including the object of Part 5, the interests of Queensland Rail and access holders and the efficient operation of the network (ss. 138(2)(a), (b), (h)).

²⁵⁰ Aurizon Bulk, sub. 12: 19.

²⁵¹ Aurizon Bulk, sub. 12: 19.

²⁵² Provided that this is done 'to remedy, or to mitigate or avoid, the operation of train services on any part of the network being congested, prevented or otherwise materially adversely affected' (sch. G, cl. 3(i)(i)(B)).

Summary 9.7

The QCA's draft decision is that it is appropriate to approve the principles in Queensland Rail's 2020 DAU for managing deviations from a DTP, including schedule F, cl. 3(i)(i)(B).

10 REPORTING (PART 5)

The reporting provisions in Part 5 of the 2020 DAU set out how Queensland Rail will inform stakeholders about its performance in negotiating access and operating its track, and the costs of providing access to parts of the network with substantial commercial revenue. Part 5 also provides rules for auditing this information and Queensland Rail's compliance with its undertaking.

In the 2020 DAU, Queensland Rail proposed to retain all of the reporting and audit requirements from the approved 2016 undertaking, with a few changes to deadlines.

Overview of the draft decision

Our draft decision is that Part 5 of the 2020 DAU is largely appropriate to approve, but Queensland Rail should amend certain provisions, including to provide more detailed reporting of the timing of ad hoc and planned possessions. We are also taking a preliminary view that it is appropriate to approve a 31 December deadline for Queensland Rail's annual reporting.

Reporting (Part 5)—summary

<i>Queensland Rail proposal</i>	<i>Clause</i>	<i>QCA draft decision</i>
Quarterly network performance report		
Publish by end of month after each quarter, or as agreed with QCA. ²⁵³	5.1.1	The proposal is appropriate to be approved. Not discussed further. ²⁵⁴
Allow 30 minutes' leeway in timing of planned possessions.	5.1.2(x)	The proposal is not appropriate to be approved. Amendments are appropriate to specify that reporting on planned possessions should be subject to 15 minutes' leeway, and provide information in ranges (see section 10.1).
No proposal on reporting on use of ad hoc planned possessions.	5.1.2(y) (added)	Queensland Rail should report on ad hoc planned possessions (see sections 10.1 and 9.2.1).
Specify types of service covered, for example: coal, bulk minerals, freight; exclude metropolitan system. ²⁵⁵	5.1.2(b)	The proposal is appropriate to be approved. Not discussed further. ²⁵⁶
Annual network performance report		
Format of annual network performance report unchanged.	5.2, 5.3	The proposal is not appropriate to be approved. Amendments are appropriate to provide for combined performance reporting with the regulatory accounts (see section 10.2).
Publish within six months after end of each year. ²⁵⁷	5.2.1(a)	The proposal is appropriate to be approved. Not discussed further. ²⁵⁸

²⁵³ Queensland Rail, sub. 2: 58, 62.

²⁵⁴ New Hope, sub. 15: 13.

²⁵⁵ Queensland Rail, sub. 2: 58, 62.

²⁵⁶ New Hope, sub. 15: 14; Aurizon Bulk, sub. 11: 9.

²⁵⁷ Queensland Rail, sub. 2: 58, 62.

²⁵⁸ Aurizon Bulk, sub. 11: 11; New Hope, sub. 15: 14.

Commentary required only for 'material' changes.	5.2.2(k)	The proposal is not appropriate to be approved. Amendments are appropriate to define 'material' (see section 10.2).
Other matters		
Incorrect clause number	5.2.2(i)(vi)	Clause 5.2.2(i)(vi) should be numbered 5.2.2(i)(v)(B).

10.1 Quarterly network performance report (cl. 5.1)

Reporting on planned possessions

Planned possessions are times set aside for Queensland Rail to maintain its network or undertake capital works. Train services are stopped during those times, which affects capacity available to access holders. A late start or early finish is inefficient, as it means the network is closed and services are most likely deferred or cancelled at a time when they could have been operating.

Planned possessions are governed by rules in the network management principles (see sch. F of the 2020 DAU and Chapter 4 of this draft decision). However, reporting on Queensland Rail's planned possessions is also included in the quarterly network performance report.

30-minute leeway for reporting

Queensland Rail said that the reporting in the 2016 undertaking covered planned possessions that started one second early or finished one second late. It proposed in the 2020 DAU that its reporting of planned possessions only cover instances where they started and finished more than 30 minutes outside the scheduled time (cl. 5.1.2(a)(x)).²⁵⁹

We consider that it is appropriate for the reporting of 'on time' planned possessions to provide some leeway. Aurizon Bulk said the threshold should be 15 minutes, while New Hope said it should be shorter than 30 minutes.²⁶⁰

We consider 15 minutes to be an appropriate threshold. This is because on the West Moreton system, for example, the longest section run time is 26 minutes. A 15-minute variance is unlikely to affect a path before or after the possession; however, a 30-minute variance would almost certainly consume (or make available) an extra path.

Therefore, weighing up the interests of Queensland Rail, access seekers and access holders (ss. 138(2)(a), (b), (e), (h)), our draft decision is not to approve Queensland Rail's proposal concerning reporting on planned possessions.

Reporting in ranges

In finding that 15 minutes is an appropriate amount of leeway for reporting of planned possession, we have also formed a view that a simple late/early threshold may be too simplistic. We consider that both access holders/seekers and Queensland Rail may benefit from a more nuanced reporting approach, which gives an indication of how material unscheduled periods of track closure are.

The way to achieve this is to report the timing variances in ranges—similar to the approach used for indicative access proposals and negotiation periods in the annual network performance report (see cl. 5.2.2(d), (h)). So, in addition to applying 15 minutes' leeway, the reporting should cover a

²⁵⁹ Queensland Rail, sub. 2: 62.

²⁶⁰ Aurizon Bulk, sub. 11: 9; New Hope, sub. 15: 14.

two-hour variance, which would have a material effect on the capacity of the network. Based on the same 26-minute section run time discussed above in relation to the 15-minute threshold, a two-hour additional closure would affect four or more available paths.

Therefore, we consider that the overall reporting regime for planned possessions should include:

- the total number of planned possessions during the quarter, and
- for the start and finish of each possession, the number and percentage that were
 - within 15 minutes of the scheduled time
 - 15 minutes to two hours early
 - 15 minutes to two hours late
 - more than two hours early
 - more than two hours late (see cl. 5.1.2(x)).

This may be in Queensland Rail's interest as it will have an opportunity to demonstrate the number of possessions that were either on schedule, or within a 15-minute tolerance (s. 138(2)(b)). At the same time, it will promote the efficient operation and use of the network by giving access seekers and access holders a clearer understanding of how many possessions are starting or finishing either somewhat or substantially outside the scheduled time (ss. 138(2)(a), (e), (h)).

Summary 10.1

The QCA's draft decision is that the appropriate way for Queensland Rail to amend the 2020 DAU is to provide information about the total number of planned possessions during the quarter and the start and finish times of planned possessions in ranges (cl. 5.1.2(x)), as set out in section 10.1 of this draft decision.

Reporting on ad hoc possessions

Queensland Rail proposed a new category of ad hoc planned possessions, which would allow it to schedule maintenance work that has not been included in the master train plan (see section 9.2.1).

Given this is a new approach to scheduling, it is appropriate that access holders/seekers and other interested parties be informed on how the new category of possessions is being used by Queensland Rail. This will enable them to understand how access is provided, and make informed comments on whether the changes should be retained in future undertakings.

Weighing up the interests of Queensland Rail, access seekers and access holders (ss. 138(2)(a), (b), (e), (h)), our draft decision is that it is not appropriate to approve Queensland Rail's proposal as it does not include reporting on ad hoc planned possessions (using Queensland Rail terminology). So, while stakeholders have not proposed reporting on this new category of possessions, we consider it appropriate for Queensland Rail to amend its 2020 DAU to provide for quarterly reporting of:

- how many ad hoc planned possessions it has used
- the average duration of those possessions
- how many train paths have been cancelled or rescheduled for those possessions.

The ad hoc planned possessions should also be subject to the reporting for on-time performance, with a 15-minute threshold (discussed above in relation to planned possessions).

Queensland Rail has not proposed any reporting on urgent or emergency possessions. We invite stakeholders' comments on whether these should be included in the reporting requirements.

Summary 10.2

The QCA's draft decision is that the appropriate way for Queensland Rail to amend the 2020 DAU is to provide transparency about how often ad hoc planned possessions (using Queensland Rail terminology) are used, the times they start and finish, and the consequences of those possessions.

10.2 Annual network performance report (cl. 5.2)

Annual performance and financial reporting

Queensland Rail proposed that it be required to publish both:

- (a) an annual performance report (cl. 5.2), and
- (b) an annual financial report (regulatory financial statements) (cl. 5.3)²⁶¹

for the previous financial year, by 31 December.

While stakeholders did not comment on these provisions, we consider that Queensland Rail should be able to streamline its annual reporting required in the 2020 DAU, by providing it all in a single document. Combining the two reports into one annual document will reduce the regulatory burden, and provide a more effective single source of information about Queensland Rail's performance.

Our preliminary position is to accept much of Queensland Rail's proposed approach to the annual performance reporting—that is, that it be left largely unchanged from the 2016 undertaking. However, we consider it may be appropriate to give Queensland Rail the option of satisfying those requirements through an expanded version of the annual regulatory financial statements, subject to approval of the form and content by the QCA.

We consider this would benefit both Queensland Rail and access holders/seekers (ss. 138(2)(b), (e), (h)).

On 31 December 2018, Queensland Rail published its performance report and regulatory financial statements for 2017–18.²⁶² Stakeholders may wish to have regard to these latest publications when commenting on this draft decision.

²⁶¹ The annual regulatory financial statements are guided by the cost allocation manual, which in turn is prescribed in the QCA Act (ss. 159–163).

²⁶² The annual reporting can be downloaded at <https://www.queenslandrail.com.au/forbusiness/access/access-undertaking>.

Summary 10.3

The QCA's draft decision is that the appropriate way for Queensland Rail to amend the 2020 DAU is to provide the option of combining the annual performance and financial reporting into one document.

Material changes

Queensland Rail proposed that it only be required to provide commentary on variances between its forecast and actual maintenance spending where the difference was 'material' (cl. 5.2.2(k)).²⁶³

New Hope said there should be a transparent threshold for materiality, set as a dollar value, a percentage of the forecast expenditure category or change in any relevant reference tariff.²⁶⁴

While the proposal to introduce a materiality consideration does not appear to be unreasonable, weighing up the interests of Queensland Rail and access seekers (ss. 138(2)(b), (e)), our draft decision is not to approve the proposed change.

We consider that it may be appropriate for Queensland Rail to amend its proposal so that the threshold for materiality should be either \$500,000, or 10 per cent of the forecast amount, whichever is greater. This should relieve Queensland Rail from explaining trivial variances, and changes in categories with low expected spending. However, Queensland Rail's reporting will provide commentary in cases where spending has varied substantially from the forecasts used to assess tariffs. We seek stakeholders' comments on whether these are appropriate thresholds.

Summary 10.4

The QCA's draft decision is that the appropriate way for Queensland Rail to amend the 2020 DAU is to specify that a material change for the purposes of reporting on maintenance spending is the greater of \$500,000 or 10 per cent of the estimated amount (cl. 5.2.2(k)). The QCA seeks stakeholders' comments on whether these are appropriate thresholds.

²⁶³ Queensland Rail proposed in the 2020 DAU to include 'material' but did not provide an explanation.

²⁶⁴ New Hope, sub. 15: 14.

11 ADMINISTRATIVE PROVISIONS (PART 6)

Part 6 of the 2020 DAU contains a number of administrative provisions, including a mechanism for resolving disputes, rules that apply to the QCA when it makes decisions under the undertaking, and provisions to address the transition from one undertaking to another. While the provisions are largely unchanged from the 2016 undertaking, Queensland Rail has proposed some changes to the dispute resolution process and transitional provisions.

Overview of the draft decision

While our draft decision is to require Queensland Rail to make some amendments to Part 6 of the 2020 DAU, including to the provisions dealing with the parties that can access the dispute resolution mechanism and the requirements for the QCA to obtain rail safety advice, there are many provisions in Part 6 we consider appropriate to be approved.

Administrative provisions (Part 6)—summary

<i>Queensland Rail proposal</i>	<i>Clause</i>	<i>QCA draft decision</i>
Parties that can access dispute resolution		
Dispute resolution is only available to access seekers.	6.1.2	The proposal is not appropriate to be approved. Amendments are appropriate to enable other parties to access the dispute resolution mechanism if they receive the benefit of an obligation in the undertaking (see section 11.1).
Disputes referred to the QCA for resolution		
The QCA must obtain advice from a rail safety expert when arbitrating certain disputes.	6.1.4	The proposal is not appropriate to be approved. Amendments are appropriate to address identified problems with the workability and clarity of the clause (see section 11.2).
The process for the QCA to resolve disputes may differ depending on the nature of the dispute.	6.1.4	The proposal is not appropriate to be approved. Amendments are appropriate to provide certainty as to the awarding of costs and the binding nature of the process (see section 11.2)
Other matters		
Other provisions in Part 6 have been identified for further consideration.	Various	Our draft decision on each provision is provided in Table 22 in section 11.3.

11.1 Parties that can access dispute resolution (cl. 6.1.2)

Under Queensland Rail's proposal, the dispute resolution mechanism would apply to disputes between access seekers and Queensland Rail (cl. 6.1.2). Queensland Rail did not propose to make the mechanism available to other parties.

Yancoal and New Hope considered that access holders should retain the right to dispute proposed changes to master train plans and the accuracy of line diagrams that is provided in cl. 6.1.2(b) of the 2016 undertaking.²⁶⁵ We note that, in the 2020 DAU, the right of access holders to dispute the accuracy of line diagrams is still referred to in cl. 1.2.3(f), even though there is no longer a

²⁶⁵ Yancoal, sub. 16: 20–21; New Hope, sub. 15: 7.

corresponding right in Part 6. Pacific National argued that dispute resolution should be equally available to access seekers and access holders.²⁶⁶

Where parties other than access seekers receive the benefit of an obligation in an undertaking—for example, access holders or train operators—it is appropriate that they have the ability to resolve a dispute in relation to that obligation. While access holders and train operators have recourse to dispute resolution in access agreements, this mechanism may only apply to disputes arising under those agreements. Our draft decision is that Queensland Rail's proposal is not appropriate to approve because it does not adequately balance the rights and interests of Queensland Rail, access seekers, access holders and other parties (ss. 138(2)(b), (e), (h)).

We consider that amendments to cl. 6.1.2 of the 2020 DAU should be made to broaden the scope of the dispute resolution mechanism to enable parties that receive the benefit of an obligation in the undertaking to access the dispute resolution mechanism in relation to that obligation. Consequential amendments should also be made, including to cl. 6.1.2(b), to remove the reference to an 'access holder'.

Summary 11.1

The QCA's draft decision is that the appropriate way for Queensland Rail to amend the scope of the dispute resolution mechanism in the 2020 DAU is to:

- (1) enable all parties who receive the benefit of an obligation in the undertaking to access the dispute resolution mechanism in relation to that obligation (cl. 6.1.2)
- (2) specifically include the right of access holders to dispute proposed changes to the accuracy of line diagrams, and access holders and train operators to raise disputes in relation to master train plans (as is provided in cl. 6.1.2(b) of the 2016 undertaking).

Consequential amendments should also be made.

11.2 Disputes referred to the QCA for resolution (cl. 6.1.4)

Under Queensland Rail's proposal, the process in cl. 6.1.4 applies to disputes referred to the QCA for resolution. The key change from the 2016 undertaking is the process for resolving disputes about rail safety matters.

Disputes about rail safety matters

Under cl. 6.1.4(b) of the 2020 DAU, the QCA is required to seek and have regard to the opinion of a rail safety expert (approved by the disputing parties) when arbitrating particular disputes (i.e. disputes for the purposes of Part 5, division 5 of the QCA Act). Queensland Rail advised that its proposed approach differs from the approach in the 2016 undertaking to reflect:

- the start of the national rail safety laws and establishment of the national safety regulator as the body responsible for rail safety regulation in Queensland
- that the national rail safety regulator does not have the power to make a decision on rail safety aspects of disputes.²⁶⁷

²⁶⁶ Pacific National, sub. 17: 11–12.

²⁶⁷ Queensland Rail, sub. 2: 59, 63.

We consider that it is appropriate to accommodate changes to rail safety legislation, as proposed by Queensland Rail, and stakeholders generally supported Queensland Rail's proposal to require the QCA to have regard to the advice of a rail safety expert on safety matters.²⁶⁸

However, Queensland Rail's proposal is not appropriate to approve because there are problems with the workability and clarity of the clause. In particular, it is not clear how an expert would be selected if the disputing parties could not agree on an expert and the requirement to seek rail safety advice is not clearly targeted at disputes involving rail safety matters. It is in the interests of all parties that the clauses are workable and clear (ss. 138(2)(b), (d), (e), (h)).

Our draft decision is that the appropriate way for Queensland Rail to amend cl. 6.1.4(b) is to:²⁶⁹

- include a provision for the QCA to select an expert if the parties cannot agree on an expert, to prevent the process from stalling
- clarify that QCA is only required to seek rail safety advice on those aspects of the dispute that the QCA, or any party to the dispute, consider to be a rail safety matter
- as rail safety matters could be relevant to any dispute referred to the QCA, extend the requirement to seek rail safety advice to disputes described in cl. 6.1.4(a)(ii)
- remove the reference to cl. 6.1.4(c), because it no longer exists.

Summary 11.2

The QCA's draft decision is that the appropriate way for Queensland Rail to amend the provisions in the 2020 DAU relating to disputes resolved by the QCA that involve rail safety matters (cl. 6.1.4(b)) is to:

- (1) include a provision for the QCA to select an expert if the parties cannot agree on an expert
- (2) clarify that the QCA is only required to seek rail safety advice on those aspects of the dispute that the QCA, or any party to the dispute, consider to be a rail safety matter
- (3) extend the requirement to seek rail safety advice to disputes described in cl. 6.1.4(a)(ii)
- (4) remove the reference to cl. 6.1.4(c).

Process improvements

Where disputes are referred to the QCA for resolution, it is appropriate that the responsibility for awarding costs and the binding nature of the process is certain. This is in the interests of all potential disputing parties, namely Queensland Rail, access seekers, access holders and train operators (ss. 138(2)(b), (e), (h)). As Queensland Rail's proposal does not include provisions to provide this certainty, we consider that it is not appropriate to approve.

It is appropriate for Queensland Rail to amend the 2020 DAU to include a requirement that, before a QCA dispute determination commences, all parties must agree (in a legally binding way) to:

²⁶⁸ Aurizon Bulk, sub. 11; Pacific National, sub. 17: 12.

²⁶⁹ We note that the first two proposals are consistent with suggestions made by New Hope and Yancoal (New Hope, sub. 15: 15; Yancoal, sub. 16: 21).

- be bound by the determination
- pay any order by the QCA as to the payment of any other party's costs for the dispute (otherwise, there may be further disputes regarding liability for the costs of an arbitration).

However, as the QCA Act already deals with these matters if the dispute is a dispute for the purposes of Part 5, division 5 of the QCA Act²⁷⁰, the requirements should only apply to disputes described in cl. 6.1.4(a)(ii).

To prevent the determination process from stalling, the parties should be required to act reasonably and in good faith to reach agreement on the above matters as soon as reasonably practicable.

Summary 11.3

The QCA's draft decision is that the appropriate way for Queensland Rail to amend the process in the 2020 DAU that applies when the QCA is responsible for resolving disputes (cl. 6.1.4) is to require the parties to a dispute that is described in cl. 6.1.4(a)(ii) to:

- (1) agree to be legally bound by the determination of the QCA, including agreement to pay any other party's costs as ordered by the QCA, before the QCA can start a determination process
- (2) act reasonably and in good faith to reach agreement on the above matters as soon as reasonably practicable.

The amendments the QCA considers appropriate are set out in cl. 6.1.4(a)(iii) in Appendix B.

11.3 Other matters

The following table provides the QCA's analysis and draft decisions in respect of other matters not discussed in the sections above.

Table 22 Other Part 6 matters—draft decision

<i>Issue</i>	<i>QCA analysis and draft decision</i>
Cl. 6.4—Queensland Rail proposed to update the transitional provisions so that references to 'the 2008 Undertaking' become 'AU1'.	The proposal is appropriate to be approved. ²⁷¹
Cl. 6.4(f) of 2016 undertaking—Queensland Rail proposed to remove a requirement for tariff reports for the West Moreton Network, which cover the period before the undertaking commences.	The proposal is appropriate to be approved if the 2020 DAU commences on 1 July 2020. If not, we consider it would be appropriate to include a similar cl. to cl. 6.4(f) of the 2016 undertaking, updated for the 2016 undertaking. We also consider that this requirement should be extended to include reports for other networks that are provided for under cl. 5.2.2(j)). In our view, this requirement reduces information asymmetry in negotiating and determining future access charges.
Cross-referencing errors	The following amendments are appropriate:

²⁷⁰ That is an 'access dispute' as defined under s. 112 of the QCA Act.

²⁷¹ We note that Aurizon Bulk advised it did not object to the proposed amendments to cl. 6.4 (Aurizon Bulk, sub. 11).

<i>Issue</i>	<i>QCA analysis and draft decision</i>
	<ul style="list-style-type: none">• cl. 6.1.2(b)—correct the reference to cl. 1.0.1(a)• any further amendments that are required to correct identified typographical or cross-referencing errors.

12 STANDARD ACCESS AGREEMENT (SCHEDULE H)

An access agreement must be consistent with the terms of the standard access agreement (SAA), unless the parties agree otherwise (cl. 2.94 of the 2020 DAU). Queensland Rail's proposed SAA is schedule H of the 2020 DAU (the proposed SAA). The proposed SAA sets out the standard terms and conditions for access to Queensland Rail's network.²⁷²

Queensland Rail proposed minor changes to the current SAA (as approved under the 2016 undertaking). Some of these changes reflect stakeholder feedback and others relate to changes to rail safety legislation.^{273,274}

Overview of the draft decision

While our draft decision is to require a number of amendments to the proposed SAA, there are many provisions we consider appropriate to be approved.

Standard access agreement (schedule H)—summary

<i>Queensland Rail proposal</i>	<i>SAA Clause</i>	<i>QCA draft decision</i>
Variations for productivity and efficiency improvements		
Access holders or train operators can seek a variation to the access agreement to promote or accommodate a demonstrable efficiency or productivity improvement for the supply chain.	1.3	The proposal is not appropriate to be approved. Amendments are appropriate to remove the words 'for the supply chain' (see section 12.1).
Operational rights for train operators		
There is a process for granting operational rights to train operators and the nomination of subsequent train operators.	3	It may not be appropriate to approve the proposed drafting, given our concerns about the clarity and workability of the clause, but we invite further submissions from Queensland Rail and stakeholders on this matter (see section 12.2).
Liability in relation to performance levels		
Queensland Rail is not liable for failing to meet performance levels, except as set out in agreed performance levels.	13.4(a)	The proposal is not appropriate to be approved. We accept the intent of this clause, but consider that amendments are appropriate to clarify the drafting (see section 12.3).
Security deposits		
Access holders must, in appropriate cases and having regard to the access holder's financial capability, provide a security deposit of at least six months of access charges	17.1 and sch. 1	The proposal is not appropriate to be approved. Amendments are appropriate to set the level of security as a maximum amount rather than a minimum amount, and to make future payment obligations under the agreement a factor to be

²⁷² References to clauses and schedules in this chapter are to the proposed SAA in schedule H of the 2020 DAU, unless otherwise specified.

²⁷³ Queensland Rail, sub. 2: 47, 59.

²⁷⁴ New Hope commended Queensland Rail's approach of making minimal changes to the current SAA, particularly given the rigorous review undertaken as part of the process for approving the 2016 undertaking (New Hope, sub. 14: 6, sub. 15: 23). Yancoal and New Hope generally supported Queensland Rail's proposal, but raised concerns about specific matters (Yancoal, sub. 16: 22; New Hope, sub. 14: 6, sub. 15: 23).

<i>Queensland Rail proposal</i>	<i>SAA Clause</i>	<i>QCA draft decision</i>
		considered when determining the security amount (see section 12.4).
Relinquishment fees		
Access holders must pay a fee for relinquishing their access rights that is 80 per cent of the present value of take-or-pay charges for the remainder of the agreement (unless the contracting parties agree otherwise).	21.2(c)	The overall proposal is not appropriate to be approved. Queensland Rail's proposal as it applies to reference tariff services is appropriate to be approved. However, the proposal to prescribe relinquishment fees for non-reference-tariff services is not appropriate to be approved (see section 12.5).
Requirements to negotiate or consult in good faith		
Various obligations to negotiate or consult in 'good faith' in the current SAA no longer apply.	Various	The proposal is not appropriate to be approved. Amendments are appropriate to reinstate the requirements to negotiate or consult in good faith that apply in the current SAA. We support Queensland Rail's intention to negotiate with stakeholders on the development of a definition of good faith (see section 12.6).
Other terms of the proposed SAA		
Other terms of the proposed SAA have been identified for further consideration.	Various	Our draft decision on each matter is provided in Table 23 in section 12.7.

12.1 Variations for productivity and efficiency improvements (cl. 1.3)

Queensland Rail proposed that access holders or train operators could seek a variation to the access agreement to promote or accommodate a demonstrable efficiency or productivity improvement for the supply chain. Queensland Rail would be required to reasonably consider the proposed variations, having regard to a non-exhaustive list of factors.

Key differences between Queensland Rail's proposal and the current SAA are:

- The requirement in the proposed SAA to consider variations for efficiency or productivity improvements is limited to supply chain improvements, but no such limitation applies in the current SAA.
- A non-exhaustive list of factors that Queensland Rail must have regard to when considering proposed variations is included in the proposed SAA.
- Queensland Rail is required in the current SAA to negotiate with customers in good faith, but the proposed SAA removes this requirement.

Queensland Rail argued that the proposed changes would promote certainty²⁷⁵, but stakeholders raised concerns with the proposal.²⁷⁶ New Hope and Aurizon Bulk did not agree that variations should only be considered where there are benefits to the supply chain.²⁷⁷ New Hope noted that this may limit the number of potential variations, including where the initial efficiency gains were specific to one aspect of the system, but did not promote supply chain efficiencies immediately.²⁷⁸

²⁷⁵ Queensland Rail, sub. 2: 47.

²⁷⁶ Aurizon Bulk, sub. 11; Aurizon Coal, sub. 12: 2; New Hope, sub. 15: 24; Yancoal, sub. 16: 22.

²⁷⁷ Aurizon Bulk, sub. 11; New Hope, sub. 15: 24.

²⁷⁸ New Hope, sub. 15: 24.

In response to stakeholders' concerns, Queensland Rail argued that the proposed changes did not reduce its obligations or narrow potential variations.²⁷⁹

Despite Queensland Rail's contention, the proposal appears to narrow the scope of potential variations to be considered, because supply chain improvements (to the extent these could be defined) are likely to be a subset of possible improvements. We consider that Queensland Rail's proposal is not appropriate to be approved, because it is not sufficiently flexible to require Queensland Rail to consider variations that may deliver a broader range of improvements to be considered. Therefore, Queensland Rail should amend cl. 1.3 to remove the words 'for the supply chain'. In our view, Queensland Rail's legitimate business interests would not be adversely affected, because Queensland Rail is only required to reasonably consider the proposed variations. Our draft decision is appropriate having regard to the factors in s. 138(2), including the object of Part 5, the legitimate business interests of Queensland Rail and the interests of access seekers and access holders (ss. 138(2)(a), (b), (e), (h)).

We have considered New Hope's argument that the list of factors Queensland Rail must have regard to when considering the proposed variation, as well as Queensland Rail's ability to have regard to other undefined factors, creates ambiguity.²⁸⁰ However, our view is that it is appropriate for Queensland Rail to have the flexibility to have regard to a range of factors, because the relevance of those factors will depend on the proposed variation being considered.

Many stakeholders would also like to see the requirement for Queensland Rail to negotiate in good faith being reinstated.²⁸¹ This issue, which applies to several clauses in the proposed SAA, is addressed in section 12.6.

Summary 12.1

The QCA's draft decision is that the appropriate way for Queensland Rail to amend the provisions on productivity and efficiency variations in the proposed SAA (cl. 1.3(a)) is to remove the words 'for the supply chain'.

12.2 Operational rights for train operators (cl. 3)

Queensland Rail proposed a process for granting operational rights to train operators and the nomination of subsequent train operators. Queensland Rail restructured the clause so that, in its view, the clause is clearer and the process of allocating access rights from one train operator to another is clarified.²⁸² Consequential amendments were also proposed (see cls. 4.2(a)(ii), (iv)).

While Queensland Rail's proposal simplifies the process for appointing subsequent operators, it also removes:

- the process for nominating, assessing or rejecting the initial operator
- the flexibility for appointing an initial operator after the execution of the agreement.

The proposed changes also affect the clarity of cl. 2.2(a)(i), because this clause indicates that the initial operator is nominated to operate some or all services in accordance with the agreement.

²⁷⁹ Queensland Rail, sub. 18: 18.

²⁸⁰ New Hope, sub. 15: 24.

²⁸¹ Aurizon Bulk, sub. 11; New Hope, sub. 15: 24; Aurizon Coal, sub. 12: 2; Pacific National, sub. 17: 17.

²⁸² Queensland Rail, sub. 2: 47.

Given these concerns, our preliminary view is that Queensland Rail's proposal may not be appropriate to be approved, because it creates uncertainty about the process for appointing the initial operator, particularly if a dispute arises as to the appointment of the initial operator. This may not be in the interests of Queensland Rail, train operators, access holders or access seekers or in the public interest (ss. 138(2)(b), (d), (e), (h)). We also note Aurizon Bulk's comment that the proposed changes are not necessary or warranted.²⁸³

In our view, it may be appropriate for Queensland Rail to amend the drafting to address the concerns we have raised about the process for appointing the initial operator or to reinstate the drafting that applies in the current SAA. If the latter, the parties could then negotiate how to amend or simplify it to better suit their circumstances. Queensland Rail indicated that this was the approach it had taken when negotiating and signing recent access agreements.²⁸⁴ We invite submissions from Queensland Rail and stakeholders on this issue, noting that it is in the interests of all parties that the SAA is clearly drafted and workable (ss. 138(2)(b), (d), (e), (h)).

Summary 12.2

The QCA's draft decision is that it may not be appropriate to approve the proposed drafting on granting operational rights to train operators in the proposed SAA (cl. 3), given concerns about the clarity and workability of the clause. The QCA invites submissions from stakeholders on this issue.

12.3 Liability in relation to performance levels (cl. 13.4)

Queensland Rail proposed not to be liable for failing to meet performance levels, except as set out in agreed performance levels (cl. 13.4(a)(iv)). Queensland Rail argued this was appropriate because performance levels were subject to negotiation between the parties and were thus unknown.²⁸⁵

Stakeholders did not support Queensland Rail's proposal.²⁸⁶ Pacific National argued that Queensland Rail should be held responsible for meeting its performance targets, and the risk of not meeting targets should not be shifted to customers.²⁸⁷ Aurizon Bulk stressed the importance of network performance levels to access holders.²⁸⁸

In our view, Queensland Rail's proposal is appropriate, because it is consistent with the requirement to report against the performance indicators listed in cl. 1(a) of schedule 5, rather than to meet certain performance obligations (see cl. 6.7(a)–(b)). The purpose of reporting against the indicators is to establish a level of baseline performance that can inform the contracting parties' negotiations to set performance levels and associated financial incentives and penalties (see cls. 6.7(c)–(f)).

We acknowledge the concerns raised by New Hope and Yancoal about the difficulty of establishing performance levels and incentives²⁸⁹ and note that a certain threshold of baseline reporting is required to give the parties meaningful data upon which to base their negotiations.

²⁸³ Aurizon Bulk, sub. 11.

²⁸⁴ Queensland Rail, sub. 2: 47.

²⁸⁵ Queensland Rail, sub. 2: 48.

²⁸⁶ Pacific National, sub. 17: 18–19; Aurizon Bulk, sub. 11; New Hope, sub. 15: 25; Yancoal, sub. 16: 23.

²⁸⁷ Pacific National, sub. 17: 18–19.

²⁸⁸ Aurizon Bulk, sub. 11.

²⁸⁹ New Hope, sub. 15: 25; Yancoal, sub. 16: 23.

However, we consider that the contracting parties are best placed to negotiate and agree appropriate performance levels and incentives/sanctions. To the extent they fail to reach agreement, the dispute resolution mechanism in cl. 19 is available.

Nevertheless, it is appropriate to amend the proposed SAA to improve the clarity and workability of the provisions relating to performance levels as follows:

- There should be a clear distinction between the performance levels listed in cl. 1(a) of schedule 5 and the performance levels to be agreed (see cls. 6.7(c)–(d); sch. 5, cls. 1.2–1.3) to reflect their different purposes. As currently drafted, the distinction is not clear. For instance, the former could refer to 'Performance Indicators' and the latter to 'Agreed Performance Levels'. Consequential amendments would also be required.
- Based on our proposed terminology:
 - cl. 6.7(d) should clearly state that incentives or sanctions as set out in schedule 5 apply in respect of the 'Agreed Performance Levels'
 - the clarity of cl. 13.4(a)(iv) could be improved by replacing the proposed clause with drafting to the effect of 'failure to meet Performance Indicators (but not including payments due for failure to meet the Agreed Performance Levels)'.
- Clause 6.7(e) should be amended so that disputes about a failure to agree performance levels and incentives/sanctions are directly referred to an expert to be resolved under cl. 19.3, because disputes of this nature would be more appropriately dealt with by an expert than by a court.

We consider that our proposed amendments to improve the clarity and workability of the provisions are in the interests of all parties (ss. 138(2)(b), (d), (e), (h)).

Summary 12.3

The QCA's draft decision is that the appropriate way for Queensland Rail to amend the provisions relating to performance levels in the proposed SAA is to:

- (1) clearly distinguish between the performance levels listed in item 1(a) of schedule 5 and the performance levels to be agreed (see cls. 6.7(c), (d); sch. 5, cls. 1.2, 1.3) and make consequential amendments as required
- (2) amend cl. 6.7(e) so that disputes are to be directly referred to an expert
- (3) clarify the drafting of cls. 6.7(d) and 13.4(a)(iv).

The QCA's suggested amendments are explained in section 12.3 of this draft decision.

12.4 Security deposits (cl. 17.1 and schedule 1)

Queensland Rail proposed that access holders must, in appropriate cases and having regard to the access holder's financial capability, provide a security deposit of at least six months of access charges (cl. 17.1 and sch. 1, item 11). The amount of security proposed is higher than the amount in the current SAA, which is 12 weeks of access charges. Queensland Rail argued that the proposed increase reflected its risk exposure in relation to the payment of access charges and other fees. Queensland Rail also noted that its proposal aligned with the level of security

approved by the QCA in other undertakings.²⁹⁰ Stakeholders did not support Queensland Rail's proposal to increase the security deposit.²⁹¹

In response to stakeholders' concerns, Queensland Rail argued that its approach to security was reasonable, noting that stakeholders did not submit that Queensland Rail imposed onerous or unnecessary security requirements. Queensland Rail advised that it either charged no security or significantly reduced the amount of security required, where an access holder had a demonstrated track record of meeting its financial obligations.²⁹²

The key issues around the security deposits are both the amount and the criteria that Queensland Rail must consider when determining that amount.

Security amount

While we do not consider that the level of security proposed by Queensland Rail is necessarily unreasonable, when weighing up the interests of Queensland Rail, access seekers and access holders (ss. 138(2)(b), (e), (h)), our draft decision is that it is not appropriate to approve Queensland Rail's proposal to apply the level of security as a minimum amount. We consider that the level of security should be specified as a maximum amount. Setting a maximum amount of security aligns with the requirement that access seekers must demonstrate their financial capacity to perform their obligations and satisfy their liabilities under an agreement before entering into an access agreement (cl. 2.8.3 of the 2020 DAU). It also appears to be consistent with Queensland Rail's stated practice (discussed above) of setting a lower amount of security, or no security, where access holders can demonstrate their financial capacity.

We acknowledge Queensland Rail's concern that it should be able to impose additional security requirements when an access holder does not have the financial backing of a larger parent company.²⁹³ To the extent that an access seeker does not meet the financial capacity requirements in cl. 2.8.3, setting a higher level of security would likely generate greater benefits (including to the access seeker and Queensland Rail) than a refusal by Queensland Rail to enter into an access agreement. In this instance, it should be open to the access seeker and Queensland Rail to negotiate an appropriate amount of security. We also consider that decisions by Queensland Rail to increase or decrease the security amount (after conducting a review under cl. 17.3) should not be subject to the maximum security amount because, as part of that review, the past financial performance of the access holder would be a factor to consider.

Queensland Rail has not proposed a security amount for train operators.²⁹⁴ If Queensland Rail intends that no security should apply, then references to the operator providing security in cl. 17 of the proposed SAA should be removed. If security is required from both the operator and the access holder, Queensland Rail should indicate (where relevant) how the security obligations should be appropriately allocated to avoid doubling up.

We consider that our proposed amendments appropriately balance Queensland Rail's legitimate business interests with the interests of access seekers and access holders (ss. 138(2)(b), (e), (h)).

²⁹⁰ Queensland Rail, sub. 2: 49.

²⁹¹ Aurizon Bulk, sub. 11; Yancoal, sub. 16: 23; New Hope, sub. 15: 24–25; Pacific National, sub. 17: 19–20.

²⁹² Queensland Rail, sub. 18: 19.

²⁹³ Queensland Rail, sub. 18: 19.

²⁹⁴ See sch. 1, item 11.

Summary 12.4

The QCA's draft decision is that the appropriate way for Queensland Rail to amend the provisions relating to security in the proposed SAA is to:

- (1) make the proposed Queensland Rail level of security apply as a maximum amount, rather than a minimum amount, in schedule 1
- (2) not prescribe a security amount to apply:
 - (a) when the access seeker does not satisfy the prudential requirements in cl. 2.8.3
 - (b) following a review of security under cl. 17.3
- (3) remove references in cl. 17 to train operators providing security (if not applicable).

Criteria to consider when determining security amount

Some stakeholders argued that the criteria to determining the security amount should be specified²⁹⁵, including the creditworthiness of the customer.²⁹⁶ While Queensland Rail's proposal already includes a requirement to consider the access seeker's financial capability (cl. 17.1), we consider that Queensland Rail should also be required to consider the expected future payment obligations under the agreement. This would be consistent with the criteria that apply when the amount of security is reviewed (cl. 17.3(a)(i)) and would provide appropriate flexibility to amend the security amount to reflect, for instance, the length of the access agreement. As pointed out by New Hope, the level of security proposed by Queensland Rail may be a large proportion of total contract liability for short-term agreements.²⁹⁷

Our proposed amendments appropriately balance Queensland Rail's legitimate business interests with the interests of access seekers and access holders (ss. 138(2)(b), (e), (h)).

Summary 12.5

The QCA's draft decision is that the appropriate way for Queensland Rail to amend the criteria for determining the security amount in the proposed SAA (cl. 17) is to make future payment obligations under the agreement a factor to be considered.

12.5 Relinquishment fees (cl. 21.2(c))

Queensland Rail proposed to require access holders to pay a fee to Queensland Rail if they relinquish all or part of their access rights (cl. 21.2(c)). Unless the parties agree otherwise, the relinquishment fee is 80 per cent of the present value of take-or-pay charges for the remainder of the agreement. The fee may be reduced if the relinquished access rights are granted to a new access holder. These provisions are unchanged from the provisions in the current SAA.

²⁹⁵ New Hope, sub. 15: 25.

²⁹⁶ Yancoal, sub. 16: 23; Pacific National, sub. 17: 19–20.

²⁹⁷ New Hope, sub. 15: 25.

Some stakeholders argued the relinquishment fee should be reduced:

- Aurizon Bulk said the relinquishment fee should be reduced if Queensland Rail could reasonably reduce its losses by reducing costs or securing additional volumes. Aurizon Bulk argued this would provide flexibility to current and future customers, encourage customers to contract only for those paths required and provide certainty to Queensland Rail to consider other access applications and its annual maintenance and capital works. It was suggested that limiting relinquishment fees to cover take-or-pay charges for a shorter period of time, such as one year, would be reasonable.²⁹⁸
- Pacific National considered that the approach to relinquishment fees did not provide incentives for long-term contracting for some freight operators. It argued that the current approach did not promote the most efficient utilisation of the network and considered the approach to calculating the fee should also be reduced, such covering take-or-pay charges for a shorter period of time.²⁹⁹

Queensland Rail responded that its proposal was consistent with its legitimate business interests in respect of revenue certainty and noted that access seekers could choose the contract length. Queensland Rail considered that a 12-month cap on take-or-pay obligations should not apply, as it would make the contract term meaningless.³⁰⁰

Application of prescribed relinquishment fee arrangements

Our draft decision is that it is appropriate to prescribe relinquishment fee arrangements for reference tariff services, but not for other services.

Consistent with our view on prescribing take-or-pay arrangements, we consider that prescribing relinquishment fee arrangements is appropriate for reference tariff services, because the allocation of risks, costs and entitlements has been considered when determining the reference tariff.

However, having regard to the factors in s. 138(2), we do not consider it appropriate to approve Queensland Rail's proposal because we do not consider that relinquishment fee arrangements (or take-or-pay arrangements) should be prescribed for non-reference-tariff services. In the absence of a reference tariff, the commercial negotiation of an agreement between Queensland Rail and the access seeker is the appropriate stage to consider the best package of risks, costs and entitlements. If commercial negotiations fail, either party may seek an arbitrated resolution under the QCA Act or the undertaking. We consider this approach appropriately balances the interests of Queensland Rail, access seekers and access holders (ss. 138(2)(b), (e), (h)).

²⁹⁸ Aurizon Bulk, sub. 11.

²⁹⁹ Pacific National, sub. 17: 3, 6, 20.

³⁰⁰ Queensland Rail, sub. 18: 25–26.

Summary 12.6

The QCA's draft decision is that the appropriate way for Queensland Rail to amend the provisions relating to the application of the prescribed relinquishment fee arrangements in the proposed SAA is to provide for relinquishment fees to be negotiated between the parties for non-reference-tariff services.

Relinquishment fees for reference tariff services

We propose to approve Queensland Rail's proposed relinquishment fee arrangements for reference tariff services. In our view, a relinquishment fee set at 80 per cent of the present value of remaining take-or-pay charges is appropriate to be approved because it provides a reasonable balance between:

- providing a sufficient reduction to access holders' remaining take-or-pay obligations to recognise the lower maintenance and operating costs to Queensland Rail of unused capacity (but noting that Queensland Rail has limited ability to vary planned maintenance tasks to respond to temporary fluctuations in usage) and to incentivise Queensland Rail to re-contract the relinquished paths
- being high enough to incentivise access holders to relinquish unused paths quickly to make them available for access seekers to contract and to contract for capacity they expect to use.

There are also provisions for the relinquishment fee to be reduced if the relinquished access rights are transferred or granted to an existing or prospective access holder before the date of relinquishment (cl. 21.3). Our draft decision is appropriate having regard to the factors in s. 138(2), including promoting the efficient use of, and investment in, the rail network and balancing the interests of Queensland Rail, access seekers and access holders (ss. 138(2)(a), (b), (e), (h)).

Summary 12.7

The QCA's draft decision is that it is appropriate to approve the provisions in the proposed SAA to set relinquishment fees—for services to which a reference tariff applies—at 80 per cent of the present value of take-or-pay charges for the remainder of the relevant access agreement.

12.6 Requirements to negotiate or consult in good faith (various clauses)

Queensland Rail proposed to remove various obligations to negotiate or consult in 'good faith' that were in the current SAA.³⁰¹ In explaining its proposal, Queensland Rail argued that the good faith concept was ambiguous and uncertain, particularly in relation to negotiations.³⁰² However, in response to stakeholders' concerns about removing the obligations³⁰³, Queensland Rail

³⁰¹ The clauses affected by this change are cls. 1.3, 6.7(c), 8.8(b), 18.2(c); sch. 3, cls. 2.2, 5.4(a).

³⁰² Queensland Rail, sub. 2: 47, 49.

³⁰³ Aurizon Bulk, sub. 11; Aurizon Coal, sub. 12: 2; New Hope, sub. 15: 23–24; Yancoal, sub. 16: 22; Pacific National, sub. 17: 17.

subsequently advised that it would consult with stakeholders on including an appropriate definition of 'good faith'.³⁰⁴

Retaining an obligation to negotiate in good faith is appropriate and consistent with the negotiation principle in s. 100(1) of the QCA Act. It is an appropriate standard to guide discussions, particularly where there may be an imbalance in negotiating power. We therefore do not consider it appropriate to remove the obligations to negotiate or consult in good faith. Our draft decision to retain these obligations appropriately balances the factors in s. 138(2), including the rights and interests of Queensland Rail, access seekers and access holders (ss. 138(2)(b), (e), (h)).

We support Queensland Rail's intention to negotiate with stakeholders on a definition of good faith, which the QCA will consider. New Hope has suggested a definition for consideration³⁰⁵; for clarity, we have not considered this definition in detail. Queensland Rail and stakeholders should consider appropriate wording.

Summary 12.8

The QCA's draft decision is that the appropriate way for Queensland Rail to amend the proposed SAA is to include the requirements to negotiate or consult in good faith that apply in the current SAA.

We support Queensland Rail's intention to negotiate with stakeholders on a definition of good faith, which the QCA will consider.

12.7 Other terms of the proposed SAA

The following table provides our draft decision on other terms in the proposed SAA that have been identified for further consideration and should be read in conjunction with the proposed SAA.

Table 23 Other terms of the proposed SAA—draft decision

<i>Issue</i>	<i>QCA analysis and draft decision</i>
Cl. 4.1(c)(i)—Queensland Rail proposed to remove the references to subsequent agreements contained in the current SAA to clarify the drafting. ³⁰⁶	The proposal is appropriate to be approved, as it is a minor procedural change relative to the current SAA.
Cl. 4.6(a)—Queensland Rail proposed an amendment to the current SAA to clarify that each party to the agreement (including the operator) provides the relevant representations and warranties. ³⁰⁷	The proposal is not appropriate to be approved. An operator must provide representations and warranties under cl. 23, so there is no need to add an additional requirement in cl. 4.6(a). Therefore, our draft decision is that amendments are appropriate to reinstate the drafting that applies in cl. 4.6(a) of the current SAA.
Cl. 5—Queensland Rail proposed amendments to the current SAA to reflect changes to rail safety legislation and clarify	The proposal, which reflects changes to rail safety legislation, is appropriate to be approved.

³⁰⁴ Queensland Rail, sub. 18: 18.

³⁰⁵ New Hope, sub. 15: 23–24.

³⁰⁶ Queensland Rail, sub. 2: 47.

³⁰⁷ Queensland Rail, sub. 2: 47.

<i>Issue</i>	<i>QCA analysis and draft decision</i>
that only relevant information is to be provided. ³⁰⁸	
Cl. 6.2(a)—Pacific National argued that the 10 business day timeframe for making payments, as proposed by Queensland Rail, should be extended to 45 days in line with rail industry practice. ³⁰⁹	Queensland Rail's proposed payment timeframe is appropriate to be approved. Pacific National has not justified its suggestion to extend the timeframe to 45 days and we are not aware of evidence to suggest that 10 business days is out of line with industry practice. We also note that a 10-business-day timeframe applies in Aurizon Network's current SAA. ³¹⁰
Cls. 7.3(f) 8.4(d) of the current SAA—Under Queensland Rail's proposal, the parties are not required to provide notification of actual or likely failures of the access agreement. These requirements are in the current SAA, but Queensland Rail said the requirements were inappropriate and not customary in commercial contracts. ³¹¹	Queensland Rail's proposal is not appropriate to be approved because it prevents the parties from preparing for likely breaches or mitigating the effects of actual breaches. ³¹² It does not appropriately balance the interests of Queensland Rail, access holders and train operators (ss. 138(2)(b), (h)). Queensland Rail should amend the clauses to reflect the requirements in the current SAA, except that notification should only be required for material breaches or likely breaches (otherwise the obligation is likely to be too onerous).
Cl. 8—Aurizon Bulk considered that additional train services and ad hoc train services were similar and should be consolidated under one request for extra train services that counts towards an access holder's take-or-pay obligations. ³¹³ In response to Aurizon Bulk's submission, Queensland Rail argued that the two services are different and that it did not support the consolidation of the definitions or consider there was a case for ad hoc services to be offset against take-or-pay obligations. ³¹⁴	Queensland Rail only prescribes take-or-pay provisions for reference tariff services (sch. D of the 2020 DAU). Queensland Rail's proposal of allowing additional services, but not ad hoc services, to offset an access holder's take-or-pay liability is appropriate to be approved. As noted by Queensland Rail, there are differences between ad hoc and additional services (as those terms are defined in the proposed SAA). An additional service is the same type of service as the contracted service, but an ad hoc service differs from the contracted service (for example, it could be a service with a different origin and destination). Under the take-or-pay provisions, the access holder agrees to pay for the paths it has contracted, whether or not those paths are used. We do not consider it appropriate to use revenue from different types of services (i.e. ad hoc services) to reduce an access holder's take-or-pay liability. Our draft decision to approve Queensland Rail's proposal appropriately balances the interests of Queensland Rail and access holders (ss. 138(2)(b), (h)).
Cl. 8—Aurizon Bulk submitted that amendments were appropriate to ensure Queensland Rail provides additional and ad hoc train services wherever available and evidence to support any rejection of the request. ³¹⁵	Queensland Rail's proposal is appropriate to be approved. We do not consider that Aurizon Bulk's suggested amendments are appropriate. We consider Queensland Rail has an incentive to provide additional and ad hoc services to increase its revenue and note Aurizon Bulk's

³⁰⁸ Queensland Rail, sub. 2: 48.

³⁰⁹ Pacific National, sub. 17: 17.

³¹⁰ See cl. 5.3(a)(i) of Aurizon Network's 2017 access undertaking SAA.

³¹¹ Queensland Rail, sub. 2: 48.

³¹² We also note that Queensland Rail's proposal was not supported by Aurizon Bulk or Pacific National (Aurizon Bulk, sub. 11; Pacific National, sub. 17: 17–18).

³¹³ Aurizon Bulk, sub. 11.

³¹⁴ Queensland Rail, sub. 18: 26–27.

³¹⁵ Aurizon Bulk, sub. 11.

<i>Issue</i>	<i>QCA analysis and draft decision</i>
	comment that Queensland Rail has been accommodating and reasonable in practice. ³¹⁶
Cls. 8.4(c), 10.2(c), 10.7(a) and 11(c)—Pacific National submitted that Queensland Rail should only be allowed to recover 'reasonable' costs and expenses. ³¹⁷	Queensland Rail's proposal is not appropriate to be approved. In relation to cls. 8.4(c), 10.2(c) and 11(c), it is appropriate to include the caveat proposed by Pacific National to balance the interests of the contracting parties. Queensland Rail should be able to recover reasonable costs, while access holders should not be liable for costs that are excessive (ss. 138(2)(b), (e), (h)). However, we do not consider it is appropriate to add this caveat to cl. 10.7(a), because there are sufficient protections within the clause requiring Queensland Rail to act reasonably.
Cl. 9.2(d)—Queensland Rail proposed to clarify that changes to the interface risk management plan (IRMP) could be made by exchanging written notices. Queensland Rail considered the amendment would remove an unnecessary administrative burden and enable safety issues to be dealt with quickly. ³¹⁸	Queensland Rail's proposal is not appropriate to be approved. We accept the intent of Queensland Rail's proposal to simplify the process of changing the IRMP and consider that the rights of the contracting parties are not affected. However, amendments to cl. 9.2(d) are appropriate to clarify the drafting in a manner similar to the following: '(d) For administrative ease, the IRMP may be amended by way of written communications between the duly authorised representatives of the Parties.'
Cls. 9.3, 9.10, 10.1 and 28.1—Queensland Rail proposed a number of amendments to the current SAA to reflect changes to rail safety legislation and the establishment of the Office of the National Rail Safety Regulator. ³¹⁹	Queensland Rail's proposal is not appropriate to be approved. We have reviewed Queensland Rail's proposal and consider the following amendments are appropriate: <ul style="list-style-type: none"> • the definition of 'RNSL' needs to be amended to reflect that the Queensland and South Australian laws are separate acts and to refer the South Australian National Law • the removal of the definition of 'Railway Operator' requires consequential amendments to schedule 2, where the term 'Railway Operator' is still used.
Cl. 10.2(c)—Pacific National submitted that amendments should be made to this clause to only enable Queensland Rail to do anything it considers 'reasonably' necessary. ³²⁰	Queensland Rail's proposal is not appropriate to be approved. It is appropriate for Queensland Rail to amend cl. 10.2(c) as suggested by Pacific National. Including this caveat is appropriate to guide the actions taken by Queensland Rail and strikes a reasonable balance between the interests of the contracting parties (ss. 138(2)(b), (h)).
Cl. 10.7—Pacific National argued that the ability to use dispute resolution for disputes about the noise mitigation requirements should be made explicit. ³²¹	While the general dispute resolution mechanism in cl. 19 would apply to disputes in relation to this clause, we do not consider that Queensland Rail's proposal is appropriate to be approved because it may result in disputes being referred to a court, even though disputes of this nature would be more appropriately dealt with by an expert. Queensland Rail should include an additional provision to provide that disputes in relation to cl. 10.7 are directly referred to an expert for resolution under cl. 19.3.

³¹⁶ Aurizon Bulk, sub. 11.

³¹⁷ Pacific National, sub. 17: 17.

³¹⁸ Queensland Rail, sub. 2: 48.

³¹⁹ Queensland Rail, sub. 2: 48–49.

³²⁰ Pacific National, sub. 17: 18.

³²¹ Pacific National, sub. 17: 18

<i>Issue</i>	<i>QCA analysis and draft decision</i>
<p>Cl. 12.2—Pacific National argued that the clause should be clarified to specify that Queensland Rail is not indemnified in the event that it is negligent. Pacific National also suggested removing cls. 12.2(c) and 12.2(d).³²²</p>	<p>Queensland Rail's proposal is appropriate to be approved. This clause applies where the operator's customer is not a party to the SAA and is intended to apply the same limitations on the potential liability of Queensland Rail as those that apply under cl. 13 to the operator's customer. Queensland Rail's potential liability for negligence is considered in cl. 13.</p> <p>Pacific National has not provided any reasons for deleting cls. 12.2(c) and (d) and these clauses are consistent with the intent of cls. 12.2(a) and (b).</p>
<p>Cl. 15—Queensland Rail proposed to amend the current SAA by including cl. 15.1 to clarify that cls. 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. Queensland Rail advised that these changes are necessary to address the ipso facto legislative amendments.³²³</p>	<p>Queensland Rail's proposal is appropriate to be approved given the introduction of the new ipso facto regime. While Queensland Rail advised that consequential amendments should be made to cl. 17.2, which deals with Queensland Rail's recourse to security, it did not appear to submit any proposed amendments. We will consider proposals in relation to further amendments in response to the draft decision.</p>
<p>Cl. 15.2(a)—Pacific National considered the clause should be amended to protect the operator from Queensland Rail terminating the agreement, if the operator is not liable for a failure under the agreement. Pacific National proposed similar wording to cl. 15.4(c).³²⁴</p>	<p>Queensland Rail's proposed cls. 15.2(a) and 15.3(a) are not appropriate to be approved. It is appropriate for Queensland Rail to amend cls. 15.2(a) and 15.3(a) to reflect the wording in cl. 15.4(c). Providing reciprocal rights in relation to the ability to terminate an agreement appropriately balances the interests of Queensland Rail, access seekers, access holders and train operators (ss. 138(2)(b), (e), (h)).</p>
<p>Cl. 15.4—Pacific National argued that the operator should be able to terminate the agreement if Queensland Rail fails to comply with safety related obligations in the agreement (consistent with Queensland Rail's rights in cl. 15.2).³²⁵</p>	<p>Queensland Rail's proposal is appropriate to be approved. We do not consider that the amendments proposed by Pacific National are necessary, noting that the operator's rights under cl. 15.4(c) are likely to address Pacific National's concern.</p>
<p>Cl. 16.9—Pacific National argued that the clause appears to be incorrectly drafted because insurance claims paid are for liability to Queensland Rail, not necessarily damage to the network.³²⁶</p>	<p>Queensland Rail's proposal is appropriate to be approved. We do not consider that cl. 16.9 implies that all claims are paid in respect of damage to the network. Clause 16.9 covers a specific situation where there is damage to the network, but does not limit other circumstances of liability to Queensland Rail.</p>
<p>Cl. 18.2—Pacific National argued that access holders should not be required to pay higher costs if there is a change in taxes, law or credit. This is an example of Queensland Rail attempting to shift risk on to its customers who are not better placed to manage the risk.³²⁷</p>	<p>Queensland Rail's proposal, which only applies to non-reference-tariff services, is appropriate to be approved. The clause appropriately addresses how adjustments to access charges are to be made when there is a change in costs due to the occurrence of certain events that are outside Queensland Rail's control. Relevantly, it provides for adjustments that reflect cost decreases, as well as cost increases. While we consider the proposed clause is an</p>

³²² Pacific National, sub. 17: 18

³²³ Queensland Rail, sub. 2: 49.

³²⁴ Pacific National, sub. 17: 19.

³²⁵ Pacific National, sub. 17: 19.

³²⁶ Pacific National, sub. 17: 19.

³²⁷ Pacific National, sub. 17: 20.

<i>Issue</i>	<i>QCA analysis and draft decision</i>
	<p>appropriate default contract provision, the parties may negotiate variations.</p> <p>Our draft decision appropriately balances Queensland Rail's legitimate business interests with the interest of access seekers and access holders (ss. 138(2)(b), (e), (h)).</p>
<p>Cl. 19.4 of current SAA—Queensland Rail proposed to remove this clause, which was included in the current SAA, to reflect the commencement of the Rail Safety National Law (Queensland) and the establishment of the Office of the National Rail Safety Regulator, which has no jurisdiction to resolve disputes.³²⁸</p>	<p>Queensland Rail's proposal is not appropriate to be approved having regard to the s. 138(2) factors.³²⁹ While the changes to the safety laws mean that the national regulator has no jurisdiction to resolve disputes under the national law, Queensland Rail should amend its proposal so that disputes relating to safety issues are to be referred to an expert for resolution under cl. 19.3. We expect that safety-related disputes would be more appropriately dealt with by an expert than a court.</p>
<p>Various clauses—Queensland Rail's proposed dispute resolution mechanism (cl. 19) requires the parties to agree to refer a dispute to an expert, unless the SAA explicitly requires a dispute to be referred to an expert.</p>	<p>Elsewhere in this chapter, we have identified disputes that may be more appropriately considered by an expert rather than being referred directly to a court (for example, disputes in relation to noise mitigation requirements and performance levels). There may be other instances where disputes would be more appropriately, and also potentially more efficiently, dealt with by a relevant expert (such as disputes that relate to technical matters). Under the proposed drafting, these types of disputes would be referred to a court if the parties could not agree on expert review (unless the relevant clause specifically calls for expert review).³³⁰</p> <p>We consider that such an approach may more appropriately balance the interests of Queensland Rail, access holders, train operators and customers (ss. 138(2)(b), (d), (e), (h)). However, we welcome comments from stakeholders in relation to these matters and particularly as to specific circumstances where disputes may be better referred directly to an expert. Relevant clauses for further consideration by stakeholders may include cls. 8.8, 8.9, 8.10, 9.2, 9.6–9.8³³¹, 10.1, 11.</p>
<p>Pacific National argued that Queensland Rail should reimburse train operators for take-or-pay charges incurred on the Aurizon Network sections of the North Coast line, when train services are not used on those sections due to a Queensland Rail cause.³³²</p>	<p>In the absence of a reference tariff applying on the North Coast line and given the limited and specific circumstances to which reimbursement may apply, we consider it would be appropriate for these matters to be negotiated between the contracting parties as part of an overall package of risks, costs and entitlements. In our view, this approach appropriately balances the interests of Queensland Rail, access seekers and access holders (ss. 138(2)(b), (e), (h)).</p>
<p>Various corrections and updates.</p>	<p>We consider that it is appropriate for Queensland Rail to make the following amendments:</p> <ul style="list-style-type: none"> • cl. 8.10(b)(i)—add 'to' after the word 'relation' • cl. 19.3(b)(i)(B)—The term 'Institute of Chartered Accounts in Australia' is not current and should be

³²⁸ Queensland Rail, sub. 2: 49.

³²⁹ Aurizon Bulk did not support the removal of this clause (Aurizon Bulk, sub. 11).

³³⁰ We are not suggesting that drafting be adopted that prevents relevant stakeholders from resolving the dispute between themselves prior to escalation to an expert.

³³¹ Although disputes arising under these clauses that relate to compliance are likely to be matters for a court.

³³² Pacific National, sub. 17: 21.

<i>Issue</i>	<i>QCA analysis and draft decision</i>
	<p>changed to 'Chartered Accountants Australia and New Zealand'</p> <ul style="list-style-type: none">• cl. 28.1—in the definition of Access Charge Input, the reference to cl. 0 of schedule 3 should be corrected• schedule 3—references to cl. 0 should be corrected• any further amendments required to correct identified typographical or cross-referencing errors. <p>It is in the interests of all parties that the SAA is workable and free from errors (ss. 138(2)(b), (d), (e), (h)).</p>

GLOSSARY

ACCC	Australian Competition and Consumer Commission
AER	Australian Energy Regulator
ARTC	Australian Rail Track Corporation
cl., cls.	clause, clauses
CPI	consumer price index
CQCN	Central Queensland coal network
DAAU	draft amending access undertaking
DAU	draft access undertaking
DBCT	Dalrymple Bay Coal Terminal
DTP	daily train plan
ERA	Economic Regulation Authority (Western Australia)
ESC	Essential Services Commission (Victoria)
ESCOSA	Essential Services Commission of South Australia
Frontier	Frontier Economics
GDP	gross domestic product
gtk	gross tonne kilometres
HVCN	Hunter Valley Coal Network
IEA	International Energy Agency
Incenta	Incenta Economic Consulting
IPART	Independent Pricing and Regulatory Tribunal (New South Wales)
IRMP	interface risk management plan
MAR	maximum allowable revenue
mgtk	million gross tonne kilometres
MRP	market risk premium
mtp	master train plan
mtpa	million tonne(s) per annum
NMP	network management principles
nt	net tonne
ORM	operating requirements manual
QBH	Queensland Bulk Handling
QCA	Queensland Competition Authority
QCA Act	<i>Queensland Competition Authority Act 1997</i>
RAB	regulatory asset base
RBA	Reserve Bank of Australia

s., ss.	section, sections
SAA	standard access agreement
sch.	schedule
Systra	Systra Scott Lister
TPI	The Pilbara Infrastructure
TRR	total revenue requirement
TSC	Transport Service Contract
TSE	train service entitlement
WACC	weighted average cost of capital
2015 DAU	the draft access undertaking submitted by Queensland Rail to the QCA on 5 May 2015
2016 undertaking	Queensland Rail's current access undertaking, which came into effect on 11 October 2016 and terminates on 30 June 2020
2020 DAU	the draft access undertaking submitted by Queensland Rail to the QCA on 14 August 2018

APPENDIX A: FIRST PRINCIPLES ANALYSIS

This appendix outlines the QCA's first principles assessment of an appropriate set of comparators for determining West Moreton coal's³³³ beta estimate.

From this analysis, the QCA considers that the comparators considered by Queensland Rail to have some relevance (toll roads, Class 1 railroads, North American pipelines, ports and airports business groups) are all likely to be exposed to comparatively higher systematic risk than West Moreton coal. At the same time, the QCA considers that the West Moreton system is likely to exhibit a level of systematic risk that is greater than that of a typical regulated energy and water business.

In assessing an appropriate set of comparators for West Moreton coal, the QCA has had regard to the key risk characteristics of West Moreton coal, as well as those of potentially comparable firms.

Queensland Rail's first principles analysis

Queensland Rail provided a first principles analysis conducted by its consultant, Frontier Economics (Frontier). Frontier considered that there would be few, if any, comparator industries that would embody all of Queensland Rail's key characteristics. As such, Frontier said that comparators should be selected and afforded weight based on the extent to which their asset beta reflects conditions relevant to Queensland Rail, when compared with alternative comparators. Frontier undertook this analysis by reference to Queensland Rail's network as a whole, rather than by reference to West Moreton coal. The key characteristics that Frontier considered were whether the firm:

- is a transport infrastructure operator
- is used to transport a mix of bulk freight and other kinds of freight
- has a reasonably small number of larger customers
- is exposed to competition in some or all components of the business
- is exposed to changes in demand from changes in global commodity prices.³³⁴

Frontier conducted a first principles analysis by evaluating how well firms in different industries reflected these characteristics. As part of its analysis, Frontier considered samples from the following business groups:

- Class 1 railroads
- ports
- airports
- toll roads
- oil and gas transmission pipelines
- regulated water and energy firms.

From its analysis, Frontier concluded that Class 1 railroads and ports were the most relevant comparators, and provided weightings of 40 per cent to Class 1 railroads and 30 per cent to ports. Airports, considered

³³³ By West Moreton coal, the QCA refers to Queensland Rail's operations providing below-rail access to coal-carrying train services on the West Moreton system.

³³⁴ Queensland Rail, sub. 4: 3.

to be the next most relevant comparator, were assigned a weighting of 15 per cent. Frontier stated that toll roads and pipelines were less relevant, and applied weightings of 15 per cent and 0 per cent respectively. According to Frontier, energy and water businesses were not relevant at all, sharing no key, risk-based features with Queensland Rail.³³⁵

The QCA's approach

As discussed in Chapter 3, we consider that it is appropriate to determine a WACC by having regard to risks borne by Queensland Rail's coal operations on the West Moreton system, rather than its operations on the entire network. Consequently, our approach for conducting this first principles analysis has focused specifically on Queensland Rail's coal operations on the West Moreton system.

In identifying appropriate comparators for Queensland Rail, we have considered the extent to which the proposed industry group comparators are exposed to similar levels of systematic risk (that is, covariance of their returns with market returns) as Queensland Rail's West Moreton coal business. We consider that this approach will identify an appropriate set of firms with systematic risk that is comparable to that of West Moreton coal, and is preferable to Frontier's approach of assigning weights to different industry groups that were selected on the basis of physical or operational characteristics that are similar to Queensland Rail's. While similarity of physical or operational characteristics could also indicate similar covariance risk, this will not necessarily be the case.

As such, establishing appropriate comparators necessarily requires us to consider West Moreton coal's exposure to systematic risk. Our analysis examines industry, regulatory and market characteristics that are most likely to affect Queensland Rail's exposure to risk in providing access for West Moreton coal.

In assessing the business group's exposure to systematic risk, the QCA's first principles analysis has had regard to, amongst other things, a number of potential determinants of beta:

- market power and the regulatory framework
- income elasticity of demand and nature of the customer
- asset stranding risk
- contracting
- operating leverage
- growth options
- pricing structure.

To determine which of these business groups are appropriate comparators, we have examined the relevance of these characteristics for the systematic risk of West Moreton coal, as well as for the systematic risk of each of the business group samples proposed by Frontier.

Queensland Rail's exposure to risk in the West Moreton system

In considering Queensland Rail's exposure to risk, amongst other things, we have examined those factors affecting Queensland Rail's exposure to risk associated with providing access for coal services on the West Moreton system. This includes considering the market characteristics associated with Queensland Rail's coal haulage services, as well as the way in which risk is addressed within the regulatory framework.

³³⁵ Queensland Rail, sub. 4: 4, 18.

A regulatory framework that helps insulate West Moreton coal revenue

Queensland Rail's customers on the West Moreton system have no alternatives to transport their coal to port. As part of the regulatory regime, the QCA assesses and approves a tariff for coal transported on the West Moreton system. The QCA uses a building blocks approach that has regard to the expected, efficient costs of operating and maintaining the network. In addition, price risk is mitigated for Queensland Rail, as it will receive the same amount of revenue per service, regardless of the price of coal.

An important feature of the Queensland Rail regulatory framework is 100 per cent take or pay on contracted volumes. Consequently, contracted volumes provide a revenue floor for Queensland Rail. Contracted volumes have accounted for approximately 85 per cent of volumes railed on West Moreton over the last three years. We consider that measures in this draft decision will give access seekers a stronger incentive to enter into take-or-pay contracts—we propose that a 5 per cent premium be charged for non-contracted paths, on top of the access charge for contracted paths (see section 2.3.2).

The take-or-pay contracts mitigate much of the short-run volume risk faced by Queensland Rail—short-term volume risk is completely mitigated where Queensland Rail contracts 8.5 million tonnes a year. However, the QCA acknowledges that Queensland Rail is exposed to some risk in the event that contracts are not renewed, or are renewed at a level below 8.5 million tonnes.

For the 2020 access undertaking, our draft decision recommends introducing an approach that sets the tariff by having regard to the coal-carrying capacity of the network. Under the proposed tariff approach, the reference tariff is set independently from the forecast volume level, based on an annual network utilisation level of 8.5 million tonnes. Relevantly, Queensland Rail has forecast annual volumes of 9.1 million tonnes for the regulatory period, which would allow it to earn revenue above the total revenue requirement used in the QCA's assessment of the West Moreton tariff.

Additionally, our draft decision proposes a tariff premium in instances where Queensland Rail has under-recovered (see section 5.2.2). This premium would have a cap of 15 per cent of the high-volume tariff, and would mitigate Queensland Rail's risk of a revenue shortfall associated with a decline in volumes.

Queensland Rail's reference tariffs and take-or-pay contracts are only two features of the regulatory framework that materially buffer its cash flows from cyclical movements in the economy. A number of other regulatory mechanisms, which feature in the QCA Act or have been proposed as part of the Queensland Rail 2020 DAU process, contribute to insulating Queensland Rail's revenue stream from external shocks. These mechanisms include, but are not limited to:

- the right of Queensland Rail to submit a draft amending access undertaking under the QCA Act
- the ability for Queensland Rail to recover capital expenditure where it might differ from forecast levels, should the QCA approve it
- security requirements for Queensland Rail, with access holders required to pay relinquishment fees (80% of the remaining access charges) in the event that they surrender their contracted volumes
- limited-life loss capitalisation to provide Queensland Rail with the opportunity to recover any losses of revenue over a five-year period—the QCA has proposed that capitalised losses would be recovered through increases in the tariff in years where volumes returned to a level sufficient to provide revenue adequacy to Queensland Rail
- limited asset optimisation, restricting the scope for Queensland Rail's RAB to be lowered
- a capacity investment framework that provides Queensland Rail with the ability to secure capital underwriting.

We consider that Queensland Rail's market position as the sole below-rail service provider for the mines in the West Moreton system and the resulting regulatory framework afford a high level of revenue insulation, which significantly dampens Queensland Rail's exposure to systematic risk.

Stable demand for thermal coal from the West Moreton system

The West Moreton system is predominantly used to transport thermal coal from the Cameby Downs and New Acland mines to the Queensland Bulk Handling (QBH) export terminal. While some small portion of this thermal coal is used domestically, the majority is exported and sold on the seaborne thermal coal market—much of it is destined to Asia as an input for electricity generation.

RMI's (2017) market outlook for thermal coal considered that demand will be driven by, amongst other things, the construction of High Efficiency Low Emissions thermal coal power stations, with new plants well advanced in Vietnam, India, Pakistan, Malaysia, Thailand and Egypt.³³⁶

Bloomberg analysts consider that Southeast Asia will play a pivotal role in import growth of thermal coal. They forecast that over the next three years annual demand could rise by 59 million tonnes in the region.³³⁷ Specifically, Vietnam has 8 gigawatts of coal-fired capacity under construction through to 2021, Bangladesh's Rampal and Matarbar coal-fired power plants are being brought online, and Pakistan is expected to increase its demand for coal products significantly.

Overlaying the increase in demand for thermal coal within Southeast Asia is the move towards cleaner coal products. South Korea has recently implemented tax incentives that favour low sulphur coals and coals with high calorific values, while China is placing import restrictions on Indonesia's low quality coal. India, Japan and other Southeast Asian countries are all moving toward higher quality suppliers from Australia, Russia and South Africa.³³⁸

The recent price movements of different calorific coal blends demonstrate the preference for higher quality coal. For instance, the price of 4200k kcal/kg coal (typically regarded as low quality) dropped from US\$50 per tonne to US\$31 per tonne in 2018.³³⁹ Even among higher-calorific blends (generally regarded as higher quality), the price gap has widened in favour of higher quality products (see Figure 10).

³³⁶ RMI, *Assessment of Coal Volume Forecasts for Aurizon Network's 2017 Draft Access Undertaking*, 2017: 6.

³³⁷ Incenta, *Estimating Queensland Rail's WACC for the 2020 DAU—Stage Two*, 2019: 14.

³³⁸ Incenta, *Estimating Queensland Rail's WACC for the 2020 DAU—Stage Two*, 2019: 14.

³³⁹ Incenta, *Estimating Queensland Rail's WACC for the 2020 DAU—Stage Two*, 2019: 14.

Figure 10 Historical thermal coal prices by calorific value

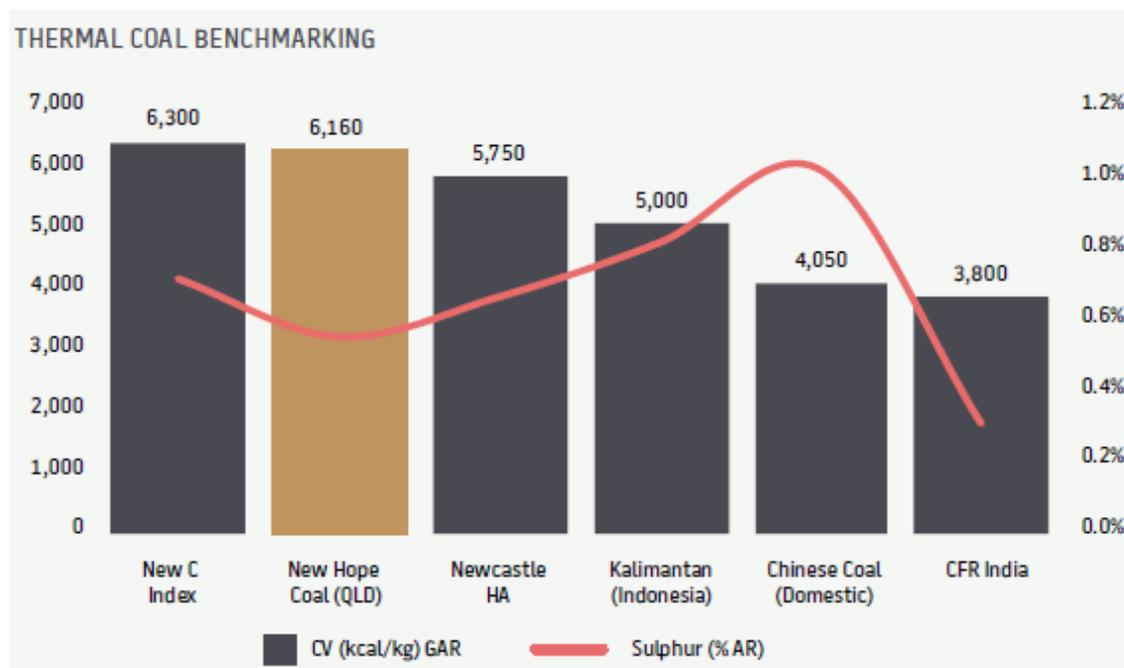
Source: Incenta, *Estimating Queensland Rail's WACC for the 2020 DAU—Stage Two*.

Bloomberg views Australia as the thermal coal success story over the coming years, as a result of low cost structure, proximity to growing Asian markets, and high quality coal.³⁴⁰

This preference for higher quality coal in the evolving seaborne coal market is likely to make West Moreton coal highly sought after. The Cameby Downs mine produces coal that is high in calorific value (6300 kcal/kg) and low in sulphur (approximately 0.45%).³⁴¹ Similarly, New Acland produces coal of a high calorific value (6160 kcal/kg) and a low level of sulphur (approximately 0.55%) (see Figure 11).

³⁴⁰ Incenta, *Estimating Queensland Rail's WACC for the 2020 DAU - Stage Two*, 2019: 19.

³⁴¹ MiningLink, [Site/Cameby Downs](#), web page, accessed 4 February 2019.

Figure 11 Thermal coal benchmarking

Source: New Hope Group, 2017–18 Annual Report.

Given the attributes of West Moreton coal, we consider that demand from Asia for thermal coal from the West Moreton system will persist for the short and medium term. Queensland Rail also said it expected the coal price to remain strong over the medium term, driven by demand in Asian markets and a shift towards increased use of premium coals, including Australian export thermal coals.³⁴²

As such, we consider that both Yancoal and New Hope are well-placed to secure demand for their coal in the future, as are any future producers mining similar coal from the same basins.

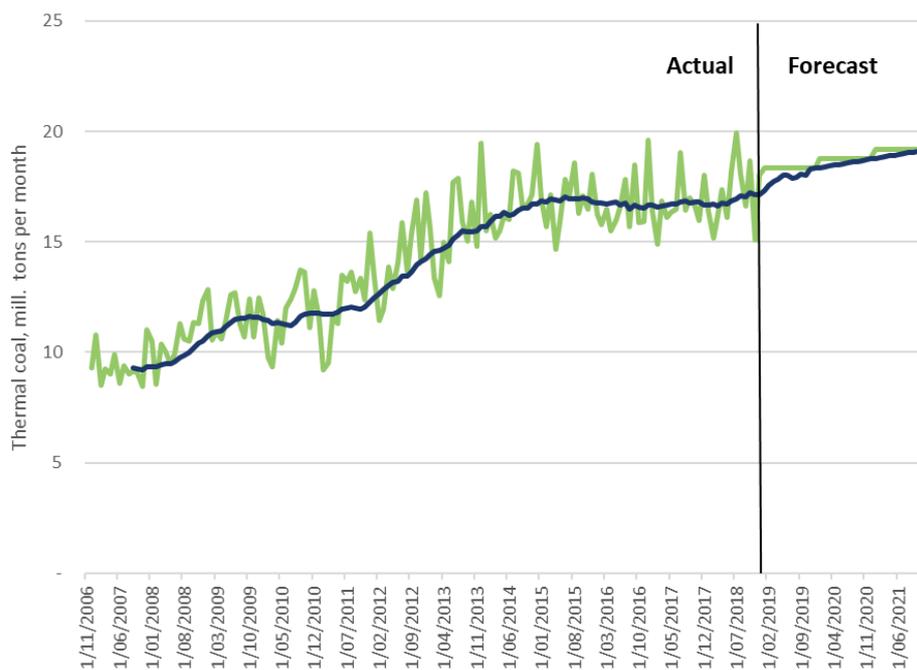
In the longer term (through to 2040), the IEA, in its 2018 World Energy Outlook, forecasts that a decline in demand for thermal coal in advanced economies will be largely offset by increasing demand in developing economies.³⁴³ The IEA considered that 'it was too soon to count coal out of the global power mix', with the average age of a coal-fired plant in Asia being less than 15 years, compared with around 40 years in advanced economies. While there are potential constraints on long-term demand for thermal coal, we consider that in a carbon-constrained environment higher quality coal will be favoured and will increase in demand in the medium term.

As Australia exports most of its thermal coal to Asia as an input for electricity generation, we would expect demand for Australian thermal coal to be relatively stable (see Figure 12). A significant proportion of electricity demand will belong to residential consumption, which tends to be largely independent of the state of the market. Additionally, a number of the countries that import Australian thermal coal are undergoing urbanisation and industrialisation, leading to sustained demand for thermal power. Demand for coal exports has remained relatively consistent; in particular, there was no noticeable drop in demand over the period of the global financial crisis.

³⁴² Queensland Rail, sub. 2: 41.

³⁴³ IEA, *World Energy Outlook 2018—Executive Summary*, 2018: 4. This is part of the IEA's New Policies Scenario, which reflects, among other things, policies and targets announced by governments.

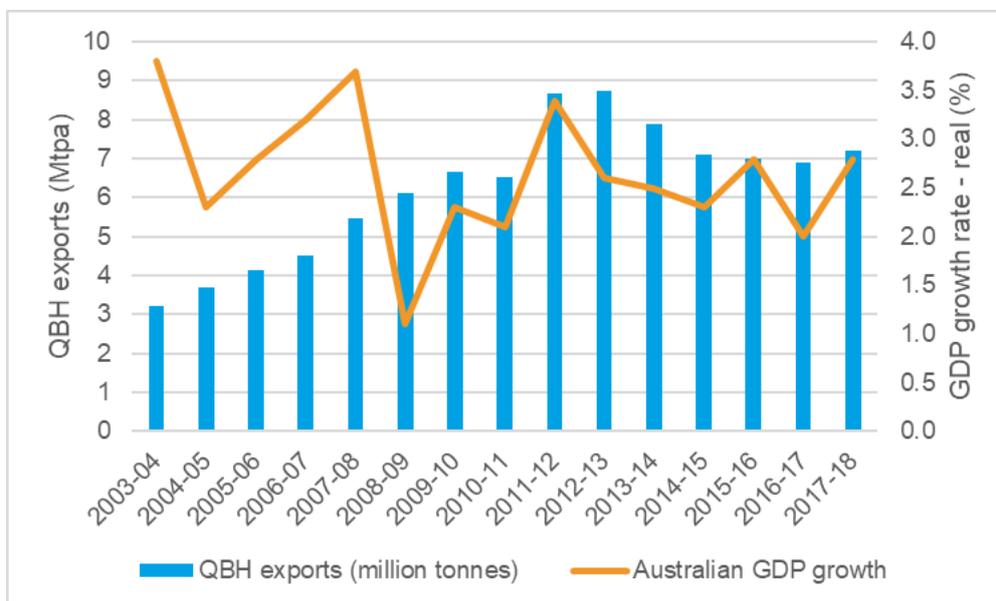
Figure 12 Australian thermal coal exports



Source: Incenta, *Estimating Queensland Rail's WACC for the 2020 DAU—asset beta, benchmark gearing, and credit rating*.

Data suggest a weak relationship between the state of the Australian economy and the demand for West Moreton coal. For example, export volumes from QBH—the sole coal export terminal for West Moreton coal—indicate that seaborne demand for West Moreton coal has not been responsive to changes in annualised GDP growth rates (Figure 13).³⁴⁴ Also, export volumes increased during the global financial crisis.

Figure 13 QBH exports and annualised Australian real GDP growth rates



Source: Australian Bureau of Statistics; QCA analysis.

³⁴⁴ While systematic risk is strictly a measure of a firm's returns relative to the market, we consider that GDP movements will be highly correlated with market returns.

Customers on West Moreton are highly incentivised to maintain production

Coal mines generally require high levels of capital outlay to commence production. High shut-down and start-up costs give mines an incentive to continue to produce coal even when the price drops below marginal cost—where this is expected to be temporary.

As outlined above, Queensland Rail receives 100 per cent take or pay on contracted volumes in the West Moreton system. As customers are still required to pay rail costs, regardless of whether they use their contracted volumes, this adds an extra level of incentive to maintain production. This is particularly the case for the West Moreton system, where rail costs form a significant proportion of marginal production costs.

Additionally, a relinquishment fee associated with terminating the contract—set at 80 per cent of remaining access charges—affords Queensland Rail with a high level of revenue security on its contracted volumes, as well as providing further incentives for its customers to continue raiing.

Furthermore, West Moreton coal's customers are likely to have longstanding relationships with their own customers, bolstered in many cases by long-term supply contracts.³⁴⁵ Failing to rail coal during a time of low thermal coal prices may risk disrupting these contracts and endangering longer-term stable revenue for the mines.

Yancoal noted that other coal supply arrangements, including coal-handling services by QBH and rail haulage by Aurizon Operations, were likely to make the demand for the reference service more inelastic, particularly given that both operate under take-or-pay regimes.³⁴⁶ Relevantly, New Hope, responsible for the majority of coal throughput along West Moreton, also owns the QBH terminal. A reduction in coal produced at the New Acland mine might not only damage important customer relations, but also reduce the profitability of its coal export terminal.

Accordingly, we consider that the incentives faced by these entities are such that they will continue to be highly motivated to maintain consistent production, even in circumstances where there is a significant short-term drop in the price of thermal coal.

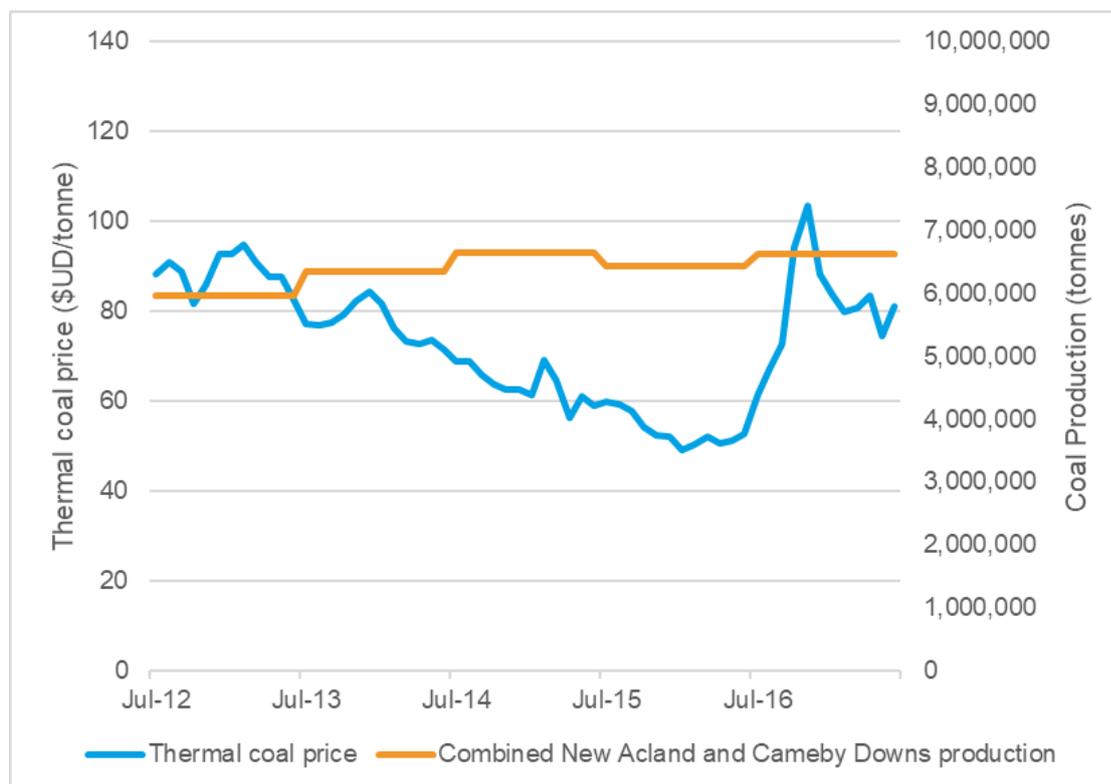
While existing users will have strong incentives to maintain production even at low thermal coal prices, we acknowledge that investments by prospective access holders with no committed investments are likely to be much more responsive to the state of the economy and the expected price of thermal coal.

Customer output has been resilient to fluctuating coal prices

The West Moreton system's resilient customer base makes it well-equipped to deal with a drop in thermal coal prices. Over the last five years, thermal coal prices have been turbulent. The price dipped to as low as US\$49 per tonne in January 2016 and rose to US\$120 per tonne in July 2018. However, over this period, combined volumes transported along the West Moreton system by Yancoal and New Hope have remained relatively stable.

³⁴⁵ Ernst & Young, *New Acland Coal Mine Stage 3 Project: Financial Impact Study*, September 2017: 27.

³⁴⁶ Yancoal, sub. 16: 9.

Figure 14 Combined production from New Acland and Cameby Downs mines, and thermal coal price

Source: QCA analysis; IndexMundi; Queensland Government—Production by individual mines.

In relation to the thermal coal transported on the West Moreton system, Frontier said low margins gave rise to a risk that a downturn in commodity prices would reduce demand for transportation from Queensland Rail, with mine closures plausible—as happened with Wilkie Creek in 2013.³⁴⁷

In general, counterparty risk for Queensland Rail must be considered in relation to the underlying drivers of demand in the relevant market, which is the seaborne thermal coal market. Fundamentally, the competitiveness of coal producers in the West Moreton system will be a key determinant of Queensland Rail's exposure to risk in the longer term—below-rail coal services will be sustained as long as end customers have a sustained demand for the output of mines.

We consider that the economics of the Wilkie Creek mine do not necessarily reflect those at the New Acland and Cameby Downs mines. The Wilkie Creek mine shut down in December 2013, at a time when thermal coal prices were approximately US\$84 per tonne. Both the New Acland and Cameby Downs mines kept operating during this period, and also during periods when prices were much lower than when Wilkie Creek closed.

Moreover, in November 2016—not long after thermal coal prices fell to US\$49 per tonne—Yancoal announced its Cameby Downs mine continued operations project. As part of the continued operations project, Yancoal has proposed to increase the life of the Cameby Downs mine to 70 years from 45 years at an increased annual production level of 2.75 million tonnes, up from 2.2 million tonnes.³⁴⁸ We regard this as further evidence that the economics of the Wilkie Creek and Cameby Downs mines differ and that, as a customer, Yancoal is resilient to a fall in the price of thermal coal.

³⁴⁷ Queensland Rail, sub. 4: 7.

³⁴⁸ Yancoal, November 2016: 4. In citing this increased production number, the QCA has assumed that the ratio of run-of-mine coal to processed thermal coal remains the same for the Cameby Downs mine.

Furthermore, despite thermal coal prices dropping below the price at which Wilkie Creek shut down, New Hope was still seeking approval for Stage 3 of its New Acland mine, which would extend the life of the mine by at least 12 years.

Limited customers on the West Morton system

Queensland Rail submitted that it had a small number of customers on the West Moreton system and considered that:

This raises the risk profile as a large reduction in demand could result from the decisions of a single customer. The New Acland coal mine in particular accounts for a substantial share of revenue ...³⁴⁹

Yancoal and New Hope did not agree that Queensland Rail faced a higher level of systematic risk because it had a smaller number of customers.³⁵⁰ In particular, New Hope submitted:

Simply having a smaller number of customers will not mean a business is more exposed to market risk factors, if demand from those customers is not tied to fluctuations in the general economy.³⁵¹

We view that, all other things being equal, having a smaller number of customers could increase the overall risk profile of a firm. A smaller customer base causes counterparty risk to be diversified across a smaller pool of customers, potentially amplifying the impact on revenue caused by a material decline in customer volumes. However, we acknowledge that this is only one factor that determines a firm's exposure to systematic risk—other market characteristics, such as the resilience of the customer base, may offset the effect of a small customer base.

At the time of this draft decision, Queensland Rail has two coal customers in the West Moreton system: New Hope, which operates the New Acland mine; and Yancoal, which operates the Cameby Downs mine.

Supply conditions from the Cameby Downs mine are strong, with the mine currently producing 2.2 million tonnes a year, with proposals to increase this to approximately 2.75 million tonnes³⁵², as well as extending the life of its mine to 2086.

New Hope is seeking approval for Stage 3 of the New Acland mine. Stage 2, which currently produces approximately 4.7 million tonnes a year, is expected to cease production in 2020. Should Stage 3 be approved, the annual volume railed by New Hope would increase to as much as 7.5 million tonnes for at least 12 years.³⁵³ If Stage 3 does not receive approval, it is likely that there will be at least a short-term reduction in demand for West Moreton rail haulage, with Yancoal becoming the only supplier of export coal.

The short-term uncertainty associated with New Acland mine's production highlights that Queensland Rail's smaller and less diverse customer base makes it more exposed to counterparty risk, should a customer stop railing.

Nevertheless, Queensland Rail's counterparty risk should also be considered in relation to the underlying drivers for demand in the seaborne thermal coal market. As outlined above, the market outlook for West Moreton coal remains positive. Queensland Rail submitted that in the medium term (5–10 years) and long

³⁴⁹ Queensland Rail, sub. 4: 6; sub. 4: 7

³⁵⁰ Yancoal, sub. 16: 7.

³⁵¹ New Hope, sub. 14: 20.

³⁵² Yancoal, November 2016: 4. Assuming the ratio for run-of-mine coal to processed thermal coal remains the same.

³⁵³ Ernst & Young, *New Acland Coal Mine Stage 3 Project: Financial Impact Study*, September 2017: 1.

term (10+ years), annual coal haulage volumes are expected to be 9.7 million tonnes, or even higher, should more infrastructure be built.³⁵⁴

We consider that the underlying drivers of demand for West Moreton coal will limit the counterparty risk for Queensland Rail. In addition to having a stable expected demand for a commodity that is relatively invariant to the state of the Australian economy, Queensland Rail's exposure to volume risk is also mitigated by it having a customer base that has shown resilience to price shocks and is heavily incentivised to maintain production. However, Queensland Rail's customer base exposes it to the risk of a customer being temporarily unable to rail.

Relevantly, we propose to implement a limited-life loss capitalisation mechanism to allow Queensland Rail with the opportunity to recover any losses of revenue, over a five-year period (see section 5.2.1). A staged write-down of these losses would then occur over a five-year period. This mechanism will help mitigate the extent to which Queensland Rail is exposed to counterparty risk, where a customer temporarily stops raiing.

Regulated energy and water businesses

Frontier's industry sample of regulated energy and water businesses consists of 78 firms from the United States, the United Kingdom, Canada and Australia.

Frontier considered that firms in the regulated energy and water sector were not informative comparators of Queensland Rail, noting that:

Failing to reside in the broad industry of transportation, such businesses also have very few similarities in terms of determinants of risk exposure.³⁵⁵

Our view is that the physical characteristics of a firm are not necessarily instructive of the systematic risk faced by the firm. What is important for determining systematic risk, is analysing factors that are likely to enhance or mitigate the variability of a firm's returns in response to changing market conditions. As such, we do not consider that simply because regulated energy and water businesses do not operate in the transportation industry, they are necessarily poor comparators for West Moreton coal. We have therefore assessed the key determinants of risk exposure for Queensland Rail's West Moreton system and regulated energy and water businesses, to determine whether they are appropriate comparators.

New Hope and Yancoal submitted that regulated energy and water businesses were appropriate comparators for West Moreton coal due to similar regulatory frameworks that provide risk protection mechanisms.³⁵⁶

The QCA considers that both Queensland Rail and regulated energy and water businesses have strong regulatory regimes that afford a high level of revenue certainty. The underlying cost-based regulatory framework sets controls for a predetermined period of time, eliminating price risk for both regulated energy and water businesses, and Queensland Rail.

Additionally, both Queensland Rail (in the West Moreton system) and regulated energy and water businesses are utility service providers, which have a customer base that has no alternative service options and that exhibits a resilient demand for the service through economic cycles. These characteristics jointly result in low sensitivity of demand to GDP shocks for West Moreton coal and regulated energy and water businesses.

³⁵⁴ Queensland Rail, sub. 18: 10.

³⁵⁵ Queensland Rail, sub. 4: 9.

³⁵⁶ New Hope, sub. 14: 22; Yancoal, sub. 16: 9.

However, the sources of their customers' resilience through economic cycles differ considerably and this could affect the overall risk profile facing these potential comparators. In this context, Frontier considered that energy and water businesses differ from Queensland Rail in two key regards:

- (a) Nature of the customer base—the diverse nature of customer and geography and demand mitigates demand risk that applies to energy and water distribution companies; and
- (b) Elasticity of demand for services—the lack of substitutes for an energy or water distribution company means that they are able to benefit from relatively inelastic demand.³⁵⁷

Furthermore, Frontier noted:

The demand risk of the coal network is more aligned with coal prices as it relies on demand of coal both in Queensland and internationally. Given the recent volatility in the global coal markets, demand for Queensland coal is likely to be more elastic than the demand for energy provided by energy networks.³⁵⁸

We consider that regulated energy and water businesses' revenues are resilient to economic cycles, as a significant component of demand comes from residential consumers with no other service options and with a low income elasticity of demand for the service. Similarly, customers on the West Moreton system have no alternative transport options and face strong incentives to maintain production. This has been the case over the last number of years, where coal volumes railed by New Hope and Yancoal have remained consistent despite volatility in the price of thermal coal. However, we consider that the customer base of regulated energy and water businesses provides for more resilient demand, compared to that of West Moreton coal.

While regulatory mechanisms and features of Queensland Rail's customer base mitigate much of Queensland Rail's volume risk, Queensland Rail will be exposed to volume risk in instances when customers have not contracted to high levels. In comparison, the characteristics of regulated energy and water customers will mitigate much of these firms' exposure to volume risk through the business cycle. Therefore, relative to West Moreton coal, regulated energy and water businesses are typically not as reliant on risk-mitigating mechanisms such as long-term, take-or-pay-contracts, to insulate them from volume risk.³⁵⁹ As a result, we view that under a price cap regulatory regime, West Moreton coal has the potential to be exposed to a greater degree of volume risk than regulated energy and water businesses.

Additionally, Queensland Rail has a smaller and less diverse coal customer base than that of regulated energy and water businesses—making it more exposed to counterparty risk, should a customer temporarily stop railing. Queensland Rail's exposure to counterparty risk is largely mitigated by:

- the underlying favourable and stable drivers of demand for West Moreton coal
- having a customer base that is resilient to price shocks and is incentivised to maintain production
- additional mechanisms in the regulatory framework, such as the proposed limited loss capitalisation mechanism, to mitigate such risk.

However, the counterparty risk of regulated energy and water businesses is generally mitigated by having a larger, diversified and more resilient customer base. Overall, the QCA considers that the customer base of regulated energy and water businesses is likely to be more effective in mitigating exposure to counterparty risk.

³⁵⁷ Queensland Rail, sub. 4: 9.

³⁵⁸ Queensland Rail, sub. 4: 10.

³⁵⁹ As noted elsewhere in this appendix, regulated energy and water businesses are subject to cost-based regulation that helps insulate them from volume risk.

Another source of differentiation between West Moreton coal and regulated energy and water businesses is the systematic risk associated with growth options. Implicit within Queensland Rail's view that demand will be strong over the long term is the assumption that new mining operations commence. The systematic risk associated with these new projects will be greater than that facing already committed projects. However, for regulated energy and water businesses, what growth options do exist are unlikely to have the same impact on revenues, as any further growth option will likely represent a much smaller proportion of demand for the service, relative to West Moreton.

In summary, the QCA considers that there are many similarities between West Moreton coal and regulated energy and businesses with respect to key beta determinants, including market power and a regulatory framework that insulates revenues. However, the QCA also notes there are some differences between West Moreton coal and regulated energy and water businesses—in particular, differences in customer characteristics—that suggest West Moreton coal is likely to exhibit a greater level of systematic risk than a typical regulated energy and water firm.

Toll roads

Frontier's industry sample of toll roads consists of eight businesses—six European businesses (Spain, Italy and France) and two Australian businesses.³⁶⁰

Referring to Incenta (2017), Frontier submitted that toll road operators are exposed to competitive pressure from alternative routes/transportation modes.³⁶¹ This is particularly the case where capacity on alternative routes is not fully constrained. Comparatively, Queensland Rail is the sole below-rail service provider for the mines in the West Moreton system, and thus is not exposed to the same competitive pressures.

Frontier considered that Queensland Rail's form of regulation aligned more closely with that of toll roads given that price caps often applied in that sector.³⁶² While the QCA acknowledges that both Queensland Rail and toll roads are subject to price cap regulation, this form of regulation is only one aspect of Queensland Rail's overarching regulatory framework.

Toll roads do not have a cost-based regulatory framework with fixed periodic reviews. Rather, they are often provided with a CPI-linked price cap that can endure for many years. While this type of price control provides toll road operators with price certainty, revenue might deviate from the costs of providing the service. Additionally, toll roads bear full demand risk, as cash flow volatility arising from market shocks is not dampened by the regulatory framework. This light-handed regulatory approach reflects the fact that toll roads are subject to competitive pressures.

Additionally, toll roads do not have contracting arrangements with customers. While certain mechanisms, such as non-compete and compensation clauses, can protect toll roads in the medium term from other competitors entering the market, this does not provide any protection from competition from existing alternatives to toll road services.

Conversely, the tariffs for West Moreton are calculated using a building blocks approach and have regard to the cost of providing and maintaining the service. In addition to this, while Queensland Rail faces some level of volume risk, 100 per cent take or pay on long-term contracts³⁶³ is able to mitigate a significant portion of this risk. Queensland Rail also has other regulatory features such as relinquishment fees on

³⁶⁰ Queensland Rail, sub. 4: 23.

³⁶¹ Queensland Rail, sub. 4: 8.

³⁶² Queensland Rail, sub. 4: 8.

³⁶³ For example, Queensland Rail's 2016 undertaking provides preferential rights to miners making renewal applications for 10 years (cl. 2.9.3((b), (c))). Similar provisions were included in the 2008 QR Network undertaking that previously applied for Queensland Rail.

contracted volumes, as well as the QCA's proposed limited life loss capitalisation mechanism, and the proposed ability to apply tariff premiums if it under recovers its total revenue requirement (see sections 5.2.2 and 5.2.1). The QCA considers that all of these features will contribute to a higher degree of revenue insulation.

Both Yancoal and New Hope submitted that toll roads were not an appropriate comparator as they were more exposed to volume risk.³⁶⁴ New Hope said toll roads also competed with toll-free roads, and had experienced severe financial difficulties, particularly during times of depressed economic activity.

In relation to customer base, Frontier noted that toll roads might be used for freight transportation, although the exposure of toll roads to commodity markets was less than that of other infrastructure owners such as Queensland Rail.³⁶⁵ The QCA is of the view that toll road traffic will generally be split between industrial/commercial customers and residential customers. However, given toll roads face competitive pressure from alternative routes and modes of transport, the customers of toll roads have alternative options. Importantly, the QCA considers that the demand of toll roads' customer groups is likely to be more sensitive to market conditions, with users opting to avoid toll roads in times of economic downturn.

This is different from West Moreton coal, where Queensland Rail's customers have no feasible alternative transport options, and have strong incentives to maintain their production at a consistent level throughout the economic cycle. Such incentives are due to:

- long-term, take-or-pay contracts with Queensland Rail and QBH
- contracts and longstanding relationships with customers
- high, sunk fixed costs and comparatively low marginal costs of production.

The customers of toll roads, however, do not face any such incentives to maintain their demand for particular toll road services.

The QCA acknowledges that toll roads have a larger and more diversified customer base than Queensland Rail, which will to an extent mitigate exposure to economic downturns. However, the QCA considers that Queensland Rail's exposure to counterparty risk is mitigated by:

- the underlying demand for West Moreton coal, which is relatively invariant to the state of the Australian economy
- Queensland Rail's resilient customer base that is heavily incentivised to maintain production
- Queensland Rail's regulatory framework, which contains mechanisms that mitigate or compensate for Queensland Rail's exposure to counterparty and volume risk (for example, the proposed limited life loss capitalisation mechanism).

Due to the above considerations, the QCA expects toll road businesses to be exposed to higher systematic risk in comparison to West Moreton coal.

Class 1 railroads

Frontier's industry sample of Class 1 railroads consists of 12 businesses from various countries, including Canada, United States, Australia³⁶⁶, China, India and Russia.

Yancoal submitted that Class 1 railroads were likely to be a poor comparator for West Moreton coal as:

³⁶⁴ New Hope, sub. 12: 18; sub. 12: 19; Yancoal, sub. 16: 9.

³⁶⁵ Queensland Rail, sub. 4: 8.

³⁶⁶ The only Australian business in the Frontier sample is Aurizon Holdings.

...Class 1 railroads are more exposed to competition due to the significantly greater degree of rail interconnectivity in the United States and more diversified sources of demand.³⁶⁷

Class 1 railroads face competitive pressure from parallel lines and alternative modes of transport. This enhances the level of counterparty risk, as customers have the ability to move their business from one Class 1 railroad operator to a competing operator.

Frontier considered that Queensland Rail was subject to competitive pressure on a number of freight routes, competing against both road and sea transport. In particular, Frontier considered that the non-bulk component of Queensland Rail's business would be contestable in many cases.³⁶⁸ However, as outlined above, the benchmark business entity being considered for estimating Queensland Rail's beta is based on coal traffic on the West Moreton system only. As such, the extent to which the non-bulk component of Queensland Rail's business is contestable has not been considered in estimating an appropriate beta for Queensland Rail's 2020 undertaking.

Frontier acknowledged that Queensland Rail's coal/bulk business might arguably be non-contestable, as coal transported from West Moreton would not be economical to move by truck.³⁶⁹ The QCA considers that Queensland Rail's customers on the West Moreton system have no viable alternatives to transport their coal to port. As such, Queensland Rail is not exposed to the same level of counterparty risk as that of Class 1 railroads.

Class 1 railroads haul goods that include: steel and steel-related commodities, thermal coal, drilling-related and crude oil commodities, building and construction raw materials, agricultural products, chemicals, automobiles, and automobile parts.³⁷⁰ The demand for these goods is likely to be from business and industrial customers, and thus to be strongly pro-cyclical. Table 24 shows that haulage totals for the various products carried by Class 1 railroads declined significantly during the course of the global financial crisis.

Table 24 North American rail volumes

	2006	2007	2008	2009	2010	08-09%
Commodity Carloads	21.71	21.68	21.42	17.66	19.34	-17.6%
Intermodal Unit Volume	14.81	14.77	14.49	12.28	14.08	-15.3%
Agriculture & Food Products	3.02	3.05	3.14	2.85	3.01	-9.2%
Chemicals	2.62	2.77	2.71	2.38	2.67	-12.4%
Coal	7.66	7.67	8.05	7.06	7.18	-12.3%
Forest Products	1.46	1.28	1.12	0.85	0.89	-23.9%
Motor Vehicles & Equipment	1.49	1.52	1.22	0.83	1.02	-32.2%
Metallic Ores & Metals	2.24	2.28	2.50	1.59	2.24	-36.5%
Nonmetallic Minerals & Products	2.31	2.25	2.13	1.66	1.83	-22.3%
Other	0.91	0.91	0.58	0.51	0.51	-12.6%

Source: *Incenta, Estimating Queensland Rail's WACC for the 2020 DAU—Stage Two.*

Conversely, the ultimate demand for the goods transported on the West Moreton system is from international power stations, used to generate electricity. Demand for West Moreton coal is stable and relatively invariant to the state of the Australian economy, with customers being resilient to price shocks and heavily incentivised to maintain production. So overall, Class 1 railroads haul goods that are more sensitive to GDP shocks than the coal product transported on the West Moreton system.

³⁶⁷ Yancoal, sub. 16: 9.

³⁶⁸ Queensland Rail, sub. 4: 6.

³⁶⁹ Queensland Rail, sub. 4: 6.

³⁷⁰ Association of American Railroads, 2018.

As outlined above, Queensland Rail's regulatory framework contains various mechanisms that mitigate, allocate or compensate for various risks associated with transporting coal on the West Moreton system. This regulatory framework has a stabilising effect on Queensland Rail's cash flows.

While certain traffic may be subject to industry-specific regulatory regimes³⁷¹, Class 1 railroads are generally not subject to a comprehensive regulatory regime that buffers their cash flows. This is to be expected given they face competitive pressure from parallel lines and alternative modes of transport. As such, the weak regulation of Class 1 railroads will provide minimal insulation from the volatility of cash flows associated with their exposure to changing market conditions.

Although contracting exists for Class 1 railroads, analysis presented by Incenta (2017) suggests that contracts are typically around 1–3 years in length, with contracts of up to five years for coal haulage. As these contracts are generally short-term in nature, the way in which contracting can limit the risk faced by Class 1 railroads is subdued. Short-term contracts increase the possibility of contract expiry during a period of economic downturn. Additionally, noting that Class 1 railroads are competing against parallel lines and alternative modes of transport, contract roll-over becomes a significant risk for Class 1 railroads.

While Class 1 railroads may share some physical characteristics with the West Moreton system, the way in which Class 1 railroads' earnings are correlated to movements in the economy is substantially different. As we have noted above, Class 1 railroads carry a more pro-cyclical product mix and face competitive pressures unlike West Moreton coal. Class 1 railroads also lack strong regulatory mechanisms and long-term contracts to mitigate the extent to which they are exposed to these underlying risks. As a consequence, the QCA considers that the overall level of systematic risk faced by Class 1 railroads is higher than West Moreton coal.

North American pipelines

Frontier's industry sample of oil and gas pipelines consists of 15 North American pipeline businesses.³⁷²

The QCA acknowledges that Queensland Rail's West Moreton system has several similar characteristics to North American pipeline businesses. Both provide single commodity transportation assets that service a limited number of commercial customers, which are subject to a regulatory access regime.

However, North American pipeline businesses are subject to competitive pressures from parallel pipelines and alternative modes of transport. Frontier considered that this aspect was shared with Queensland Rail, with alternative modes of transport applying competitive pressure to some Queensland Rail operations.³⁷³ As outlined above, the QCA considers that the appropriate benchmark business entity being considered for estimating beta is based solely on coal traffic on Queensland Rail's West Moreton system. Queensland Rail is the sole below-rail service provider for the mines in the West Moreton system. As a result, the QCA considers that the customers of North American pipeline businesses have more options for service than the customers along the West Moreton system.

In certain markets, North American pipelines are not subject to direct competitive pressure in a pipeline market, but rather are subject to competition for the market. In these circumstance, the pipeline businesses may face a customer base with fewer options; however the resilience of their customer base will be reliant on the characteristics of the regional market in question.

³⁷¹ For instance, Canadian grain traffic is subject to revenue cap regulation by the Canadian Transportation Agency.

³⁷² Queensland Rail, sub. 4: 24.

³⁷³ Queensland Rail, sub. 4: 8.

Additionally, North American pipeline businesses are susceptible to changing market conditions in the oil and gas markets, such as shifts in the regional demand for capacity. Demand for pipeline services in regional markets will vary, reflecting the differing characteristics of regional pipeline customers. For instance, the increase in shale gas production has shifted the flows on the interstate pipeline network—changing the nature of market demand and impacts on competitors.³⁷⁴ The resilience of a pipeline’s customer base will depend on the competitiveness of its customer base to supply that regional market. Sector transformation has benefitted some regions to the detriment of others.

As outlined above, the QCA considers that the market demand outlook for thermal coal product sourced from the West Moreton system is strong given the attributes of its coal. Additionally, Queensland Rail’s customer base in the West Moreton system is resilient to fluctuating coal prices, making it well equipped to deal with a drop in the thermal coal price. The mines also face strong incentives to maintain their production at a consistent level throughout the economic cycle.

The regulation of North American pipelines is typically light-handed, relying on the fact that pipelines are subjected to competitive pressures. In competitive markets, North American pipelines are not necessarily subject to cost-of-service rates³⁷⁵—rates are constrained by competition and not regulation. Where this is the case, regulation does not insulate North American pipelines’ cash flows from the volatility arising from market shocks.

While cost-of-service regulation is adopted in the regulatory regimes to mitigate any existing market power that the pipeline carriers may have, North American pipelines remain exposed to market forces on their uncontracted capacity. Long-term contracts are a characteristic of the North American pipelines industry. However, where competition exists in pipeline markets, the extent to which the pipelines’ customers have no alternatives will be reliant on the coverage of these long-term contracts.

Even where long-term contracts are in place, companies will be exposed to counterparty risk. Noting that market dynamics may change over the life of a contract, competition could result in lower shipping rates and/or unused capacity for the pipeline operator following the expiration of a long-term contract. In any case, the threat of contract roll-off in itself exposes pipelines to market forces, as businesses may be inclined to restructure contracts (revising contracted volumes or rates) to manage recontracting risk.

While Queensland Rail is exposed to some volume risk associated with forecast volumes not materialising, the QCA notes that there are various mechanisms existing, or proposed within the regulatory framework, that seek to limit the amount of volume risk faced by Queensland Rail. This includes:

- 100 per cent take-or-pay contracts in the West Moreton system that mitigate the short-term volume risk associated with a price cap
- take-or-pay contracts will completely mitigate short-term volume risk where Queensland Rail contracts 8.5 million tonnes—Queensland Rail is forecasting volumes of 9.1 million tonnes for the regulatory period
- a 5 per cent tariff premium for all uncontracted volumes railed to compensate Queensland Rail for volume risk associated with uncontracted railings

³⁷⁴ Tierney, *Natural Gas Pipeline Certification: Policy Considerations for a Changing Industry*, November 2017: 18.

³⁷⁵ Market-based/settlement/negotiated rates are a common feature in United States pipeline ratemaking. Relevantly, it appears that a number of the businesses in the North American pipelines sample have numerous tariffs established as an alternative to the cost-of-service rate—and thus are not subject to cost-of-service regulation.

- a tariff premium may be applied (of up to 15%) when the total revenue requirement is under recovered in the previous year, which has similarities to an unders and overs mechanism for recovering the total revenue requirement throughout the regulatory period.

While Queensland Rail is exposed to counterparty risk owing to its small customer base, the QCA notes that Queensland Rail's exposure to counterparty risk is largely mitigated by:

- being the sole service provider for the mines in the West Moreton system
- the underlying favourable and stable drivers of demand for West Moreton coal
- having a customer base that is resilient to price shocks and incentivised to maintain production over the course of the business cycle
- additional mechanisms in the regulatory framework, such as the proposed limited-life loss capitalisation mechanism, to mitigate such risk.

Therefore, we expect the North American pipelines' earnings to be more pro-cyclical than West Moreton coal's.

Ports and airports

Frontier's industry sample of ports included 39 port and logistics companies from varying countries, while its sample of airports included 25 airports from many different countries.

We do not consider airports or ports to be appropriate comparators for West Moreton coal, due to, amongst other things, the elasticity of demand for their services and the regulatory frameworks of firms in these industries.

Airport revenue is highly dependent on passenger numbers. In 2014, the Airports Council International reported that 55.8 per cent of revenue was derived from passenger-related charges.³⁷⁶ Given that passenger travel, particularly tourism-related travel, is likely to be highly correlated with the state of the economy, we would expect airport revenue to be correlated with the business cycle. For example, growth in airport passenger numbers declined significantly during the global financial crisis years of 2008 and 2009 (Table 25).

Table 25 Domestic and international passengers (millions)—50 major domestic and international airports

	Domestic Pax	%	International Pax	%	Total Pax	%
2006	320.3		347.0		667.3	
2007	365.7	14.2%	376.1	8.4%	741.8	11.2%
2008	386.3	5.6%	382.5	1.7%	768.8	3.6%
2009	397.1	2.8%	379.9	-0.7%	777.0	1.1%
2010	430.0	8.3%	409.1	7.7%	839.0	8.0%

Source: Incenta, *Estimating Queensland Rail's WACC for the 2020 DAU—Stage Two*.

Cargo passing through most ports includes a proportion of goods whose demand is relatively inelastic over the course of the business cycle—such as foodstuffs and grains. However, a significant proportion of cargo also includes goods such as construction material, vehicles, and chemicals—all of which are likely to be highly correlated to the state of the economy.³⁷⁷ As such, demand for services from commercial ports is also likely to be sensitive to changes in economic conditions. In contrast, we consider that having a customer

³⁷⁶ Airports Council International, *2015 ACI Airport Economics Report*, 2016: 12.

³⁷⁷ Association of Canadian Port Authorities, Site/[Industry Information—CPA Facts](#), web page.

base that is resilient to price shocks and is incentivised to maintain coal production is likely to contribute to revenue that is largely invariant to the state of the economy.

Regulation of ports and airports is typically light-handed and constrained to market monitoring activities. As a result, there are limited mechanisms in place to buffer the likely pro-cyclical cash flows of these businesses. The QCA is of the view that some ports are significantly exposed to global demand shocks, as they lack a strong regulatory framework and experience cyclical demand for cargo transported. We would expect the same to be true for the airports included in the sample, which are likely to have a significant share of international customers. Alternatively, Queensland Rail's cost-based regulatory framework with fixed periodic reviews includes various mechanisms that insulate its revenue from the business cycle.

Consequently, our view is that airports and ports are exposed to a materially greater level of systematic risk than West Moreton coal. West Moreton coal is much better positioned to deal with global economic shocks, due to Queensland Rail's customer base—which has exhibited inelastic demand for West Moreton coal services—and a strong regulatory framework.

We understand that Frontier included airports as part of the proposed comparator sample on the basis that the appropriate beta was one applying to the entire Queensland Rail network. Frontier stated:

The passenger transportation side of airports shares some similarities with that of QR, at least the long-distance passenger services are exposed to similar shocks to demand.

As we view the appropriate benchmark entity for estimating beta to be based solely on coal traffic on Queensland Rail's West Moreton system, risks pertaining to Queensland Rail's passenger service are not a relevant consideration in this assessment.

Further cross-checks

The QCA's first principles analysis provides a qualitative assessment of the systematic risk faced by coal traffic on the West Moreton system. In this context, we view that further consideration of other Australian coal-carrying rail networks—namely Aurizon Network's Central Queensland Coal Network (CQCN) and ARTC's Hunter Valley Coal Network—is relevant. As part of the 2016 Queensland Rail undertaking, the asset beta was set at a level equal to the asset beta for the CQCN.

We have also had regard to the risks borne by other regulated Australian rail freight networks. These networks include ARTC's interstate network, as well as the Pilbara Institute and Arc Infrastructure (formerly Brookfield Rail) networks that operate in Western Australia.

Aurizon Network's CQCN

Frontier submitted that the approach for setting the asset beta for Aurizon Network should not be adopted for Queensland Rail, for two primary reasons:

- (a) The form of regulation is only one of a number of determinants of systematic risk, and there are material differences between Queensland rail and Aurizon Network in terms of many of the drivers of systematic risk; and
- (b) Even if the form of regulation is considered to be the primary driver of systematic risk, Aurizon Network operates under revenue cap regulation whereas Queensland Rail operates under price cap regulation.³⁷⁸

Frontier also outlined several other differences between West Moreton and the CQCN, including the number of mines, the coal mine type and the amount of coal exported.³⁷⁹

³⁷⁸ Queensland Rail, sub. 4: 21.

³⁷⁹ Queensland Rail, sub. 20: 9.

New Hope agreed with a previous assessment from the QCA, which suggested that Queensland Rail and Aurizon Network shared similarities in terms of exposure to systematic risk, as they both had:

- (a) Operations in the Queensland coal chain;
- (b) Cost-based regulation that is applied to coal traffic operations;
- (c) Revenue protection from take or pay provisions;
- (d) cost pass through provisions within access agreements; and
- (e) similar institutional arrangements, in that they are both located in the same state and regulated by the same regulator.³⁸⁰

Yancoal considered that Aurizon Network remained highly relevant, and the closest comparator, when the asset beta to apply for West Moreton is assessed.³⁸¹

Our view is that Aurizon Network's CQC and the West Moreton system share a number of similarities, including those listed above.

However, some differences between Aurizon Network's CQC and West Moreton coal are likely to contribute to West Moreton coal facing a higher level of systematic risk. Firstly, we consider that Aurizon Network has a more comprehensive regulatory framework than Queensland Rail. Aurizon Network operates under a revenue cap that aligns the costs to run the network with revenue. In the event that volumes differ from forecast levels and Aurizon Network experiences a shortfall in revenue, tariffs are adjusted in the future to account for this revenue shortfall. In this way, Aurizon Network is afforded a higher degree of revenue certainty, and is not exposed to significant risk from coal prices or volumes.

Queensland Rail's regulatory regime also applies a building blocks approach that has regard to the costs of operating and maintaining the network. Price risk is mitigated for Queensland Rail, as it receives the same amount of revenue per service, regardless of the price of coal. Unlike Aurizon Network, whose volume risk is mitigated by virtue of revenue cap regulation, the way in which Queensland Rail's regulatory framework limits its exposure to volume risk largely lies in the presence of 100 per cent take-or-pay contracts. Given Queensland Rail will be exposed to volume risk when customers have not contracted to high levels, we consider that the Queensland Rail regulatory regime provides less revenue security than Aurizon Network's arrangements.

Aurizon Network also has a highly resilient customer base in the CQC. A large portion of the metallurgical coal volumes produced in the CQC is from miners that sit towards the bottom or middle of the international metallurgical coal cost curve. Consequently, a reduction in global demand for metallurgical coal is unlikely to have a material influence on the production from CQC mines.

Customers on West Moreton have shown themselves to be resilient to shocks to the price of thermal coal. However, Queensland Rail has a smaller and less diverse coal customer base than that of the CQC. While Queensland Rail's counterparty risk is generally considered in relation to the underlying drivers for demand in the seaborne thermal coal market, its smaller and less diverse customer base makes it more exposed to counterparty risk, should a customer temporarily stop railing. In comparison, in the CQC, such risk is shared across the larger customer base through the system tariffs and revenue cap mechanisms. While Queensland Rail's regulatory framework has additional mechanisms to mitigate such risk, such as a proposed limited loss capitalisation mechanism, overall the QCA considers that Aurizon Network's customer base and regulatory framework will be more effective in mitigating counterparty risk.

³⁸⁰ New Hope, sub. 14: 22; sub. 14: 23.

³⁸¹ Yancoal, sub. 16: 11.

In summary, West Moreton coal and Aurizon Network share many similar key risk characteristics, including market power, cost-based regulation, long-term contracting and strong incentives to maintain output. However, we conclude that differences in the specific characteristics of the networks' customer bases and cost-based regulatory regimes are likely to contribute to West Moreton coal facing a higher level of systematic risk relative to Aurizon Network.

ARTC's HVCN

Yancoal considered that the HVCN was an appropriate comparator, as it was exposed to very similar systematic risk. Yancoal noted a number of systematic risk features common to both West Moreton and the HVCN, including:

- Monopoly service provider with no competing service
- Rail related operational risks
- Revenue protection from long term take or pay contracts
- Revenue protection from right to request security
- Customer exposure to thermal coal
- Demand protection as a result of other coal supply chain arrangements.³⁸²

We also consider that the above factors are all likely to contribute to a similar level of systematic risk between West Moreton coal and the HVCN. However, there are characteristics that are likely to contribute to differences between the systematic risk faced by West Moreton coal and the HVCN.

In its 2017 draft decision on the Hunter Valley access undertaking, the ACCC considered that:

ARTC has a slightly better ability to mitigate systematic risks compared to Aurizon Network. Therefore, the ACCC considers ARTC's asset beta should be equal to or lower than that of Aurizon Network.³⁸³

As catalogued by the ACCC, the HVCN's regulatory framework has a number of mechanisms that mitigate risk. The regulatory framework contains unders and overs mechanisms to account for any revenue shortfalls, long-term take-or-pay contracts, front-loaded depreciation of assets and a capitalised loss arrangement in Pricing Zone 3.

As noted above, Queensland Rail will be exposed to volume risk in instances when customers have not contracted to high levels—providing less revenue security relative to the HVCN regulatory framework. In the event that volumes differ from forecast levels, the HVCN has a revenue cap with unders and overs mechanisms that will allow it to recover revenue shortfalls. ARTC also has 10-year rolling take-or-pay contracts with users of the network.

Queensland Rail operates under a price cap and therefore does not have the same ability to recover revenue as ARTC's HVCN in the face of a revenue shortfall. While Queensland Rail has long-term 100 per cent take-or-pay contracts with its customers, they are not rolling, and hence average contract length may be lower for West Moreton than for the HVCN. Even though contracted volumes are anticipated to be high over the medium to long term, the potential for Queensland Rail to be exposed to volume risk in instances when contracted volumes are not high is likely to contribute to a higher level of systematic risk than for ARTC's HVCN.

Queensland Rail also has a smaller customer base than the HVCN—making it more exposed to counterparty risk, should a customer temporarily stop raiing. We consider that HVCN's customer base and regulatory

³⁸² Yancoal, sub. 16: 10.

³⁸³ ACCC, *Draft Decision - Australian Rail Track Corporation's 2017 Hunter Valley Access Undertaking*, April 2017: 156.

framework will be more effective in mitigating counterparty risk in comparison to the West Moreton system, as is the case for the CQCN.

Overall, the QCA considers that differences in the regulatory framework and customer base are likely to contribute to West Moreton coal facing a higher level of systematic risk relative to ARTC's HVCN.

ARTC Interstate

ARTC's Interstate rail network extends for around 8,500 kilometres from Western Australia to Queensland, through South Australia, Victoria and NSW.³⁸⁴ ARTC's interstate rail network carries both bulk and non-bulk goods. The majority of bulk freight comprises coal, iron ore and grain, while the majority of non-bulk goods consists of containerised goods. The QCA considers that the containerised goods transported on the ARTC interstate rail network are likely to face greater cyclical demand than the coal produced on the West Moreton system.

In addition to the ARTC transporting goods with greater cyclical demand, we consider that the ARTC interstate rail network has a more light-handed regulatory regime, which is not likely to provide as great a buffer for revenues, when compared to Queensland Rail's regulatory regime. In contrast to Queensland Rail's regulated price cap, the ARTC interstate rail network operates under a negotiate–arbitrate model, with floor and ceiling pricing limits. Furthermore, ARTC does not have additional regulatory mechanisms, such as the proposed limited life loss capitalisation mechanisms that Queensland Rail has.

In summary, relative to West Moreton coal, ARTC's interstate rail network carries traffic that is likely to be more cyclical in nature, and has a regulatory framework that provides for less revenue stability. Consequently, we would expect ARTC's revenue to more closely match the state of the economy, and thereby exhibit a higher level of systematic risk.

The Pilbara Infrastructure

The Pilbara Infrastructure (TPI) operates the railway network that links Fortescue Metals Group's mines in the Pilbara to TPI's port facilities in Port Hedland.

The Pilbara Infrastructure is regulated by the ERA in accordance with the Western Australia Rail Access Regime (WARAR). The WARAR provides for light-handed regulation of access to Western Australia's intrastate rail networks, and seeks to facilitate commercial negotiation between parties. The ERA determines reasonable costs of access by having regard to a floor price based on incremental costs and a ceiling price based on total costs.³⁸⁵ The QCA considers that this negotiate-arbitrate framework is significantly different from the regulatory framework that Queensland Rail operates within. Queensland Rail has additional revenue protection mechanisms afforded to it that TPI does not have, including the ability to submit a DAAU, and a limited-life loss capitalisation mechanism,³⁸⁶ as part of its regulatory framework.

Given the relative risks facing both West Moreton coal and TPI, we would expect that revenue for West Moreton coal will be less responsive to the state of the economy than TPI, noting that West Moreton coal has a number of additional regulatory mechanisms that help insulate revenue. Therefore, we would expect West Moreton coal to exhibit less systematic risk than TPI.

³⁸⁴ ACCC, *Draft decision - Australian Rail Track Corporation's 2018 Interstate Rail Access Undertaking*, December 2018: 6.

³⁸⁵ Economic Regulation Authority (ERA) Western Australia, *Review of the method for estimating the Weighted Average Cost of Capital for the Regulated Railway Networks*, September 2015: 3.

³⁸⁶ As proposed by the QCA as part of this draft decision.

Arc Infrastructure

Arc Infrastructure operates a 5,500 km open-access multi-user rail freight network that spreads across the southern part of Western Australia. The Arc Infrastructure network transports a range of goods, including, iron ore, grain, coal, alumina, chemicals and interstate freight.³⁸⁷ We consider that demand for chemicals and interstate freight is likely to be reasonably correlated with the state of the Australian economy. In contrast, the underlying demand for West Moreton coal is likely to be less responsive to the state of the Australian economy.

We consider that Arc Infrastructure may have customers that are not resilient to changing commodity prices. In 2016, Karara Mining, which accounts for approximately 25 to 30 per cent of Arc Infrastructure's revenue³⁸⁸, was reported to be struggling to maintain financial viability amidst falling iron ore prices.³⁸⁹ In an effort to cut costs Karara entered into a three-year deal with Arc Infrastructure that would cut rail access costs under a sliding scale in which charges would drop with the iron ore price.³⁹⁰

We are of the view that Queensland Rail's West Moreton coal customers are likely to be more resilient to changing commodity prices. During the period of low thermal coal prices in 2015, neither New Hope nor Yancoal was reported to be facing concerns over their viability moving forward. Instead, both customers were looking to expand or extend operations in one way or another—Yancoal with its Cameby Downs continuation project, and New Hope through its New Acland Stage 3 project.

Similarly to TPI, Arc Infrastructure is regulated by the ERA in accordance with the WARAR. As noted above, the WARAR is a relatively light-handed regulatory approach, which does not provide the same range of revenue protection mechanisms as the Queensland Rail regulatory regime.

Compared to West Moreton coal, Arc Infrastructure carries goods that are likely to be more cyclical in nature, and is likely to have customers that are less resilient to changing economic conditions. Factoring in a relatively light-handed regulatory regime, we consider that revenue for Arc Infrastructure will more closely match market conditions, than for West Moreton coal. As a result, we would expect Arc Infrastructure to exhibit a greater level of systematic risk than West Moreton coal.

Overview of the QCA's first principles analysis

Having regard to the first principles industry analysis, the QCA considers it appropriate to define the following bounds for assessing an asset beta that is appropriate for Queensland Rail's West Moreton coal system, for the purposes of the 2020 DAU WACC:

- West Moreton coal's asset beta should be higher than the estimated asset beta for regulated energy and water businesses.
- West Moreton coal's asset beta should be lower than the estimated asset beta for toll road businesses.

Further analysis of potentially comparable regulated Australian freight rail networks revealed that West Moreton coal is likely to be:

³⁸⁷ Economic Regulation Authority (ERA) Western Australia, Review of the method for estimating the Weighted Average Cost of Capital for the Regulated Railway Networks, September 2015: 28.

³⁸⁸ Incenta, *Estimating Queensland Rail's WACC for the 2020 DAU—asset beta, benchmark gearing, and credit rating*, 2019: 46.

³⁸⁹ The Sydney Morning Herald, Site/[Contractors key to Karara mine's fate](#), web page, accessed April 2019.

³⁹⁰ National Mining Chronicle, Site/[Rail Relief Waits on China Nod](#), web page, accessed April 2019.

- exposed to a higher level of systematic risk relative to Aurizon Network's CQCN³⁹¹ and ARTC's HVCN³⁹².
- exposed to a lower level of systematic risk relative to Arc Infrastructure³⁹³, The Pilbara Infrastructure³⁹⁴, and ARTC's interstate network³⁹⁵.

³⁹¹ The UT5 final decision estimated an asset beta for Aurizon Network of 0.42.

³⁹² The 2017 HVCN draft decision estimated an asset beta for ARTC of 0.45.

³⁹³ The ERA determination on the 2017 weighted average cost of capital estimated an asset beta of 0.7 for Arc Infrastructure.

³⁹⁴ The ERA determination on the 2017 weighted average cost of capital estimated an asset beta of 1.05 for TPI.

³⁹⁵ The 2018 ARTC Interstate draft decision estimated an asset beta of 0.60 for ARTC.

APPENDIX B: SELECTED DRAFTING

This appendix provides the QCA's suggested drafting amendments in relation to selected clauses of Queensland Rail's 2020 DAU.

Chapter 6—section 6.2

Suggested drafting amendments to definitions (cl. 7.1)

Terminating Date means the earlier of:

- (a) 30 June 2025;
- (b) in respect of any part of the service to which this Undertaking relates, the ~~date~~ end of the day on which that part of the service ceases to be taken to be a declared service for the purposes of Part 5 of the QCA Act but only where the relevant Minister has not made a declaration as referred to in clause 6.3 of this Undertaking; and
- (c) the date on which this Undertaking is withdrawn in accordance with the QCA Act;

Suggested drafting amendments (new cl. 6.3)

6.3 New declaration

If the service to which this Undertaking relates ceases to be taken to be declared under section 250(1)(a) of the Act, and, if the relevant Minister makes a declaration in relation to that service or part of the service which is itself a service, under Part 5 of the Act which is to start with effect from the expiry date referred to in section 87A(1) of the Act, then, from that date:

- (a) subject to paragraph (c) below, this Undertaking will continue to apply to any service (or part thereof) which was originally declared by section 250(1)(a) of the Act and which service (or part thereof) is later declared by the Minister under Part 5 of the Act;
- (b) subject to paragraph (c) below, any reference in this Undertaking to "service taken to be declared under section 250(1)(a) of the Act" (and words having similar effect) will be taken to also refer to a service to which this Undertaking continues to apply pursuant to paragraph (a) above;
- (c) paragraphs (a) and (b) above apply only where the declaration by the Minister under Part 5 of the Act takes effect from the expiry date (referred to in section 87A(1) of the Act) of the declaration under section 250(1)(a) of the Act.

Chapter 6—section 6.3

Suggested drafting amendments to definitions (cl. 7.1)

Extension includes an enhancement, expansion, augmentation, duplication or replacement of all or part of the Network including any connection to Private Infrastructure (but excluding Private Infrastructure) and “**Extend**” or “**Extended**” will have a comparable meaning;

Chapter 7—section 7.3

Suggested drafting amendments to cl. 2.2.2(d)

- (d) Any confidentiality agreement between Queensland Rail and an Access Seeker must permit disclosure of Confidential Information: where disclosure would be allowed under a Confidentiality Exception (as if those exceptions applied), unless the parties agree otherwise.
- ~~(i) as required by Law;~~
 - ~~(ii) to the QCA;~~
 - ~~(iii) in the case of Queensland Rail, as necessary to:~~
 - ~~(A) the Rail Authority;~~
 - ~~(B) the Rail Authority's board members; and~~
 - ~~(C) the Rail Authority's:~~
 - ~~(1) chief executive officer, chief finance officer and other senior executives (as those terms are defined under the Rail Authority Act); and~~
 - ~~(2) other officers and employees.~~

Chapter 11—section 11.2

Suggested drafting amendments (new cl. 6.1.4(a)(iii))

- (iii) any determination of a Dispute by the QCA under clause 6.1.4(a)(ii) must not commence unless, and can only be made if, all of the parties to the Dispute agree (in a legally binding way) to be bound by the outcome of the Dispute and any order the QCA makes requiring a party to pay any other party's costs of the Dispute. The parties must act reasonably and in good faith to reach agreement as soon as reasonably practicable; and

APPENDIX C: LIST OF SUBMISSIONS

The QCA received the following submissions during its investigation of Queensland Rail's 2020 DAU. The submission numbers below are used in this draft decision for referencing purposes. The submissions are available on the QCA website unless otherwise indicated

Stakeholder	Submission	Number	Date
Aurizon Bulk	Submission on Queensland Rail's 2020 DAU	11	17 Oct 2018
Aurizon Coal	Submission on Queensland Rail's 2020 DAU	12	17 Oct 2018
New Hope	Cover letter	13	17 Oct 2018
	Submission on Queensland Rail's 2020 DAU, Volume 1: Overview and Reference Tariffs	14	17 Oct 2018
	Submission on Queensland Rail's 2020 DAU, Volume 2: Undertaking and Standard Access Agreement	15	17 Oct 2018
Pacific National	Submission on Queensland Rail's 2020 DAU	17	7 Nov 2018
Queensland Rail	2020 Draft Access Undertaking	1	14 Aug 2018
	Explanatory document	2	14 Aug 2018
	Att 1: West Moreton Tonnage Forecasts (not published)	3	14 Aug 2018
	Att 2: <i>Independent Expert Report on Asset Beta and Equity Beta</i> , report by Frontier Economics	4	14 Aug 2018
	Att 3: West Moreton system DAU2 capital expenditure submission	5	14 Aug 2018
	Att 4: <i>Peer Review of West Moreton System DAU2 Capital Expenditure 2020-21 to 2024-25</i> , report by GHD	6	14 Aug 2018
	Att 5: West Moreton system DAU2 maintenance costs 2020–21 to 2024–25	7	14 Aug 2018
	Att 6: <i>Peer Review of West Moreton System DAU2 Maintenance Costs 2020-21 to 2024-25</i> , report by GHD	8	14 Aug 2018
	Att 7: <i>Independent Expert Report on Price Differentiation</i> , report by HoustonKemp	9	14 Aug 2018
	Att 8: <i>Independent Expert Report on Contract Renewal Rights</i> , report by HoustonKemp	10	14 Aug 2018
	Queensland Rail's Response to Industry Comments on Queensland Rail's Draft Access Undertaking 2 (DAU2)	18	16 Nov 2018
	Att 1: <i>Response to submissions on low volume scenarios</i> , report by Frontier Economics	19	14 Nov 2018
	Att2: <i>Response to submissions on the required return for Queensland Rail</i> , report by Frontier Economics	20	26 Oct 2018
Yancoal	Submission on Queensland Rail's 2020 DAU	16	17 Oct 2018
	Response to the QCA's request for collaborative submissions on Queensland Rail's 2020 DAU	21	16 Nov 2018

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