

Dalrymple Bay Coal Terminal User Group

Submission in response to Queensland Competition Authority Interim Draft Decision

24 April 2020



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1 Introduction

This submission is made on behalf of the Dalrymple Bay Coal Terminal User Group (the **DBCT User Group**), including for these purposes both users with existing access agreements and future access seekers who have not currently contracted capacity.

The DBCT User Group thanks the Queensland Competition Authority (**QCA**) for publishing its Interim Draft Decision of February 2020 (the **Interim Draft Decision**) in respect of the appropriate model of pricing regulation to be adopted in respect of DBCT Management Pty Ltd's (**DBCTM**) 2019 draft access undertaking (the **2019 DAU**).

This submission responds to the preliminary findings in the Interim Draft Decision and should be read in conjunction with the DBCT User Group's previous submissions of 23 September 2019 (**1st User Group Submission**) and 22 November 2019 (**2nd User Group Submission**).

2 Executive Summary

2.1 2019 DAU Pricing Model not appropriate

The DBCT User Group strongly agrees with the QCA's conclusion in the Interim Draft Decision that the 2019 DAU pricing model (without reference tariffs) is not appropriate to approve, including because it:

- (a) does not provide a sufficient constraint on the ability of DBCTM to exercise market power in negotiations, which are likely result in prices above the efficient costs of service delivery;
- (b) creates uncertainty, which could materially and adversely impact investment investments;
- (c) does not promote the economically efficient operation of, use of and investment in, the infrastructure by which the declared service is provided; and
- (d) does not appropriate balance the legislative business interests of DBCTM with the interests of access seekers and access holders, and the public interest.¹

2.2 Reference tariffs required to be appropriate

The DBCT User Group also strongly agrees with the QCA's conclusion in the Interim Draft Decision that the pricing model could be made appropriate by adopting reference tariffs.²

However, consistent with the 1st and 2nd User Group Submissions, the DBCT User Group strongly considers that the *only* basis on which the 2019 DAU would be appropriate is where it includes such QCA determined reference tariffs.

In particular, the DBCT User Group consider the preliminary conclusion in the Interim Draft Decision that it might be possible for the 2019 DAU to be appropriate with a non-reference tariff pricing model where it features particular characteristics³ does not:

- (a) give sufficient weight to the characteristics of the DBCT service (including its contractual and regulatory arrangements), which so heavily favour the need for greater regulation that they *are* practically determinative of the need for a reference tariff;
- (b) give sufficient weight to the reasons a reference tariff would clearly be the preferable pricing model for the DBCT service, many of which are identified by the QCA in Chapter 6 of the Interim Draft decision including:⁴

¹ QCA Interim Draft Decision, iv.

² QCA Interim Draft Decision, v.

³ QCA Interim Draft Decision, iv-v.

⁴ QCA Interim Draft Decision, 58.

- (i) better and more effectively resolving information asymmetry concerns than information provision can, due to a reference tariff's simplicity and transparency;
 - (ii) the benefits of a well-established, well understood open and transparent process with appropriate time for the QCA to consider all relevant information, in contrast to the time pressured negotiations that would occur without reference tariffs;
 - (iii) the greater certainty and transparency provided by an ex-ante price, providing price signalling with resulting benefits for investment planning and timing that are not provided by an ex-post unknown price that is dependent on arbitration;
 - (iv) the time cost and resources needed to determine a reference tariff are incurred once per regulatory period, instead of the greater cost that will be caused by a price needing to be determined each time an access seeker seeks access to the Terminal; and
 - (v) the existence of reference tariffs is likely to reduce the risk of a set of rolling arbitrations needing to be determined by the QCA, which could be costly, inefficient and time-intensive for access seekers and DBCTM, and resource intensive for the QCA;
- (c) give effect to the QCA's findings that the potential costs associated with a reference model would be outweighed by the benefits of including a reference tariff⁵
 - (d) give consideration to how a reference tariff model does or could mitigate those perceived costs;
 - (e) recognise that a move to a negotiate-arbitrate model should necessarily involve far more fundamental changes to other parts of the pricing model in ways the 2019 DAU or Interim Draft Decision do not propose such as removing socialisation (and the barriers to doing that that exist in current user agreements);
 - (f) consider the difficulties the absence of a reference tariff will cause in respect of existing access agreements which contemplate a continuing role for the QCA in approving tariffs and making decisions in relation to annual roll-forwards and review events; and
 - (g) undertake a cost-benefit analysis to determine whether an adjusted negotiate/arbitrate model could ever be more appropriate than a reference tariff model.

The core of the issue is that assessing appropriateness of a proposed undertaking necessarily requires assessing the merits of the terms proposed relative to alternatives.

Where a reference tariff model has such clear advantages relative to a non-reference tariff model, and any modifications to DBCTM's negotiate-arbitrate model will fall short of rectifying the underlying problems arising from the circumstances of the DBCT service, and give rise to additional issues, it cannot be appropriate within the meaning of the QCA Act to approve or require DBCTM to submit a less appropriate non-reference tariff model.

⁵ QCA Interim Draft Decision, 59.

PART A – Appropriate Pricing Model

3 Statutory Framework for QCA Decision

3.1 Threshold for approval

As recognised in the Interim Draft Decision,⁶ the QCA may only approve the 2019 DAU under section 138 of the *Queensland Competition Authority Act 1997* (Qld) (the **QCA Act**) where it considers it appropriate having regard to the factors outlined in section 138(2) QCA Act.

Consistent with the detailed analysis in the 1st User Group Submission,⁷ the DBCT User Group strongly agrees with the Interim Draft Decision findings that the QCA's application of the factors in section 138(2) is not limited or constrained by the market or competition analysis undertaken in the context of a review of the access criteria.⁸

That much is made abundantly clear by both:

- (a) the clearly separate and different process and criteria provided for consideration of declaration and consideration of a draft access undertaking; and
- (b) the width of the factors referred to in section 138(2) QCA Act, which the QCA is required to have regard to in assessing a draft access undertaking.

The application of those factors is considered in more detail in section 4 of this submission below.

It follows that DBCTM's description of the 2019 DAU as 'fit for purpose' principally on the basis of DBCTM's reading of the declaration review Draft Decision is a serious mis-characterisation of both the declaration review Draft Decision and its relevance to assessing the 2019 DAU.

3.2 Determining appropriateness

Appropriateness, in accordance with its ordinary meaning, is a consideration of whether the terms of the proposed undertaking are suitable, proper and right for the circumstances of the declared service.

As the High Court has previously stated:⁹

The phrase "considers ... appropriate" indicates the striking of a balance between relevant considerations so as to provide the outcome which is fit and proper.

Where terminology of this nature is used in legislative provisions, it has also been acknowledged by the court that what is "appropriate" falls to be determined in light of the purpose of the section and is not to artificially be limited.¹⁰

The DBCT User Group acknowledges the QCA's view that the starting point for the QCA's statutory task is assessing whether the draft access undertaking as submitted is appropriate.¹¹

However, it necessarily follows from the meaning of appropriate that the QCA is not required, and it would actually be an invalid exercise of its power, to settle for a less suitable alternative.

There are a number of clear contextual indicators that are important to the interpretation of "appropriate" in the context of section 138(2) QCA Act.

⁶ QCA Interim Draft Decision, 12.

⁷ See particularly, 1st User Group Submission, 8-9.

⁸ QCA Interim Draft Decision, 20.

⁹ *Mitchell v R* (1996) 134 ALR 449 at 458.

¹⁰ *Australian Building and Construction Commission v Construction, Forestry, Mining and Energy Union* (2018) 262 CLR 157 at [103]

¹¹ QCA Interim Draft Decision, 21.

(a) Appropriateness must be assessed relative to alternatives

First, whether the proposed terms of an undertaking are appropriate must be assessed relative to the alternative terms which could be adopted in the draft access undertaking.

That is fairly self-evident, because in determining whether terms of a draft access undertaking are fit and proper for the circumstances of the declared service the QCA will logically have to consider how they could be made more suitable for the circumstances. Fit, proper and appropriate are, by their nature, relative terms.

This uncontroversial statement is made even more clear by the way section 134 QCA Act operates. Namely that, if the QCA was to refuse to approve a draft access undertaking, the QCA must provide a secondary undertaking notice requiring the owner or operator of the declared service to '*amend the draft access undertaking in the way the authority considers appropriate*'.¹²

It necessarily follows that, if there are considerable advantages of one potential approach over another, that the less advantageous approach is not appropriate. That will remain the case irrespective of whether it was the approach initially submitted.

The QCA's Interim Draft Decision expressly recognises at multiple points that there are likely to be advantages for adopting reference tariffs, and that those advantages outweigh any perceived disadvantages of doing so.

For example, the QCA has expressly recognised:

*the current model whereby we determine a reference tariff, has some advantages over modifying the 2019 DAU*¹³

and

*While we recognise these potential costs associated with a reference tariff model, we consider that, in the context of the 2019 DAU (as submitted by DBCTM), these costs would be likely to be outweighed by the benefits of including a reference tariff or tariffs in the DAU*¹⁴

and

*Overall, we consider that there are likely to be benefits to requiring DBCTM to amend its 2019 DAU to incorporate a reference tariff.*¹⁵

and

*Overall, while acknowledging there are potential drawbacks that could be associated with inclusion of a reference tariff in DBCTM's 2019 DAU, we do consider that a reference tariff has certain specified advantages associated with it (as discussed above) – and we consider these advantages are likely to outweigh the drawbacks of including a reference tariff or tariffs in the 2019 DAU.*¹⁶

The DBCT User Group submits those views are entirely correct, and entirely inconsistent with a conclusion that a non-reference tariff model could be appropriate.

In order for the QCA to ultimately conclude that a non-reference tariff model is appropriate, it would need to determine that the non-reference tariff model put forward is so close in terms of merits to the reference tariff model that they could both be considered appropriate.

¹² Section 134(2)(a) QCA Act.

¹³ QCA Interim Draft Decision, 48.

¹⁴ QCA Interim Draft Decision, 59.

¹⁵ QCA Interim Draft Decision, 61.

¹⁶ QCA Interim Draft Decision, 62.

That is clearly not the case for the 2019 DAU as submitted. For the reasons set out in this submission, it would also not be the case for the 2019 DAU where incorporating the potential non-reference tariff model amendments noted in the Interim Draft Decision.

Where the QCA's views of the relevant merits of the different price models remains as set out in the Interim Draft Decision, the DBCT User Group submits that the QCA cannot consider the 2019 DAU appropriate and must require a reference tariff as part of its final decision and secondary undertaking notice.

(b) The QCA does not have to accept sub-optimal proposals

Second, the requirement that a draft access undertaking must be appropriate must be interpreted in the context of the requirement in section 138(5) QCA Act that the QCA may not refuse to approve a draft access undertaking only because the QCA contains a minor and inconsequential amendment should be made.

Minor and inconsequential amendment is defined to mean *'an amendment that, if made, would have no real effect or consequence in relation to that part of the undertaking and the undertaking as a whole'*.¹⁷

As explained in the explanatory note to the bill that inserted this requirement, the intention of this provision is that it *'provides for a regulatory approach where the Authority doesn't question a proposal put forward by a regulated entity if it is of a relatively minor nature'*.¹⁸

The two provisions read together, make it absolutely clear that the QCA Act expressly contemplates that as soon as the QCA forms the view that a change that goes beyond 'having no real effect or consequence' is desirable then the QCA is entitled to determine that it is not appropriate to approve a draft access undertaking.

There is obviously no way that the difference between a reference tariff and a negotiate-arbitrate regime could ever be framed as 'having no real effect or consequence', such that once the QCA forms the view that a reference tariff model is preferable that should result in a refusal to approve a non-reference tariff model.

3.3 In a refusal to approve the QCA must require the most appropriate outcome

As noted above, section 134 QCA Act provides that if the QCA refuses to approve a draft access undertaking its must provide a secondary undertaking notice that requires the owner or operator or the service to amend the draft access undertaking in the way the QCA considers appropriate.¹⁹

What is clearly noticeable from that provision is that once the QCA refuses to approve the 2019 DAU it must require that it is amended in *the* particular way the QCA considers appropriate. The QCA is not permitted by the statutory framework to require one of a variety of ways. For the same reasons, the DBCT User Group considers that the QCA is entirely correct in its conclusion that it is not limited to proposing only a 'minimum' set of amendments.²⁰

There is obviously no issue with an Interim Draft Decision considering potential alternatives for the purposes of informing subsequent decisions, and the DBCT User Group acknowledges that constitutes appropriate practice in some circumstances. However, the DBCT User Group submits that section 134 QCA Act clearly does not permit that at the point of a final decision.

¹⁷ Section 138(6) QCA Act.

¹⁸ Explanatory Note *Queensland Competition Authority Amendment Bill 2008* (Qld).

¹⁹ Section 134 QCA Act.

²⁰ QCA Interim Draft Decision, 21.

Accordingly, if the QCA was to maintain the preliminary views that a reference tariff model has advantages over a pricing model without reference tariffs,²¹ then the DBCT User Group submits that the secondary undertaking notice must require reinstatement of a reference tariff model.

For the detailed reasons set out in this submission (and the 1st and 2nd User Group Submissions), the DBCT User Group submits that a reference tariff being preferable is the only reasonably open conclusion.

3.4 Reference tariffs in undertakings in the QCA Act

For completeness, the DBCT User Group also emphasises its strong agreement with the QCA's acknowledgement that it is clear that the QCA Act contemplates a reference tariff being a normal inclusion in an access undertaking.²²

As the QCA notes, section 137(a)(a) and section 101(4) QCA Act expressly envisage undertakings including reference tariffs. Section 101(4) QCA Act is a particular recognition of the role that reference tariffs have in resolving a key issue the QCA has identified with a negotiate-arbitrate model in information asymmetry.

In addition, when those provisions are coupled with section 138 QCA Act, as noted in the 2nd User Group Submission:²³

Given that access undertakings can only be approved where the QCA determines they are appropriate, the QCA Act expressly and unequivocally recognises that it can be appropriate for the QCA to require an access undertaking which includes reference tariffs.

As the AEMC has recognised in recommending retention of the full regulation option for gas pipelines, reference tariffs 'act as a direct constraint on a service provider's ability to price reference services monopolistically', but also 'inform negotiations between service providers and users'.²⁴ There are clear advantages that can only be delivered by a reference tariff as recognised in section 6 of the Interim Draft Decision.

The DBCT User Group also notes that the submissions of DBCTM regarding the 'need to give primacy to commercial negotiations' do not give proper consideration to:

- (a) the fact that, as discussed at length in the 2nd User Group Submission, an undertaking with reference tariffs assists and facilitates efficient negotiations²⁵ (or as the AEMC puts it '*the primary rationale of reference services and reference tariffs is to inform negotiations between service providers and users, in reference to the access arrangement*')²⁶; and
- (b) the actual statutory framework under the QCA Act for making the decision about the appropriate pricing model and the circumstances of the DBCT service.

In relation to that second issue, the DBCT User Group notes that the QCA Act has a fundamentally different structure to the national access regime in Part IIIA of the *Competition and Consumer Act 2010* (Cth) – which the comments relied on so heavily by DBCTM actually relate to. In particular, the QCA Act gives the QCA the power to mandate submission of an undertaking for a declared service, and recognises that such a mandated undertaking can contain a reference tariff where the QCA considers that appropriate. It is notable that in its submission to the Productivity Commission's review of the national access regime, the National Competition Council

²¹ QCA Interim Draft Decision, 5 and 48.

²² QCA Interim Draft Decision, 21.

²³ 2nd User Group Submission, 9.

²⁴ Australian Energy Market Commission, Final Report – Review into the scope of economic regulation applied to covered pipelines, 3 July 2018, 28.

²⁵ 2nd User Group Submission, 6-9.

²⁶ Australian Energy Market Commission, Final Report – Review into the scope of economic regulation applied to covered pipelines, 3 July 2018, 28.

advocated for the introduction of a 'full regulation' model into the national access regime, noting the circumstances in which it would be appropriate.²⁷

In addition, the statements by the Productivity Commission which DBCTM relies so heavily upon (about negotiated outcomes generally being preferable because the parties to a dispute will know more about their claims and costs and benefits of access)²⁸ simply do not in any way reflect the actual circumstances of the DBCT service or the QCA.

The QCA is extremely familiar with the claims of stakeholders and costs and benefits of access in respect of DBCT as:

- (a) this is the fourth full draft access undertaking process that the QCA has administered, with the first undertaking submitted to the QCA in 2003 and, in that 17 years, the QCA has received substantial submissions from DBCTM, the DBCT User Group and other stakeholders;
- (b) the QCA has extensively considered the market in which DBCTM provides coal handling services, the extent of market power held by DBCTM, and relevant dependent markets during the declaration review process;
- (c) the QCA is very familiar with the relevant supply chain and coal industry through its further role as the economic regulator in respect of Aurizon Network's central Queensland coal network; and
- (d) unlike for many regulated infrastructure services, there is no complication concerning regulatory oversight of operating and maintenance costs, which the QCA has to be concerned with given the role and nature of Dalrymple Bay Coal Terminal Pty Ltd and the way operating costs are passed on to users.

The QCA clearly is better position to know more about the costs and benefits of access than the vast majority (if not all) access seekers, and has statutory investigation powers if it ever feels it does not have sufficient information.

In that scenario, the DBCT User Group strongly rejects the assertions by DBCTM that the QCA is not sufficiently informed or that an arbitrary 'preference' for a negotiated outcome is somehow a 'drawback' of a reference tariff approach which in fact has been proven over many years to facilitate efficient negotiation of access to DBCT.

4 Application of section 138(2) factors

The DBCT User Group considers it is clear that a proper application of the factors the QCA is required to have regard to under section 138(2) QCA Act strongly favours a reference tariff being the appropriate pricing model.

Each of those factors is considered in turn below.

4.1 Object of Part 5 QCA Act

The object of Part 5 is to:²⁹

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

The DBCT User Group agrees with the QCA's conclusions that *'economically efficient outcomes are facilitated, among other things, by a robust access framework that constrains the potential*

²⁷ NCC, The National Access Regime - Submission to Productivity Commission , 8 February 201317-18.

²⁸ Productivity Commission, National Access regime, Inquiry report no 66, October 2013, 115.

²⁹ Section 69E QCA Act

exercise of market power by the owner of a facility with monopoly characteristics,³⁰ and the QCA's resulting views as to what the access undertaking for the DBCT service should be directed at.

A simple review of a number of those factors demonstrates why a reference tariff is more appropriate, as a negotiate-arbitrate model will:

- (a) result in unfair differentiation between access holders and access seekers based on different levels of information asymmetry and resources to pursue arbitrations – rather than efficiency;
- (b) create risks of monopoly pricing, that restricts or delays efficient entry or hinders competition in dependent markets; and
- (c) create uncertainty of outcomes, inconsistent with the desire for a stable, transparent, well-understood and predictable regulatory framework.

The DBCT User Group submits that even the other factors listed by the QCA do not actually support a negotiate-arbitrate model – rather they can be achieved under either a reference tariff or a negotiate-arbitrate pricing model.

In addition, the DBCT User Group submits that the requirement to have regard to the object of Part 5 of determining the appropriateness of a draft access undertaking does not occur in a vacuum and requires the QCA to compare the effectiveness of the alternative pricing models under consideration in achieving that object.

Any reasonable comparison will demonstrate that a reference tariff is preferable to a negotiate-arbitrate model for achieving the objective because reference tariffs necessarily provide greater certainty for the infrastructure provider, access holders and access seekers, which assists with efficient contracting, investment and utilisation decisions and thereby promotes efficient operation of the terminal and competition in dependent markets.

While greater information disclosure, QCA guidelines and improving the arbitration criteria may reduce the uncertainty inherent in a negotiate-arbitrate model to some degree, they will never achieve the certainty provided by a reference tariff.

4.2 The legitimate business interests of DBCTM (as operator)

Consistent with the DBCT User Group's earlier submissions and the Interim Draft Decision we acknowledge that these factors take into account the interests of DBCTM (as 'operator') and the interests of DBCT Holdings (as 'owner').

(a) Reference tariffs will provide revenue adequacy

The DBCT User Group acknowledges that DBCTM has a legitimate interest in having an opportunity to recover the efficient costs of providing the service and in earning a commercial return on investment commensurate with the regulatory and commercial risks in supply the declared service (i.e. revenue adequacy).

However, the DBCT User Group submits that it is absolutely clear from all of the QCA's previous decisions (including consideration of all previous undertakings in respect of DBCT) that any reference tariff the QCA sets would meet that threshold.

The combination of the way that the QCA sets the reference tariff using a building blocks methodology and the socialisation mechanisms including in the access agreements and undertaking ensure that DBCTM has revenue adequacy across the regulatory period even where changes are experienced after the QCA's final decision on the undertaking.

³⁰ QCA Interim Draft Decision, 14.

The DBCT User Group also rejects the argument that the potential for 'regulatory error' is a drawback of a reference tariff model.

In particular:

- (i) any such error would be expected to 'balance out' over a number of regulatory periods, as there is no suggestion there is a persistent downwards bias to the QCA's decision making;
- (ii) if anything, the QCA has demonstrated an upwards bias to ensure that revenue adequacy is achieved – for example adopting an asset beta of 0.45 for the existing DBCT reference tariffs, despite Incenta's estimate of 0.40 being accepted by the QCA as the best empirical estimate; and
- (iii) to the extent that the QCA has concerns about 'regulatory error' leading to a reference tariff being set below revenue adequacy levels, it is clear from QCA decisions, such as that in relation to Aurizon Network's UT5 reference tariffs that the QCA is willing to exercise its judgement to depart from a bottom-up WACC estimate to ensure that does not occur.

In particular, in providing Aurizon Network with an uplift above the QCA's bottom up WACC estimate, the QCA specifically noted that in exercising its judgement that that was appropriate it had taken into consideration:³¹

- *risk of Aurizon Network's legitimate business interests not being satisfied, arising from the bottom-up assessment using the proposed averaging period;*
- *asymmetric consequences of setting a WACC that is not commensurate with Aurizon Network's commercial and regulatory risks;*
- *uncertainty inherent in estimating a WACC for the provision of access to the CQCN.*

In other words:

- (i) the reference tariff pricing model has sufficient flexibility to resolve these concerns; and
- (ii) the QCA has demonstrated that it is both willing and capable of making any required adjustments to ensure that revenue adequacy is achieved.

Accordingly, it is absolutely clear that both a reference tariff and a negotiate-arbitrate model will achieve the aim of revenue adequacy, such that DBCTM's legitimate interests do not weigh in favour of either model.

(b) Higher returns from inefficient prices are not in DBCTM's legitimate business interests

The DBCT User Group recognises that DBCTM strongly believes that a negotiate-arbitrate regime will enable it to charge higher prices. It is no co-incidence that DBCTM suddenly sought to change the pricing model in the context of their proposed sale of the terminal where this is presumably being presented as 'upside' for potential buyers.

The key question is therefore whether any improvement in DBCTM's commercial returns is necessarily in its *legitimate* interests.

The DBCT User Group strongly submits that the reference to 'legitimate' in section 138 QCA Act needs to be given effect to. By the insertion of that word, it was clearly intended that there would be some things that would be in DBCTM's business interests – but not considered legitimate.

³¹ QCA, Decision: Aurizon Network's 2017 draft access undertaking, December 2018, vii and 74

The interpretation of 'legitimate' in this context particularly needs to take into account the clear object of Part 5 of the QCA Act of encouraging efficiency and thereby promoting competition.

Where the negotiate-arbitrate model creates the potential for (in the DBCT User Group's view the serious likelihood of) DBCTM setting prices at inefficient levels (i.e. engaging in monopoly pricing), the resulting improvement in DBCTM's returns is not in the *legitimate* interests of DBCTM. To find otherwise would give no meaning or purpose to the express qualification of 'legitimacy' provided in section 138(2)(b) QCA Act.

Accordingly, the DBCT User Group strongly submits that the legitimate business interests of DBCTM do not weigh in favour of either pricing model.

4.3 Legitimate business interests of DBCT Holdings (as owner)

The DBCT User Group submits that greater weight needs to be given to DBCT Holding's business interests than is provided for in the Interim Draft Decision.

In particular, the State (through DBCT Holdings) intentionally privatised the terminal through a long term lease structure which resulted in the State remaining the owner, but not benefiting from any increase in terminal revenue through any higher lease payments.

Consequently, DBCT Holdings interests would be anticipated to be much more aligned with achieving public interest outcomes.

In particular, DBCT Holdings' interests favour a reference tariff model due to the benefits to the State delivered by certainty of efficient pricing such as investment, economic growth, employment and greater coal royalties (noting that higher terminal charges will immediately reduce royalties, as such charges are a deduction from coal royalty calculations). The DBCT User Group submits that the weight to be given to those factors should be higher in the context of the DBCT service where they are relevant to both the factors in sections 138(2)(b) and 138(2)(d) QCA Act.

4.4 The public interest, including the public interest in having competition in markets

The DBCT User Group agrees with the QCA's assessment of the public interested criterion, and particularly emphasises its strong agreement with the conclusion that:³²

There is public interest in the promotion of sustainable and efficient development of the Queensland coal industry, which in turn, provides a stimulus to the Queensland economy, local employment and regional development.

There is absolutely no doubt that the promotion of sustainable and efficient development of the Queensland coal industry requires:

- (a) pricing for DBCT's coal handling service being set at efficient levels; and
- (b) certainty of the approach to pricing.

Only a reference tariff pricing model can meet those requirements.

In addition to the factors specifically recognised in the Interim Draft Decision, the DBCT User Group submits that regulatory certainty and stability of regulation is an important public interest factor, that falls well within the scope of the wide breadth of matters³³ that are encompassed in consideration of the public interest.

In relation to the public interest factors highlighted by the explanatory memorandum to the *Competition and Consumer Amendment (Competition Policy Review) Bill 2017* (Cth), as

³² QCA Interim Draft Decision, 16.

³³ See *Pilbara Infrastructure Pty Ltd v Australian Competition Tribunal* (2012) 246 CLR 379 at [42]

referenced in the Interim Draft Decision, the DBCT User Group notes that example 12.1³⁴ clearly demonstrates the relevance of the fact that:

- (a) the administrative and compliance costs of multiple protracted negotiations and bi-lateral arbitrations under a negotiate-arbitrate model will clearly outweigh the costs of a single ex-ante determination of the appropriate reference tariff followed by efficient negotiations;
- (b) there will be social benefits from the certainty created by a reference tariff including the promotion of coal investment and anticipated flow on effects like an increase in employment; and
- (c) access to DBCT being priced at above efficient levels or uncertainty as to the future price (as will occur without a reference tariff) harming coal investment also creates the potential for declining incentives to undertake investment in other significant infrastructure in the supply chain (particularly the Aurizon Network rail network).

Accordingly, the DBCT User Group submits that the public interest weighs very strongly in favour of adopting a reference tariff pricing model.

4.5 The interests of access seekers

The DBCT User Group agrees with the QCA that an important part of having regard to this factor when considering the appropriate pricing model is seeking to achieve an appropriate balance between different users, including over time.³⁵

The DBCT User Group also considers that it is absolutely clear, that access seekers are more disadvantaged by a negotiate-arbitrate model than existing users.

The difficulties of negotiation (in the absence of a reference tariff) are significant exacerbated for access seekers due to:

- (a) being likely to suffer more from information asymmetry;
- (b) typically being under greater time pressure due to having to develop a mining project, obtain approvals, obtaining financing and equity funding, and contract rail access and rail haulage in parallel to negotiations of access to DBCT;
- (c) being more likely to be a less established resources company with less financial resources to fund an arbitration and being less likely to have a portfolio of mines to spread the costs across; and
- (d) not having any protections under an existing access agreement.

All of those factors leave future users more exposed to monopoly pricing under a negotiate-arbitrate model.

There is also no way in which further information provision and QCA guidelines can resolve all of these issues. The timing and funding difficulties which lead to an unequal bargaining position will always be a feature of any non-reference tariff model.

The separate submissions from access seekers (New Hope and Whitehaven) in this process, have aptly demonstrated the level of concerns future access seekers hold in respect of a negotiate-arbitrate model.

DBCTM has also not been able to present any real benefits which would flow to access seekers from a negotiate – arbitrate model relative to a reference tariff model. In particular, the DBCT User Group strongly rejects DBCTM's characterisation of an 'opportunity to negotiate prices' as a

³⁴ Explanatory Memorandum, *Competition and Consumer Amendment (Competition Policy Review) Bill 2017* (Cth), [12.41]

³⁵ QCA Interim Draft Decision, 18.

benefit when all access seekers and access holders consider that there is absolutely no prospect of such a negotiation resulting in improved pricing relative to a reference tariff.

Accordingly, the DBCT User Group submits that the interests of access seekers weigh very strongly in the interests of adopting a reference tariff. An important part of the QCA's role is to give consideration to the interests of such future access seekers, when only the nearest term access seekers are likely to be in a position to make submissions themselves.

4.6 The effect of excluding existing assets for pricing purposes

The DBCT User Group considers this factor has little impact on the issue of the appropriate pricing model.

If anything, this factor favours a reference tariff, as it would result in a more conscious and transparent choice in relation to the exclusion of any existing assets for pricing purposes. However, the DBCT User Group does not currently anticipate that providing a reference tariff in the next period would involve optimisation or exclusion of assets in this manner.

4.7 Section 168A pricing principles

The pricing principles in section 168A QCA Act suggest that the price of access to a service should:³⁶

- (a) *generate expected revenue for the service that is at least enough to meet the efficient costs of providing access to the service and include a return on investment commensurate with the regulatory and commercial risks involved; and*
- (b) *allow for multi-part pricing and price discrimination when it aids efficiency; and*
- (c) *not allow a related access provider to set terms and conditions that discriminate in favour of the downstream operations of the access provider or a related body corporate of the access provider, except to the extent the cost of providing access to other operators is higher; and*
- (d) *provide incentives to reduce costs or otherwise improve productivity.*

Again, the DBCT User Group considers that this factor favours a reference tariff, as it would result in a more conscious and transparent choice about how pricing was being set to achieve these outcomes (or where there was tension between these outcomes, how it had been determined to weigh or balance these outcomes against each other).

Whereas a negotiate-arbitrate regime, necessarily creates the potential for different inconsistent outcomes determined in an ad-hoc ways based on a mixture of private negotiations and arbitrations that come before the QCA. A negotiate-arbitrate regime is far more likely to result in differential pricing. However that differentiation will be based on issues like ability to pay and fund arbitration, extent of information asymmetry and whether they customer is an existing user or an access seeker – not efficiency as section 168A QCA envisages.

As noted in section 4.2 of this submission above, a reference tariff model can clearly ensure revenue adequacy (and can clearly ensure each of the other pricing outcomes described in section 168A QCA Act where the QCA considers those appropriate).

4.8 Other relevant issues

The DBCT User Group agrees with the QCA's conclusions that the following are relevant issues that should be had regard to in assessing the 2019 DAU:³⁷

³⁶ Section 168A QCA Act

³⁷ QCA Interim Draft Decision, 18-19.

- (a) the interests of existing users/access holders (which are largely aligned with those of access seekers);
- (b) the 2017 access undertakings status as a package of arrangements that the QCA considered appropriate and that stakeholders are familiar with and comfortable with the operation of;
- (c) unless there is an appropriate case of change, providing stability and predictability in the regulatory framework, is likely to promote investment confidence, and reduce administrative and compliance costs; and
- (d) supply chain coordination as an important factor for achieving the object of Part 5 of the QCA Act given the strong relationship between an efficient and effective Dalrymple Bay coal chain and the competitiveness of the Queensland coal industry.

In particular, the DBCT User Group wants to strongly emphasise the lack of a compelling case for making what the QCA acknowledges is a 'significant shift from the 2017 AU',³⁸ and damaging the stability and predictability of the existing regulatory framework.

Putting to one side all of the DBCT User Group's submissions to the contrary, the Interim Draft Decision suggests that it might be possible for DBCTM's market power to be effectively constrained in two ways. That is, by definition, not a compelling case for a significant change to the pricing model, even if it was considered that both of the alternatives were 'equal' in merit.

The existing model of regulation has been in operation for the better part of two decades. During its operation, DBCTM has invested in significantly expanding the terminal, and the terminal has been highly contracted and utilised. New Hay Point catchment coal projects have been developed with certainty as to the pricing approach they will face at DBCT. Those are the hallmarks of a successful model of regulation, not evidence of failure which would justify a significant shift. That is even more the case, when the proposed shift is to a highly contentious and unproven model that users strong consider would result in monopoly pricing.

Consistent with the DBCT User Group's earlier submissions,³⁹ the DBCT User Group also strongly agrees with the QCA's conclusions in respect of the declaration review.⁴⁰ In particular, the DBCT User Group supports the QCA's conclusions that the consideration of appropriateness under section 138 QCA Act is not confined to, or fundamentally directed by, the conclusions about impacts on competition, and the QCA's recognition that factual findings regarding DBCTM's market power will be relevant.

5 A reference tariff is appropriate

As discussed above, the Interim Draft Decision recognises that a reference tariff is appropriate, and the factors the QCA is required to have regard to weigh heavily in favour of a reference tariff being the only appropriate pricing model for the DBCT coal handling service.

While the DBCT User Group is entirely in agreement with the QCA's conclusion in that regard (and this submission therefore principally focuses on discussing the shortcomings of seeking to resolve inherent problems of a negotiate-arbitrate model), the DBCT User Group considers it important to first summarise some of the critical reasons a reference tariff is appropriate.

³⁸ QCA Interim Draft Decision, iv.

³⁹ See particularly 1st User Group Submission, 8-11.

⁴⁰ QCA Interim Draft Decision, 20.

5.1 Regulation is the *only* way in which DBCTM's market power will be constrained

As the Interim Draft Decision acknowledges, the characteristics of DBCT identified by users are relevant to the appropriate pricing model because they provide an indication of the extent of constraints on DBCTM's ability to exert market power.⁴¹

As recognised in the Interim Draft Decision:

- (a) there is limited contestability for the coal handling service provided by DBCTM, with no coal export terminals providing a close substitute and high barriers to entry (due to capital costs, economies of scale, legislative restrictions, environmental regulations and other approvals challenges, and limits on suitable locations) such that there is no real threat of new entry;⁴²
- (b) given there is no close substitutes there is no credible threat to switch material volumes to another facility, and DBCT is a multi-user terminal such that DBCTM is not dependent on any single mine or user, resulting in users and access seeker having limited countervailing power;⁴³ and
- (c) the characteristics of DBCT differ materially from Australian airports, which (in contrast to DBCTM) the Productivity Commission found to have clear constraints on their ability to exercise market power (and incentives not do so so).⁴⁴

The DBCT User Group emphasises the significant analysis contained in the 1st User Group Submission and the PwC Report attached to the 1st User Group Submission on this point.

In particular, the DBCT User Group emphasises that is clear from the QCA's analysis in the declaration review and the Interim Draft Decision that the DBCTM has significant market power, which it is incentivised to utilise to engage in market power and that DBCTM's ability to exercise that market power is not constrained by countervailing power of any user or competitive threat of new entry.

Accordingly, regulation is the *only* potential constraint on DBCTM's market power. Where that is the case, a stronger form of regulation is required than a 'light handed' negotiate-arbitrate model to ensure that DBCTM does not engage in monopoly pricing.

Consistent with what the 1st DBCT User Group submission and related PwC Report have indicated, where these characteristics exist, it strongly favours a stronger regulatory model which provides a higher constraint on the exercise of market power than a negotiate-arbitrate regime.

The QCA has rightly concluded that, given those characteristics a pricing model with reference tariffs would address the issue of bargaining imbalance caused by DBCTM's market power by providing transparent and independently verified prices.⁴⁵

5.2 Equity among existing and new users

As the Interim Draft decision acknowledges,⁴⁶ new users may be disadvantaged in comparison to existing users in the absence of a reference tariff.

As detailed in section 4.5 of this submission, new users:

- (a) are more likely to suffer from information asymmetry
- (b) typically have lesser bargaining positions due to timing/project alignment pressures;

⁴¹ QCA Interim Draft Decision, 52.

⁴² QCA Interim Draft Decision, 51-53.

⁴³ QCA Interim Draft Decision, 53.

⁴⁴ QCA Interim Draft Decision, 54.

⁴⁵ QCA Interim Draft Decision, 53.

⁴⁶ QCA Interim Draft Decision, 56.

- (c) will be far less likely to be willing to perceive arbitration as a viable path for resolving an inability to reach reasonable commercial terms of access due to having lesser financial resources (and that position will be well known to DBCTM who will have rights to assess their financial standing as party of access negotiations); and
- (d) will not have protections of an existing access agreement.

The only way to definitely resolve this problem is a reference tariff which ensure that the same pricing approach applies to all existing and future users, irrespective of the factors noted above.

As discussed in section 6 below, requirements proposed in the Interim Draft Decision for information provision, QCA guidelines and revised arbitration criteria can assist in mitigation – but cannot truly resolve the lesser bargaining position future users will have and the resulting greater exposure they will have to monopoly pricing.

5.3 Information asymmetry

As the Interim Draft Decision specifically recognises:⁴⁷

this interim draft decision describes how the pricing model (without a reference tariff) proposed in DBCTM's 2019 DAU could be amended to deal with information asymmetry problems, without requiring inclusion of a reference tariff. However, while that discussion demonstrates this could be done, there are likely to be advantages to providing for the relevant price and cost information to continue to be provided by way of a reference tariff.

...

our preliminary view is that inclusion of a reference tariff in the DAU may be a better and more effective way to deal with information asymmetry concerns regarding commercial negotiation and arbitration processes than amending DBCTM's proposed pricing model without reference tariffs.

The DBCT User Group strongly considers that, as discussed in further detail in section 6.2, 7.4, and 8 below:

- (a) there is no way in which a negotiate-arbitrate model can appropriately resolve this issue; and
- (b) any attempt to do so, will result in needing such prescriptive requirements that it will give rise to many of the QCA's perceived costs of utilising a reference tariff while still not removing all of the costs and disadvantages of a negotiate/arbitrate model.

5.4 Drawbacks of a reference tariff in relation to DBCT have been substantially overstated

The Interim Draft Decision refers to a number of potential costs or drawbacks of inclusion of a reference tariff. However, in contract to DBCTM's negotiate-arbitrate model, in considering appropriateness no consideration has been given to the mitigants which already do (or can) exist in relation to those issues.

In particular, the DBCT User Group notes the following in relation to each of the 'costs' noted in the Interim Draft Decision:

Potential drawback	Application to DBCT
Reduced incentives to reach commercial agreement	The existing model is a negotiate-arbitrate model where reference tariffs assist in facilitating efficient negotiation. It is clearly open to DBCTM and access seekers to agree a different price other than the reference tariff if DBCTM offered

⁴⁷ QCA Interim Draft Decision, 57

	<p>non-reference terms that made that attractive. The fact they have not done so is not a failing of the regulatory regime.</p> <p>In addition, as discussed in 4.5, access seekers will receive no benefit from an 'opportunity to negotiate' under a regime where DBCTM will see the likely QCA arbitrated outcome as the absolute floor – such that any negotiation will increase price.</p>
Costs associated with regulatory error	<p>As the ACCC has previously recognised, <i>'The scope for regulatory error falls primarily on the return on equity component of the allowed rate of return; Australian regulators are typically conscious of this and tend to be conservative in their selection of values'</i>.⁴⁸ As discussed in 4.2(a) above, the conduct of the QCA clearly reflects that approach (both in estimating WACC parameters at the higher end of estimated ranges and having a discretion to estimate a WACC above the bottom up estimate).</p> <p>The pass-through of operations and maintenance charges and up-front approval process means there is no prospect of regulatory error in any non-WACC issues.</p> <p>The price that will apply in a non-reference tariff model will also not be set at the precise level that would maximise overall economic efficiency. At least with a reference tariff that will be the QCA's intention.</p> <p>The submission, draft reporting, and judicial review elements of the QCA process provide further protections against any potential for regulatory error.</p>
Negotiated outcomes may be preferable as the parties to a dispute will have better information than the regulator	<p>As discussed in 3.4 above, this is not true in relation to DBCT.</p> <p>The QCA has been considering DBCT in relation to undertakings for 17 years, the declaration review and in its role as regulatory of other coal supply chain businesses. The QCA has access to modelling access seekers do not, has statutory investigation powers, and is far better placed than access seekers which will have information asymmetry.</p>
Economic distortions and adverse impact on investment	<p>The ACCC has previously found that: <i>whether regulation will discourage investment will depend on the regulatory arrangement in question, and especially whether they provide sufficient returns and whether there is sufficient certainty about the future actions of regulators. In practice, evidence on regulatory regimes ... is that the design and ex ante application of regulation substantially mitigates the theoretical concerns regarding investment incentives</i>.⁴⁹</p> <p>As discussed in 4.2(a) above, the QCA already takes the issue of providing sufficient returns into account (both in</p>

⁴⁸ ACCC, *Submission to the Productivity Commission's inquiry into price regulation of airport services*, August 2006, 35.

⁴⁹ ACCC, *Submission to the Productivity Commission's inquiry into price regulation of airport services*, August 2006, 35. See also ACCC, *Submission to the Productivity Commission Draft Report: Review of the Gas Access Regime*, 17 March 2004.

	<p>estimating WACC parameters at the higher end of estimated ranges and having a discretion to estimate a WACC above the bottom up estimate). In addition, a strength of the QCA's reference tariff regime is that it has not provided for adverse ex-post adjustments against infrastructure owners – and has given all stakeholders clear certainty about the QCA's future actions.</p> <p>In addition, reference tariffs provide certainty which promotes investment. There is no evidence of any adverse impacts at DBCT, with the terminal having expanded significantly under a reference tariff regime.</p> <p>Without a reference tariff, investment incentives in dependent markets will be distorted to a much greater extent by uncertainty and monopoly pricing.</p>
May stifle incentives for innovation in delivery or service	<p>No evidence has been provided to suggest this is an issue in respect of DBCT.</p> <p>DBCTM is not the day to day operator of the service, and any innovation that DBCTM wishes to propose can still occur through a draft amending access undertaking.</p>

As a result, it is important in assessing the appropriateness of a reference tariff model to appreciate that many of these theoretical potential drawbacks simply don't apply to DBCT, and those that do the QCA already recognises and can mitigate.

6 A non-reference tariff model cannot be made appropriate for DBCT

6.1 Can a negotiate-arbitrate model ever constrain DBCTM's ability to exert market power

The QCA's premise for being potentially open to a negotiate-arbitrate model is that 'amendments could be made to the proposed pricing model to constrain DBCTM's ability to exert market power in negotiations'.⁵⁰

Yet as the ACCC has previously recognised, *'The aim that light-handed regulatory regimes will also constrain monopoly pricing is often not matched by the design of the regulatory arrangements'*.⁵¹

The DBCT User Group considers that the preliminary conclusion that a negotiate-arbitrate model can be amended to constrain DBCTM's market power:

- (a) fundamentally overstates the extent such changes would make a negotiate-arbitrate model effective in constraining DBCTM's market power; and
- (b) even if it is assumed that both a reference tariff and revised negotiate-arbitrate model could theoretically constrain DBCTM's market power to a similar extent, fails to undertake any cost benefit analysis as to whether it is actually preferable to make those changes rather than adopting a reference tariff that will definitely be effective in constraining DBCTM's market power.

⁵⁰ QCA Interim Draft Decision, 53.

⁵¹ ACCC, Submission to the Productivity Commission's inquiry into price regulation of airport services, August 2006, 37.

6.2 Lesser effectiveness of constraints on DBCTM's market power

The Interim Draft Decision rightly concludes that the negotiate-arbitrate model proposed by DBCTM does not sufficiently constrain DBCTM's ability to exercise market power in negotiations with access seekers.⁵² As discussed earlier in this submission, the DBCT User Group considers that is absolutely correct.

The QCA goes on to conclude that key aspects of the model that create that concern are information asymmetry, the asymmetrical time pressures access seekers would face and the arbitration criteria not sufficiently protecting the interests of access seekers undermining its purpose as a 'backstop'.⁵³

However, the only characteristics in respect of the negotiation part of the framework the Interim Draft Decision suggests would be necessary for a negotiate-arbitrate model to be revised for the 2019 DAU to be appropriate are:

- information provisions that facilitate negotiations; and
- clear and certain negotiation processes to ensure access seekers (and holders) are not impacted by asymmetrical time pressure.⁵⁴

(a) Information provision

On the DBCT User Group's reading of the Interim Draft Decision, the QCA has not suggested how the information asymmetry would be resolved beyond the very high level description that a necessary characteristic of a non-reference tariff model would be:⁵⁵

Information provisions that facilitate negotiations – provision of the necessary information would allow access seekers to enter negotiations from an appropriately informed position. A model that provides such information will contribute to effective negotiations with prices that are likely to be at least reflective of the efficient costs of supply, reducing the dependent on costly and time-consuming arbitrations.

The DBCT User Group understands the ideal that the QCA is suggesting is required. However, it submits that that is practically nearly impossible to prescribe for the types of information to be disclosed in the level of detail that would be required to actually effectively inform such negotiations.

In practice, how would an undertaking prescribe what would constitute the provision of 'necessary information' that would allow access seekers to be 'appropriately informed'?

As the QCA has recognised the information obligations under section 101(2) QCA Act are a broadly-written minimum standard for information provision that is not sufficiently detailed in the context of a negotiate-arbitrate pricing model.⁵⁶ Whether through new undertaking provisions or reference to the QCA Act provisions, it cannot be sufficient to simply refer to how the price is calculated, costs, asset values, reasonable rates of return, or even individual building blocks parameters - as past undertaken processes have demonstrated that those can each be areas of contention and DBCTM has been proven to have different views of those issue than what the QCA would consider appropriate.

To the extent the QCA has in mind information provisions that are seeking to resolve that problem by prescribing how prices have to be calculated or issuing guidelines that do so, one has to

⁵² QCA Interim Draft Decision, 27.

⁵³ QCA Interim Draft Decision, 27-34.

⁵⁴ QCA Interim Draft Decision, 36.

⁵⁵ QCA Interim Draft Decision, 36.

⁵⁶ QCA Interim Draft Decision, 29.

question why doing that would be of more benefit and less cost than just adopting a reference tariff (as discussed in further detail in sections 7 and 8 below).

(b) Time pressures in negotiation and process

The QCA has recognised that access seekers face asymmetric time pressures in negotiations with DBCTM.

In particular that occurs because:

- (i) access seekers are typically seeking access for a particular greenfield mine or brownfield expansion, and access must be obtained at a certain stage of the development in order for final investment decisions to be made, financing to be obtained or joint venture approvals to be given (whereas, by contrast, existing users can often make use of capacity contracted for previous projects to support such future projects);
- (ii) access seekers will also be negotiating rail access and rail haulage in parallel due to the substantial costs of take or pay and lost sales arising from any misalignment of contracted capacity;
- (iii) contrary to DBCTM's submissions, the access queuing mechanisms *do not* resolve these issues – the need to respond to the notifying access seeker process in short periods in the context of competition for limited available capacity and the way DBCTM is permitted to manage expansions (as described in section 13.2 of these submissions below), entrenches the time pressure; and
- (iv) the terminal is effectively fully contracted, with a material access queue remaining, such that DBCTM's incentives to attract incremental users, by making concessions in negotiations, are (and will continue to be) very limited.

On the DBCT User Group's reading of the Interim Draft Decision, the suggestion is that this will be mitigated by changes in the negotiation process:⁵⁷

Clear and efficient process in negotiation and arbitration and transparency around arbitrated outcomes – clear and certain processes ensure access seeker and holders are not impacted by asymmetric time pressure. Transparency of arbitration outcomes leads to efficient price determinations and decreases the likelihood of rolling arbitrations.

However, the DBCT User Group considers it is clear from the above, that the issue is principally not one of process, or one that process changes can effectively resolve.

Rather access seekers simply will always be more reliant on both reaching an outcome, and doing so in a confined period, than DBCTM. While clear and certain process is a positive thing – it does not resolve the issue of asymmetric time pressure, which will always characterise negotiations in respect of the DBCT coal handling service.

DBCTM's answer to this appears to be that arbitration will resolve that issue. However, that is either intentionally misleading or the view of an entity that has never been involved in an arbitration of infrastructure access pricing. As detailed in earlier DBCT User Group submissions, a number of users have experienced the downsides of such a structure in relation to the Abbot Point coal terminal.

It is clear that the availability of arbitration also does not resolve this issue, and in some ways exacerbates it. As the QCA has recognised:⁵⁸

⁵⁷ QCA Interim Draft Decision, 36.

⁵⁸ QCA Interim Draft Decision, 31.

the additional time costs in engaging in arbitration exacerbates the time pressure faced by an access seeker relative to DBCTM. There is potential for this imbalance to result in access seekers accepting an inefficient price or experiencing unnecessary delays in their investment.

and:⁵⁹

the asymmetrical time pressure faced by access seekers and the possibility of rolling arbitrations would negate the characterisation of access to QCA arbitrations as a 'certain backstop' to disputes

The fact that DBCTM knows that arbitration would be unattractive and practically not a real option for many access seekers, means that it cannot prevent a credible backstop, and cannot resolve the flaws in relying on negotiations in the absence of a tariff where DBCTM has such clear market power.

(c) Criteria for arbitration

The DBCT User Group wholly agrees with the QCA that the criteria for arbitration proposed by DBCTM are wholly inappropriate, would not act to constrain DBCTM's market power or incentivise agreement through negotiation and create the potential for different treatment of existing access holder and access seekers which could adversely affect competition.⁶⁰

In particular, and consistent with each of the DBCT User Group's earlier submissions, the DBCT User Group strongly agrees with the QCA's assessment that the 'willing but not anxious' criteria would:

- (i) involve reference to prices at coal terminals that do not compete with DBCT;
- (ii) cannot practically be applied given the lack of comparable transactions (as a result of there being no actual close substitute services), and
- (iii) would not produce an outcome reflective of a symmetrical bargain.

The DBCT User Group also agrees with the QCA's conclusion that having different arbitration criteria for access seekers (under the undertaking) and access holders (under existing user agreements) creates the potential for asymmetric terms being reached in arbitration, which could adversely affect competition.⁶¹

The Interim Draft Decision appears to suggest this could be rectified by revising the arbitration criteria to refer to or align with those set out in section 120 QCA Act.

The DBCT User Group fully acknowledge that the factors in section 120 QCA Act present an improved and more balanced set of criteria than DBCTM's existing proposal. However, it is critically important to recognise that improving the 'backstop' provided by arbitration does not somehow make a negotiate-arbitrate model appropriate when it is clearly not a better solution than removing the problem that creates the need for a 'backstop' in the first place.

In particular, improving the arbitration criteria does not resolve:

- (i) the time and costs involved in arbitration relative to ex-ante reference tariff determination, particularly where there will be likely to be multiple arbitrations;
- (ii) the information asymmetry which exists, particularly for access seekers;
- (iii) the uncertainty created in respect of arbitrated outcomes (which even a balanced and reasonable set of arbitration criteria cannot resolve); and

⁵⁹ QCA Interim Draft Decision, 35.

⁶⁰ QCA Interim Draft Decision, 31.

⁶¹ QCA Interim Draft Decision, 31.

- (iv) potential for asymmetric outcomes between users for reasons related to the weaker negotiating position of a user, greater extent of information asymmetry or lesser resources, rather than efficiency reasons (and the potential resulting adverse impact on competition).

The DBCT User Group emphasises again that the issue is not whether the proposals in the Interim Draft Decision would improve DBCTM's proposed negotiation-arbitration framework – they obviously would. The issue is that even with those improvements they would fall well short of constraining DBCTM exercising its market power.

(d) Uncertainty

The Interim Draft Decision recognises that:⁶²

- (i) a pricing model that does not sufficiently inform access seekers entering negotiation or adequately protect them from asymmetrical time pressures could increase the likelihood of negotiated prices gradually increasing to the point of breaching historical ranges (such that it would ultimately have a material impact on investment incentives);
- (ii) the negotiate-arbitrate process itself can give rise to uncertainty through uncertain delays and increases costs to determine access charges;
- (iii) the asymmetrical time pressure faced by access seekers and the possibility of rolling arbitrations would negate the characterisation of access to QCA arbitrations as a 'certain backstop' to disputes.

The DBCT User Group agrees with all of that, and as discussed in detail in the sections above, simply notes that the amendments the Interim Draft Decisions proposes, do not remove those problems.

A reference tariff is the only method by which upfront certainty can be provided.

7 Light Regulation Pipelines are not an appropriate comparison

The Interim Draft Decision appears to suggest that many of the information provision clauses governing light regulation pipelines, when applied to the 2019 DAU, would 'overcome a large proportion of the information asymmetry issues'.⁶³

However, the DBCT User Group strongly disagrees with that assessment because:

- (a) there are fundamental differences between the circumstances of the gas transportation services provided by 'light regulation' pipelines and the DBCT service that mean that the extent of regulation which is considered sufficient for such pipelines will not be sufficient for the DBCT service;
- (b) the changes the QCA has proposed in the Interim Draft Decision fall well short of achieving an equivalent position to 'light regulation' pipelines in any case (being far less prescriptive in nature); and
- (c) there are sufficient concerns around the outcomes of the light regulation model for gas pipelines not preventing monopoly pricing that it is not a model that should be adopted in respect of an entity like DBCTM which has been determined to have clear market power requiring regulation to constrain.

⁶² QCA Interim Draft Decision, 35.

⁶³ QCA Interim Draft Decision, 39.

7.1 Light regulation pipelines have less market power than DBCTM

First, the 'form of regulation' factors which must be had regard to under the National Gas Laws before the AER determines that light handed regulation is appropriate for the pipeline service clearly demonstrate that light handed regulation would not be adopted for the DBCT service as summarised below (see also 1st DBCT User Group submission 20-22).

Form of regulation factor	Typical Light Regulation Pipeline	DBCT Service
Barriers to entry	Likely to be some barriers to entry through high capital costs. Low threat of new entry.	Very high barriers to entry for development of a competing coal terminal due to high capital costs, economies of scale and difficulties of obtaining approvals for a greenfield coal terminal. No credible threat of new entry.
Extent to which market power is mitigated by countervailing power	Typically characterised by high levels of countervailing power by major shippers due to typically having a limited number of users	High degree of market power ⁶⁴ , with no countervailing power of customers due to no close substitutes and larger number of users. This is a critical difference to light regulation pipelines.
Presence and extent of any substitutes and elasticity of demand	While, the pipeline might be a monopoly for a particular route, it often faces field on field competition with other pipelines that transport gas to the same destination (but from different origins)	No close substitutes for the DBCT coal handling service. ⁶⁵ Again, this is another critical difference to light regulation pipelines.
Information adequacy	AER's Financial reporting guidelines for light regulation pipeline services seeks to address	Currently DBCTM proposes only section 101(2) QCA Act information

The circumstances of the DBCT coal handling service are evidently far more akin to those of covered gas pipelines for which a light regulation determination has not been made (i.e. are subject to full regulation) in recognition that where market power is not constrained by countervailing power and competing substitutes a greater level of regulatory constraint is required.

Given the clear differences in the character of light regulation gas pipeline transportation services The DBCT User Group emphasises the warning that COAG has sounded in relation to gas pipelines regarding the dangers of under-regulation due to applying negotiate-arbitrate in situations where shippers lack the ability to negotiate effectively.⁶⁶ In particular, it is worth repeating COAG's comments that:⁶⁷

⁶⁴ QCA Interim Draft Decision, 9.

⁶⁵ QCA Interim Draft Decision, 9.

⁶⁶ COAG Energy Council, Options to improve gas pipeline regulation, COAG Regulation Impact Statement for consultation, October 2019, 73.

⁶⁷ COAG Energy Council, Options to improve gas pipeline regulation, COAG Regulation Impact Statement for consultation, October 2019, 73-74.

As noted by the Expert Panel, the negotiate-arbitrate form of regulation is premised on the idea that shippers have some level of countervailing power

...

However, if users are unable to meaningfully negotiate, either because they are under-resourced, atomistic/unable to co-ordinate or captive and lacking credible alternatives, then it is not clear they have any countervailing power. The option to seek arbitration may mitigate this to a certain extent. However, small or unsophisticated shippers may be at a disadvantage in any arbitration, so the threat of arbitration may not be considered credible for these shippers ... In these circumstances, the negotiate-arbitrate may be a relatively weak form of regulation.

..

A related point is that if there are a large number of shippers, there might be a large number of arbitrations, which could be quite costly.

...

Where negotiation is unlikely to be meaningful, or the costs of arbitration are likely to be high, a more direct form of price control may be justified.

It directly follows from the findings that have been made in the 2019 DAU process, the declaration review process and the previous undertaking (about DBCTM's market power, the user's captive nature and the lack of competing substitute services, barriers to entry and resulting lack of any countervailing power), that users are not able to meaningfully negotiate in relation to the DBCT service.

Without a reference tariff, the risks of under-regulation and exercise of market power in respect of the DBCT service are very high. That is not appropriate.

7.2 Reducing information asymmetry is not sufficient

Second, it is entirely evident from the form of regulation factors noted above, that resolving the information asymmetry issue would not be likely to be sufficient for a service with DBCT's characteristics to be given light regulation, and will not result in the circumstances of the DBCT service becoming akin to those of light regulation gas pipelines.

In particular, the lack of countervailing power and lack of any competing substitute services, means that no access seeker (however well informed) will be positioned to negotiate a reasonable price outcome given DBCTM's significant market power.

As discussed above, that is exacerbated by asymmetric time pressure.

7.3 There is evidence the gas pipeline light regulation regime is not constraining exercises of monopoly power

Third, it is clearly evident from the ACCC's East Coast Gas Market Report, that the treatment of light regulation pipelines has not proven sufficient to prevent pipeline operators engaging in monopoly pricing:⁶⁸

There is evidence that a large number of pipelines are taking advantage of their market power by engaging in monopoly pricing, with ten of the 11 pipelines that were investigated having been found to be engaging in some or all of the behaviours outlined above, in addition to other forms of monopoly pricing.

...

⁶⁸ ACCC, Inquiry into the East Coast Gas Market, April 2016, 110-111.

As this list highlights, some of the pipelines that were found to be engaging in monopoly pricing ... are subject to full or light regulation ... This finding reinforces the observation that ...the gas access regime, in its current form, is also failing to impose an effective constraint on pipeline operators.

In addition, in its ongoing role in monitoring the east coast gas market, the ACCC has continued to report concerns about:

- (a) excessive pricing on some pipelines
- (b) failures by pipeline operators to comply with information disclosure requirements and exploiting information asymmetries to the detriment of shippers; and
- (c) pipeline operators viewing the threat of arbitration as less credible when it involves a smaller shipper creating a weakness in the negotiate-arbitrate framework.⁶⁹

COAG has similarly found that the dispute resolution mechanism applying to regulated pipelines may not be as credible as it could and may not therefore be posing a constraint on the behaviour of service providers in negotiations.⁷⁰

Given those findings, the DBCT User Group submits that there is a very significant, and well recognised, risk that a negotiate-arbitrate regime will *not* effectively constrain DBCTM's market power even if it was assumed (contrary to the QCA's own findings) that the circumstances of the DBCT service were the same as those of light regulation pipelines. In addition, where the existing gas pipeline regulatory framework is the subject of a myriad of reviews by government and regulatory bodies aimed at seeking to understand how to resolve its observed flaws, now is surely not that time to seek to extrapolate an appropriate regulatory setting for DBCT by comparisons to gas pipelines.

Where the QCA and stakeholders are confident that the existing reference tariff regime will constrain DBCTM's market power, and there are clear risks that a non-tariff negotiate-arbitration regime will not – it cannot be appropriate to adopt a negotiate-arbitrate regime.

7.4 Prescriptive nature of pricing requirements for light regulation pipelines

Fourth, the regulation of light regulation gas pipelines is premised on far more regulatory prescription than just information provision of the type the Interim Draft Decision seems to envisage.

As the QCA notes, the AER's Financial reporting guidelines for light regulation pipeline services are highly prescriptive – not just about the information that will be provided, but in *prescribing how prices will be calculated*.⁷¹

By way of some clear examples, the AER prescribes:

- (a) that where a pipeline was previous subject to a full access arrangement (effectively equivalent to DBCT's existing undertaking), the opening RAB value must be based on that established at the commencement of the most recent full access arrangement;⁷²
- (b) the principles to be applied in a roll forward of the RAB value;⁷³
- (c) the required depreciation methodology;⁷⁴ and

⁶⁹ ACCC, Gas Inquiry 2017-2020, Interim Report, July 2019, 110 and 128

⁷⁰ COAG Energy Council, Options to improve gas pipeline regulation, COAG Regulation Impact Statement for consultation, October 2019, 113.

⁷¹ QCA Interim Draft Decision, 39.

⁷² AER, *Financial reporting guideline for light regulation pipeline services*, October 2019, 19.

⁷³ AER, *Financial reporting guideline for light regulation pipeline services*, October 2019, 19-20.

⁷⁴ AER, *Financial reporting guideline for light regulation pipeline services*, October 2019, 14

- (d) the weighted average cost of capital (**WACC**) must be an estimate of the WACC that would have been set by the ACCC/AER if it was subjected to full regulation – based on the WACC decisions of the ACCC/AER in respect of full regulation gas pipelines.⁷⁵

The DBCT User Group considers that if there was to be any hope at all of trying to constrain DBCTM's market power without a reference tariff it would require an even greater degree of prescription, such as:

- (a) either requiring the prices to be calculated exactly in accordance with the QCA's methodology as determined for the existing access undertaking; or
- (b) requiring the adoption of the market based WACC components applied in respect of Aurizon Network, and prescribing DBCT specific WACC parameters and cost issues such as the remediation allowance.

DBCTM is obviously not suggesting anything of that nature.

However, even if it was to do so, that would mean that the level of prescription required would be increasingly close to basically being a reference tariff decision, but with the QCA sub optimally being forced to make it:

- (a) without the benefit of stakeholder submissions;
- (b) without the transparency and protection against inappropriate outcomes that submission process provides; and
- (c) without the flexibility the QCA has in an undertaking process to determine what is appropriate, even if that involves some variation from its existing methodologies.

That gives rise to real questions whether if it is considered appropriate to go to that level of prescription to fix the negotiate-arbitrate model (when by doing so any perceived benefits of a more 'light handed' approach will largely be removed) and it not clearly more appropriate to simply have a reference tariff.

8 Cost-benefit analysis

As discussed in section 3.2(a) above, appropriateness requires a consideration of the relative appropriateness of alternatives.

Even if one simply assumes (completely to the contrary of all submissions by the DBCT User Group and individual access seekers) that it is possible to make a negotiate-arbitrate model equally effective in constraining DBCTM's ability to exercise market power, that still leaves two potential pricing models that could theoretically achieve such a constraint.

Consequently, the DBCT User Group submits that the QCA is required (as part of its assessment of appropriateness) to compare any potential revised negotiate-arbitrate model against the reference tariff model that presents the clear alternative. As discussed in section 3.3, where the DBCTM pricing model is not approved, the QCA should require the most appropriate undertaking to be resubmitted.

The DBCT User Group strongly submits that a simple comparison clearly indicates that even if it was theoretically possible to revise a negotiate-arbitrate model to such an extent that it could appropriately constrain DBCTM's market power, the additional costs and prescription involved in doing so would mean that the only appropriate approach would be to require a reference tariff model instead.

⁷⁵ AER, *Financial reporting guideline for light regulation pipeline services*, October 2019, section 6.

In other words, the changes required to try to get a negotiate-arbitrate model to be effective in constraining DBCTM's market power will bring this 'light handed' form of regulation, so close to what DBCTM derides as 'heavy handed' regulation – that the whole rationale for adopting it in the first place is substantially diminished, if not removed.

A critical analysis of the proposals in the Interim Draft Decision to seek to resolve the uncertainty and information asymmetry issues inherent in a negotiate-arbitrate model aptly demonstrate why that is the case.

Where the QCA considers that it would adopt the light regulation gas pipeline model of prescribing how price would be calculated or would publish a QCA guidance document that prescribes the methodologies the QCA would intend to adopt in an arbitration,⁷⁶ the QCA will have effectively introduced all of the issues that the QCA perceives to be disadvantages of a reference tariff, while still failing to provide the level of certainty that a reference tariff would.

That follows because, as discussed in section 7.4 of these submissions above, the level of prescription involved in the 'disclosure' and 'guidance' materials would be increasingly close to effectively being a reference tariff decision. However, it would be a quasi-tariff that brought new disadvantages of the QCA being forced to make it without the benefit of stakeholder submissions and without the transparency and certainty that process provides, and losing the flexibility the QCA has in an undertaking process to determine what is appropriate, even if that involves some variation from its existing methodologies.

Yet, it would still only have mitigated and not completely removed most of the problems inherent in the negotiate-arbitrate model as any required pricing principles or QCA guidance would presumably still leave some areas of uncertainty (unintended or otherwise) – and therefore create:

- (a) the greater cost and time for DBCTM and access seekers need for multiple negotiations of price;
- (b) the greater cost and time for DBCTM and access seekers needed for multiple arbitrations of price rather than a single ex-ante determination; and
- (c) the potential for access seekers to agree to inefficient monopoly pricing (even if inconsistent with the QCA guidelines) or be deterred from efficient contracting and investment due to time pressured negotiations and the unattractive nature of arbitration.

It is also far from clear how responsive such guidance would be to changes in circumstances, and how transparent and well-informed any such modification process would be, in the absence of review events or draft amending access undertaking related changes to the reference tariffs under the existing reference tariff model.

Consequently, the DBCT User Group struggles to comprehend how such a solution – which looks increasingly like a Clayton's reference tariff – would be considered more appropriate on any cost-benefit analysis, having regard to the section 138(2) QCA Act factors than the existing reference tariff model.

9 A non-reference tariff model is inappropriate when coupled with socialisation

9.1 Socialisation is not appropriate in a negotiate-arbitrate model

The non-reference tariff model proposed by DBCTM clearly envisages the potential for differential pricing between users of the terminal. That is, of course, an expected and highly likely outcome of

⁷⁶ QCA Interim Draft Decision, 42.

any negotiate-arbitrate model, and would remain the case even with the potential amendments to the non-reference tariff pricing model described in the Interim Draft Decision.

Any negotiate-arbitrate model will create that potential for users to agree different prices with DBCTM and for individual arbitrations to determine different prices.

Yet, DBCTM's model seeks to preserve *all* the regulatory protections that have been introduced as an appropriate part of a reference tariff regime, with the principal example being automatic socialisation of matters including changes in volume and new capital expenditure. That is, DBCTM seeks to change the pricing model to increase its pricing while not changing the commercial and regulatory risks it faces.

To the DBCT User Group's knowledge, socialisation is unsurprisingly not a feature of any other negotiate-arbitrate regulatory regimes. There are clear and principled reasons why that is not the case.

It is one thing for socialisation to occur across users utilising a service on identical prices and identical or near-identical terms as currently occurs.

But how can it be appropriate for:

- (a) all volume risk to be automatically socialised – when DBCTM could, for example, accept greater counterparty credit risks, shorter terms or greater termination rights in return for higher pricing (knowing that other users will effectively underwrite the risks completely if the risks from such decisions actually eventuate, even between price reviews); or
- (b) all new capital expenditure to be socialised without any mechanism for a review of prudence or efficiency of such capital expenditure.

Yet, that is exactly what DBCTM's 2019 pricing model (through the proposed terms in the 2019 DAU and related standard access agreement provisions) would achieve.

A negotiate-arbitrate regime cannot be appropriate where features of a reference tariff system such as socialisation to protect DBCTM against risks are continued.

To put it plainly, socialisation means that users that are not party to commercial negotiations and arbitrations can be affected by the pricing arrangements agreed or determined without affected users having any opportunity to even raise their reviews. That is the very antithesis of the circumstances in which socialisation should apply.

Socialisation is appropriate in the current regulatory settings because all affected stakeholders have transparency of proposals and the opportunity to make submissions in relation to capital expenditure, revenue and pricing issues that are ultimately socialised.

The DBCT User Group urges the QCA to critically consider this issue (noting that it does not appear to have been considered in the Interim Draft Decision and was not referred to in great length when raised in the 1st DBCT User Group Submission⁷⁷), as it believes that for the QCA to find a negotiate-arbitrate regime to be appropriate in respect of DBCT would require far more fundamental and wide-reaching changes to the structure of pricing of the DBCT service than the Interim Draft Decision contemplates.

9.2 Existing User Agreements prevent a transition to a non-socialised model

In addition, those fundamental and wide-reaching changes cannot actually be made through the 2019 DAU to the existing user agreements, which contractually provide for that socialisation occurring, and will not be amended simply by the any future changes to the future standard access agreement terms.

⁷⁷ 1st User Group Submission, 49.

It would obviously be an inappropriate result to have completely different approaches to socialisation applying to existing and future users.

Yet, it is difficult to see how existing users are incentivised to assist DBCTM by agreeing amendments to introduce a pricing approach they consider will allow DBCTM to engage in monopoly pricing.

In other words in the current circumstances it is not actually possible to uniformly remove socialisation across users of the terminal. Yet, without doing so, it is clear that a non-reference tariff pricing model is not appropriate.

Consequently, the DBCT User Group strongly considers that this issue reinforces the position that the only way the 2019 DAU can be appropriate is with the inclusion of a reference tariff.

10 A non-reference tariff model is inappropriate given the terms of the existing access agreements

Existing users have access agreements that clearly anticipate the existing regulatory arrangement and continuation of reference tariffs.

As previously submitted during the declaration review process, the DBCT User Group consider that the User Agreements are not frustrated, as there remains a manner for setting price through the 5 yearly price review and arbitration mechanisms in clause 7 of the access agreements.

However, that is not to say that the User Agreements will continue to operate exactly as may have been intended, particularly in the periods between pricing reviews.

In particular, the DBCT User Group notes that:

- (a) The Terminal Infrastructure Charge (TIC) is determined by the Revenue Cap, which in turn is determined principally based on the principles in the undertaking (Schedule 2, Part A, item 4);
- (b) Clauses 4.7 and 5.1(f) and Schedule 2, Part A, item 2 and Part B, item 4 envisage the QCA making decisions in relation to approval of increments and repayment / retention of the provisional increment; and
- (c) Schedule 2, item 5 (annual roll-forward) and item 6 (review events) are reliant on QCA approvals of particular pricing outcomes and drafted quite differently to the provisions DBCTM is proposing in the 2019 DAU in relation to those issues (see Schedule C, Part B, 2019 DAU).

Those provisions effectively do not appear to operate as intended without reference tariffs, creating uncertainty for existing users and different outcomes in relation to those issues than were presumably intended at the time of contracting and resulting in different outcomes than will apply to users contracting under DBCTM's proposed new standard access terms that are not-reference based.

However, DBCT Users have no obligation to agree to amendments, and no incentive to do so where doing so would merely facilitate a pricing model they consider will create higher prices and uncertainty of future pricing outcomes through reducing constraints on DBCTM's ability to exercise market power.

It cannot be appropriate to adopt a pricing model that creates such uncertainty in how existing contract operate, and creates a difference in how pricing operates for existing users and future users.

These evident difficulties are not addressed in DBCTM's submissions or in the Interim Draft Decision, and the DBCT User Group urges the QCA to consider them, as they are not issues that any negotiate-arbitrate model (however amended) can readily resolve.

Part B – Proposed Approach to Reference Tariff

11 Proposed Approach to Reference Tariff – WACC

11.1 Overview – Approach to Inclusion of a Reference Tariff

In the Interim Draft Decision the QCA indicated it was seeking proposals from stakeholders as to how a reference tariff to be included in the 2019 DAU might be developed.⁷⁸

DBCTM's position means that it has failed to provide any information on what it considers an appropriate reference tariff (or underlying WACC parameters or building blocks) would be. The DBCT User Group does not anticipate that DBCTM will provide any such information in this current round of submissions, as that would effectively disclose the minimum price they would seek to charge under any negotiate/arbitration regime and therefore show the significant extent to which they will be seeking price increases.

The DBCT User Group strongly submits that the appropriate approach to including a reference tariff in the 2019 DAU would be to:

- (a) develop a building blocks-based reference tariff in the usual way that the QCA would, including setting the appropriate weighted average cost of capital by reference to past QCA methodology and advice of an independent economic expert; and
- (b) unwind all of the consequential changes that DBCTM has made in the 2019 DAU (relative to the existing approved access undertaking and standard access agreement) as a consequence of their proposal to remove the reference tariff.

In that sense the changes required are relatively simple.

11.2 PwC Estimate of Appropriate WACC

The DBCT User Group appreciate that applying the QCA's building blocks methodology still requires an assessment of each underlying parameter.

Accordingly, the DBCT User Group has engaged PricewaterhouseCoopers (**PwC**) to prepare a report on the appropriate weighted average cost of capital (**WACC**) to apply in setting the charges for the DBCT coal handling services – with that report set out in Annexure 1 to this submission (the **PwC Report**).

PwC's instructions were to prepare an independent estimate of what the QCA was likely to consider appropriate. As a result, the PwC estimate is not an ambit claim, or the lowest WACC that is arguable, As described in a number of places in the balance of this section 11, the DBCT User Group considers there are arguments for a lower WACC.

However, the PwC estimate of a WACC for the 2019 DAU of a post-tax nominal 4.36% (subject to updating for the time period selected for estimating the debt risk premium) is clearly reflective of existing QCA and regulatory precedent, particularly including the approach the QCA has consistently adopted in respect of previous DBCT access undertakings, and the DBCT User Group submits that it is an appropriate and balanced approach to estimating the WACC.

The DBCT User Group recommends the PwC Report as a strong foundation for the QCA's assessment of the appropriate reference tariff.

The estimated decrease in DBCTM's WACC is principally based on changes in market parameters, and aligns with the QCA's approach. Particularly given the complete absence of any proposal from DBCTM in relation to an appropriate reference tariff, it provides a clear source of independent advice for the QCA in respect of the appropriate estimate for WACC parameters.

⁷⁸ QCA Interim Draft Decision, 62.

Without repeating the PwC in its entirety, the DBCT User Group addresses a number of specific WACC related issues discussed in the report below.

11.3 Variations from a 'bottom up' estimate of WACC

The DBCT User Group acknowledges that the QCA has the power to determine the appropriate reference tariff, which can involve an upwards or downwards adjustment from the estimate derived from a 'bottom-up' analysis, and the QCA determined it was appropriate to provide such an uplift in the case of the Aurizon Network decision.⁷⁹

As discussed earlier in these submissions, the ability to make such a variance to ensure overall appropriateness is a strength of the reference tariff pricing model.

However, the DBCT User Group would simply note at this stage that:

- (a) without being able to review the QCA's initial bottom-up WACC estimate, it is premature to be making submissions on whether any variation from that QCA bottom-up estimate is appropriate;
- (b) as discussed in the PwC Report, there are a number of factors specific to Aurizon Network, and the potential methodologies for calculating the risk-free rate and debt risk premium parameters under consideration in the UT5 process, which appear to have influenced the QCA's decision regarding the appropriateness of a variation from the bottom up estimate in that particular case; and
- (c) as the PwC Report notes, PwC's estimate of the appropriate WACC is broadly in line with other regulatory decisions of the QCA.

11.4 Risk free rate

The DBCT User Group notes that the PwC Report adopts a 10 year bond rate for estimating the risk-free rate, consistent with the most recent QCA regulatory decisions, rather than the term-matched bond rate approach applied in the previous DBCT decision. This results in a higher risk-free rate.

The DBCT User Group considers that it would be premature to make any further adjustments in relation to the impact of COVID-19 (and the RBA's quantitative easing program) on bond rates, given that the QCA would typically update any calculated risk-free rate closer to the date for the final decision (anticipated for February 2021) when the outlook would be anticipated to be far more settled.

11.5 Market Risk Premium

The DBCT User Group notes that the PwC Report adopts a market risk premium (**MRP**) of 6.5%, adopted in previous QCA decisions and being generally corresponding to the QCA's move to using a 10 year bond-rate for estimating the risk-free rate.

As the PwC Report discusses, regulatory precedent for the MRP has tended to be lower than the 6.5 adopted by the QCA, with the AER and ACCC utilising a MRP of 6.10% in their most recent decisions.

The DBCT User Group therefore considers the PwC Report estimate of MRP is potentially overstated, and the QCA should consider whether a lower MRP is appropriate.

⁷⁹ QCA, Decision: Aurizon Network's 2017 draft access undertaking, December 2018, 73-76.

11.6 Beta

The PwC Report proposed an asset beta of 0.42, taking into account both the findings of the QCA and Incenta in respect of the existing access undertaking and alignment with the QCA's most recent regulatory decisions. The DBCT User Group considers that is appropriate.

During the 2017 draft access undertaking process, DBCTM sought an equity beta of 'at least 1' – materially higher than the 0.87 equity beta (based on a 0.45 asset beta and 60% leverage) the QCA considered appropriate.

For the reasons set out in section 4.8.2 of the QCA's Draft Decision, an asset beta of the nature adopted for that current access undertaking remains completely inappropriate.

The DBCT User Group particularly emphasises that:

- (i) if anything DBCTM is now even more insulated from any volume risk given that in addition to all of the factors noted in the decisions regarding the existing DBCT access undertaking:
 - (A) the terminal is currently fully contracted following the 'notifying access seeker process', with a remaining access queue;
 - (B) DBCTM has, through a process under existing access agreements, extended the term of existing agreements by a further 5 years (such that it actually has materially longer term take or pay commitments than at the last undertaking), aptly demonstrating the truth in the DBCT User Group's previous submissions about the extremely high likelihood of renewals; and
 - (C) DBCTM engaging with access seekers in relation to expansions;
- (ii) as found in the decisions on the 2017 draft access undertaking and the declaration review, DBCTM does not face competition from other coal terminals; and
- (iii) as found by Incenta and the QCA in respect of the 2017 draft access undertaking, from a systematic risk perspective, DBCTM's regulatory settings make regulated energy and water businesses the most appropriate comparator businesses for determining the appropriate (and the factors referred to by Incenta would continue to remain in place under a reference tariff pricing model).

As the PwC Report notes, more recent analysis by Incenta as part of the QR's recent access undertaking process, estimated the comparator regulated energy and water businesses to have an asset beta of 0.38. In, addition, during the last undertaking process the QCA accepted that an asset beta of 0.4 represented 'the best empirical value available'.⁸⁰

Accordingly, the DBCT User Group considers a 0.42 asset beta estimate more appropriate than the previous 0.45 estimate, and potentially still generous to DBCTM.

The DBCT User Group also notes for completes that it fundamentally rejects DBCTM's previous characterisation of an equity beta of 1.0 being appropriate. In particular, its adoption in the 2010 access undertaking was a result of suite of arrangements supported by industry, and it was appropriately reduced in the 2017 access undertaking. As the QCA recognised in its final decision on the 2017 access undertaking 'the uplift has served its purpose, which was to stimulate investment, and is no longer justified'.⁸¹

⁸⁰ QCA, Final Decision, DBCT Management's 2015 draft access undertaking, November 2016, 87.

⁸¹ QCA, Final Decision: DBCT Management's 2015 draft access undertaking, November 2016, 94.

In addition, given that DBCTM is only now engaging with access seekers in relation to potential underwriting agreements and conditional access agreements it is far from clear that any expansion will occur during the term of the 2019 access undertaking, such that users of existing capacity should not be punished with higher charges for nearly 85 mpta of existing contracted capacity for a notional risk arising from expansions that DBCTM has not even committed to, and which could be as small as a few million tonnes per annum.

11.7 Capital structure

The PwC Report adopts the 60% capital structure the QCA has traditionally applied to DBCT.

The DBCT User Group notes that it understands DBCTM to operate with a significantly higher proportion of debt, such that conservatively assuming a 60% capital structure may overstate the appropriate WACC. In that regard, the DBCT User Group notes public ratings announcements,⁸² and the levels of debt maturity DBCTM currently reports,⁸³ that appear to support that understanding

The DBCT User Group acknowledges that increasing the assumed leverage would be likely to result in some counterbalancing adjustments to other parameters in any case.

11.8 Gamma

The PwC Report adopts the 0.484 estimate of gamma consistent with all QCA decisions since December 2018. The DBCT User Group considers that is an appropriate estimate.

11.9 Cost of debt

The PwC Report applies the methodology for determining cost of debt from the QCA's most recent decisions using BBB rated corporate bonds. The DBCT User Group considers that is an appropriate approach.

The DBCT User Group assumes that the QCA would typically update any calculated cost of debt closer to the date for the final decision (anticipated for February 2021) when the outlook would be anticipated to be more settled than it currently is.

12 Proposed Approach to Reference Tariff – Non-WACC Building Blocks

12.1 Difficulty of comments on other building blocks without disclosure

DBCTM has chosen to approach this process in a manner which has resulted in it providing no disclosure on capital expenditure profile for the 2019 DAU term or in respect of the various cost allowances provided to DBCTM, with the exception of a self-serving estimate of rehabilitation costs.

As a result, the DBCT User Group submits that there is no basis for the QCA to make any determinations in relation to costs or methodology of assessing prudent and efficient costs that depart from those adopted in previous regulatory decisions in respect of DBCT's coal handling service.

12.2 Rehabilitation costs

DBCTM submitted a rehabilitation plan prepared by GHD with an estimated remediation cost of \$1.22 billion. The GHD estimate of rehabilitation costs is nearly triple the current estimated remediation costs utilised to calculate the remediation allowance included in reference tariffs.

⁸² See for example: <https://au.investing.com/news/stock-market-news/fitch-affirms-dbct-finance-pty-limited-at-bbb-outlook-stable-1426851>

⁸³ See: <https://www.dbctm.com.au/reporting/other-financials/>

As discussed in the 1st User Group Submission:⁸⁴

- (a) the existing remediation allowance is based on an estimate the QCA has accepted is appropriate based on the advice of an independent expert consultation;
- (b) DBCTM's new estimate is approximately 50% higher than the highest rehabilitation estimate previously proposed by DBCTM itself;
- (c) the GHD report which contains the new estimate is expressly non-reliance, 'preliminary only' based on unverified information and provided on a highly caveated basis; and
- (d) GHD's estimate does not provide any allowances for matters which would reduce the net costs – such as the potential for any reduction in costs for efficient improvements, technological changes, alternative uses, the government allowing a different standard or rehabilitation or Hay Point Coal Terminal continuing such that common infrastructure areas do not have to be remediated.

DBCTM has not provided any further information in the 2019 DAU submissions process which could help further explain or justify those issues.

The DBCT User Group emphasises that given the significance of the proposed increase, the very limited explanation provided, and the material impact on tariffs, it is critical in developing an appropriate reference tariff, that the QCA should engage independent experts to assess the appropriate estimate.

In addition, the DBCT User Group submits that the intention should be to resolve an appropriate estimate, not an ultra-conservative one with significant contingency.

That follows particularly as there will continue to be avenues, at a minimum at each regulatory term, for the appropriate remediation allowance to be reconsidered taking into account all new information including in relation to the likely useful life of the terminal and the likely cost of rehabilitation. Given the useful economic life assessed by the QCA of at least 2054, there will be plenty of opportunities and it would cause inter-generational equity issues if existing users were required to bear the brunt of a materially overstated estimate of rehabilitation costs now, only for the annuity to be significantly reduced in later periods.

In addition, if the QCA considers it is appropriate to reopen the rehabilitation estimate, it must seriously consider reopening its estimate of useful economic life of the terminal. The DBCT User Group continue to consider that the 2054 economic life basis that the QCA is utilising to calculate the annuity grossly underestimates the likely useful economic life of the terminal.

Finally, the User Group notes that an identifiable and transparent annuity stream fully funding rehabilitation costs is a direct feature of a reference tariff model that would disappear under a negotiate-arbitrate model, presenting another reason why such a change is clearly not appropriate.

12.3 Inappropriate nature of previous DBCTM arguments in relation to other pricing issues

As noted above, DBCTM has chosen to approach the 2019 DAU process in a manner which has resulted in it having provided no submissions to date regarding its views on issues relevant to an appropriate reference tariff.

However, given the nature of previous claims made by DBCTM and to assist the QCA in providing a recommended reference tariff based pricing model in its Draft Decision, the DBCT User Group has addresses some of DBCTM's previous claims below.

(a) Review events for modelling issues

⁸⁴ 1st DBCT User Group Submission, 50-51.

The DBCT User Group remains strongly opposed to one-sided review events in relation to alleged issues in the modelling of the annual revenue requirement (of the type DBCTM proposed in the various draft access undertakings referred to as the Modelling DAAUs and then the Remediation DAAU).

As recognised in the QCA Draft Decision on the Remediation DAAU:⁸⁵

for the proposed amendment to be capable of acceptance, the QCA considers that sufficient arrangements need to be put in place to enable users to view the ARR model so that they can understand and respond to any submissions made by DBCTM in respect of the errors being identified and how any proposed changes will affect them. The QCA considers that this is also necessary in order to satisfy the requirements of procedural fairness. In the absence of a transparent model, the QCA considers the new review event mechanism could lead to an imbalance in the ARR model, favouring DBCTM, over time.

DBCTM has never been willing to provide such transparent modelling.

The DBCT User Group continues to believe that it would not be appropriate to introduce amendments to the Review Event of this nature or to adjust reference tariffs for issues DBCTM asserts arising from modelling without such transparent modelling.

(b) Impact of Tax Treatment of Remediation on Remediation Allowance

For similar reasons the DBCT User Group remains strongly opposed to changing the modelling in relation to the tax treatment in respect of remediation costs.

Again, as recognised in the QCA Draft Decision on the Remediation DAAU:⁸⁶

the same considerations apply to the QCA's consideration of the tax treatment of the remediation allowance. Absent further transparency over the ARR model which would allow a broader review of the remediation and tax frameworks, the QCA's preliminary view is that this proposal does not permit users and other stakeholders an adequate and fair opportunity to consider and respond to the proposed error identified by DBCTM or the impact of any changes made to address it.

The DBCT User Group has long believed that DBCTM is 'out-performing' the extent of tax costs that the current modelling envisages it incurring, and believes that no increase to the remediation allowance of this nature should be permitted unless there is both transparency of the AAR model and a broad based review of how DBCTM's tax position aligns with the allowances it is provided for tax costs under the model.

⁸⁵ QCA, Draft Decision: DBCTM's Remediation Allowance DAAU, August 2018, iii.

⁸⁶ QCA, Draft Decision: DBCTM's Remediation Allowance DAAU, August 2018, iv.

Part C – 2019 DAU Non-Tariff Issues

13 Non-Tariff Issues

13.1 Consideration of Non-Tariff Issues in 1st User Group Submission

While, the DBCT User Group acknowledges that the Interim Draft Decision was confined to the appropriate model, given that the QCA will now proceed to a full Draft Decision, the DBCT User Group has also raised below a further non-pricing issues the QCA should consider.

This issue is raised in addition to the issues raised in the 1st User Group Submission. In particular, the DBCT User Group draws the QCA's attention to its comments in the 1st User Group Submission, Part D: Non-Pricing Changes and Schedule 3).

For the avoidance of any doubt, the DBCT User Group strongly rejects all consequential changes which have been made by DBCTM as a result of the proposal to remove the reference tariff model.

13.2 Treatment of expansions

In particular, since the 1st User Group Submissions, DBCTM has sought to require that:

- (a) access seekers sign a conditional access agreement committing to :
 - (i) without any specific expansion specified (and therefore the potential cost and capacity of such expansion unknown);
 - (ii) without any of the conditions precedent specified in clause 5.4(j) in relation to expansion development proceeding within a certain time and cost, corresponding supply chain expansions and obtaining matching supply chain rights being included; and
- (b) access seekers sign an underwriting agreement to fund feasibility studies without any specific expansion, scope of study or funding envelope included,

and threatened to remove access seekers from the queue who did not sign such arrangements.

That conduct has made it clear that the existing expansion framework provides insufficient protection to access seekers in relation to expansion proposals.

That position will be significantly exacerbated in the absence of a reference tariff as that would produce even greater uncertainty as to the potential charges that an access seeker would be committing to. It is highly inappropriate that access seekers are being required to commit to expansion capacity without even knowing whether reference tariffs will remain applicable at the time of any expansion being developed.

Accordingly, the DBCT User Group members submit that to be appropriate the 2019 DAU would also need to be amended to:

- (a) require the underwriting agreement to define the expansion(s) to be studied and the funding envelope for the study; and
- (b) require that a conditional access agreement cannot be issued to access seekers until there is sufficient definition regarding the capacity expansion to which the conditional access agreement relates as a result of such studies.

Annexure 1 – PwC Report

DBCT User Group

DBCTM's 2019 Draft Access Undertaking -
Setting an appropriate WACC

April 2020



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Key findings

The Dalrymple Bay Coal Terminal (DBCT) User Group engaged PricewaterhouseCoopers Consulting (Australia) Pty Limited to estimate a weighted average cost of capital (WACC) for the purposes of developing a reference tariff for inclusion in DBCT Management's (DBCTM) 2019 Draft Access Undertaking (DAU). This report is intended to be provided as part of a broader User Group submission in response to the Queensland Competition Authority's (QCA) interim draft decision, which rejected the pricing model proposed by DBCTM in its 2019 DAU.

We estimate DBCTM's WACC as at 31 March 2020 to be 4.36 per cent (post-tax, nominal). We have estimated this WACC for DBCTM having reviewed the QCA's rate of return methodology, its application in recent QCA decisions, and broader Australian regulatory precedent. Our estimate is consistent with recent rate of return decisions for other regulated entities noting timing and methodological differences between jurisdictional regulators.

Our estimated WACC is lower than the approved WACC from the 2017 DBCT Access Undertaking (5.82 per cent). The table below shows that the change in the WACC is driven primarily by changes to market parameters – namely the risk-free rate and the debt risk premium - as well as some methodological changes. The WACC also incorporates a reduction in the asset beta from 0.45 to 0.42, reflecting a continuation of the downward adjustment flagged by the QCA in its decision on the 2017 DBCT AU, and to align with the regulator's most recent decision for Aurizon Network.

2017 DBCT AU and estimated DBCTM 2019 DAU WACC parameters

Parameter	2017 AU	2019 DAU	
Risk-free rate	1.82%	0.90%	↓
Market risk premium	6.50%	6.50%	-
Asset beta	0.45	0.42	↓
Capital structure	60%	60%	-
Corporate tax rate	30%	30%	-
Gamma	0.47	0.48	↑
Debt beta	0.12	0.12	-
Equity beta	0.87	0.80	↓
Cost of equity	7.48%	6.10%	↓
Debt risk premium	2.89%	2.20%	↓
Financing costs	0.24%	0.11%	↓
Cost of debt	4.72%	3.20%	↓
WACC	5.82%	4.36%	↓

Note that the figures above have been rounded to two decimal places

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1. Background

In October 2017, the Queensland Competition Authority (QCA) issued an Initial Undertaking Notice pursuant to section 133 of the QCA Act¹ requiring DBCT Management (DBCTM) to submit a draft access undertaking (DAU) by July 2019.

In its interim draft decision on 24 February 2020², the QCA rejected the pricing model included in DBCTM's 2019 DAU³, finding that it would not provide sufficient constraint on DBCTM's ability to exercise market power, and may create uncertainty. The QCA's interim draft decision sought proposals from stakeholders on the development of a reference tariff (or tariffs) to be included in DBCTM's 2019 DAU.⁴

The DBCT User Group engaged PricewaterhouseCoopers Consulting (Australia) Pty Limited (PwC) to prepare this report in response to the QCA's interim draft decision on DBCTM's 2019 DAU. This report estimates a WACC for DBCTM's 2019 DAU having regard to the QCA's rate of return methodology, broader Australian regulatory precedent and a return commensurate with the risk to investors in a benchmark efficient coal terminal.

The report is structured as follows:

- in section 2.1, we examine recent QCA decisions and the application of WACC adjustments for Aurizon Networks and Queensland Rail
- in section 2.2, we detail the individual WACC parameters for DBCTM, setting out precedent from the QCA and other regulators
- in section 2.3, we provide a top-down assessment of our estimated WACC in the context of recent determinations in comparable industries.

¹ Queensland Government (2018), *Queensland Competition Authority Act 1997*, available at: <https://www.legislation.qld.gov.au/view/pdf/inforce/current/act-1997-025>

² QCA (2020), *DBCT Management's 2019 draft access undertaking*, available at: <https://www.qca.org.au/wp-content/uploads/2020/02/interim-draft-decision.pdf>

³ DBCT Management (2019), *2019 AU Submission*, available at: <http://www.qca.org.au/getattachment/c7b28c19-c03e-4b15-a89a-c04544eaf70c/DBCTM%E2%80%942019-DAU-submission.aspx>

⁴ QCA (2020), *DBCT Management's 2019 draft access undertaking*, Page 62

2. Estimated DBCT WACC

This section details the parameters used to estimate an appropriate WACC for DBCTM's 2019 DAU. In estimating an appropriate WACC we have had regard to the QCA's rate of return methodology, its application in recent QCA decisions, and broader regulatory precedent.

2.1 Recent QCA precedent

In its decisions on Aurizon Network's 2017 DAU⁵ (UT5) and the Queensland Rail (QR) 2020 DAU⁶ the QCA included an uplift on the rate of return for both entities, albeit through different mechanisms. Table 1 shows the difference between the QCA 'bottom-up' rate of return calculation and the applied rate of return in these decisions.

Table 1 - Recent QCA rate of return decisions

Decision	Bottom-up (%)	Decision (%)	Difference (%)
Aurizon 2017 Access Undertaking - UT5 (Final Decision) ⁷	5.45	5.70	0.25
QR 2020 Draft Access Undertaking (Final Decision)	4.82 ⁸	5.46	0.64

Sections 138(2) and 168A of the QCA Act require the QCA to, among other things, consider the 'legitimate business interests of the owner or operator of the service' and 'include a return on investment commensurate with the regulatory and commercial risks involved.' The Act also requires the QCA consider the interests of access seekers, access holders and the public.

Highlighting these provisions in the Act, the QCA noted⁹ in its Aurizon UT5 decision that applying a 'mechanistic approach' would not 'necessarily ensure an appropriate overall WACC.' In considering whether 5.45 per cent (the bottom-up estimate) would provide an appropriate rate of return, the QCA explored 'alternative' calculation methodologies including a 10 year bond term for estimating the risk-free rate and an average of the interpolated 10 year debt risk premium based on estimates published by Bloomberg and the RBA. These 'alternative' approaches have since been used by the QCA in subsequent decisions (see sections 2.2.1 and 2.2.6 below).

Based on these alternative calculation methodologies and a comparison of (normalised) rate of return determinations by other regulators, the QCA determined that a rate of return of 5.70 per cent would adequately compensate Aurizon for the regulatory and commercial risks it faces, provide sufficient incentive for investment, and balance the interests of the relevant stakeholders.

⁵ QCA (2018), *Decision - Aurizon Network's 2017 Draft Access Undertaking*, available at: https://www.qca.org.au/wp-content/uploads/2019/05/34327_Final-decision-1.pdf

⁶ QCA (2020), *Decision - Queensland Rail's 2020 Draft Access Undertaking*, available at: <https://www.qca.org.au/wp-content/uploads/2019/05/qca-qr-2020-dau-decision-and-secondary-undertaking-notice.pdf>

⁷ QCA (2018), *Decision - Aurizon Network's 2017 draft access undertaking*

⁸ This value reflects a debt risk premium of 2.03 per cent and excludes the debt risk premium uplift of 1.60 per cent.

⁹ QCA (2018), *Decision - Aurizon Network's 2017 Draft Access Undertaking*, Page 74

As part of the 2020 DAU process, QR pointed to precedent from other regulators and the QCA's UT5 decision as evidence that the QCA's bottom-up rate of return estimate (6.02 per cent) in its draft decision¹⁰ was not appropriate.¹¹ In its draft (and final) QR 2020 decision, the QCA used the 'alternative' risk-free rate and debt risk premium calculation approaches considered as part of its UT5 decision.

Rather than setting a rate of return based on the risk associated with QR's operations on the entirety of the network, the QCA determined that the WACC should be reflective of only the 'risk borne by [QR's] coal operations on the West Moreton line.'¹² In its draft decision, the QCA noted that the determined WACC (6.02 per cent), take-or-pay contracts, market evidence, tariff premiums, and a time-limited loss capitalisation mechanism provided sufficient measures to counter QR's exposure to risk with respect to the West Moreton line.¹³

In its final decision, the QCA noted that its draft decision was predicated on New Hope's New Acland Stage 3 being approved before the start of the 2020 AU. Noting that Stage 3 may never be approved, the QCA noted the time-limited loss capitalisation mechanism may not be an effective tool and that a discretionary uplift to the rate of return may be more appropriate.¹⁴ The QCA considered a direct adjustment to the debt risk premium as more appropriate than re-evaluating the asset beta (noting the non-systematic nature of the risk), capital structure or credit rating. Table 2 shows the change in parameters between the QCA's draft and final QR 2020 DAU decisions.

¹⁰ QCA (2019), *Draft Decision - Queensland Rail's 2020 Draft Access Undertaking*, available at: https://qca.org.au/wp-content/uploads/2019/05/34869_QCA-QR-2020-DAU-draft-decision.pdf, Page 27

¹¹ Queensland Rail (2019), *Queensland Rail's Response to the QCA's Draft Decision on Queensland Rail's Draft Access Undertaking 2 (DAU2)*, available at: <https://www.qca.org.au/wp-content/uploads/2019/05/qr-sub-qr-2020-dau-dd.pdf>

¹² QCA (2019), *Draft Decision - Queensland Rail's 2020 Draft Access Undertaking*, Page 26

¹³ QCA (2019), *Draft Decision - Queensland Rail's 2020 Draft Access Undertaking*, Page 42

¹⁴ QCA (2020), *Decision - Queensland Rail's 2020 Draft Access Undertaking*, Pages 40-41

Table 2 - QR 2020 DAU WACC parameters

Parameter	Draft decision	Final decision
Risk-free rate	2.28%	1.18%
Market risk premium	6.50%	6.50%
Asset beta	0.50	0.50
Capital structure	40%	40%
Corporate tax rate	30%	30%
Gamma	0.484	0.484
Debt beta	0.12	0.12
Equity beta	0.71	0.71
Cost of equity	8.76%	5.82%
Debt risk premium	2.28%	2.03%
Debt risk premium uplift	-	1.60%
Financing costs	0.108%	0.108%
Cost of debt	4.67%	4.92%
WACC	6.02%	5.46%

The QCA considered a direct uplift to be more practical than re-assessing QR's capital structure and credit rating given the possibility that Stage 3 may be approved during the term of the AU or that equivalent volumes are made up elsewhere, regulatory certainty, and the complexity of conducting a re-assessment. The uplift of 1.6 per cent was calculated as the difference between yields on BBB and BB rated corporate bonds in the United States and serves as a proxy for the premium required on non-investment grade bonds.

Between the QCA's draft and final QR 2020 decisions, the QCA approved Aurizon's 2019 Amending DAU¹⁵ which embeds mechanisms for a reset of the WACC during the AU term, sets a variable WACC dependent on performance targets and gives Aurizon an uplift of 20 basis points relative to the QCA's UT5 decision (setting a 'base' WACC of 5.90 per cent).

The revised Aurizon AU¹⁶ allows for a reset of the risk-free rate and debt risk premium reflecting the average of the 20 days prior to 30 June 2023 using the methodology outlined in the QCA's UT5 decision.¹⁷ This differs from the 'alternative' approaches explored in the UT5 decision (and in subsequent decisions) as these reset parameters are based on four year terms rather than 10 year terms. The QCA noted that this

¹⁵ QCA (2019), *Decision - Aurizon Network's 2019 draft amending access undertaking*, available at: <https://www.qca.org.au/wp-content/uploads/2019/12/decision.pdf>

¹⁶ Aurizon Network (2019), Revised UT5 DAAU, available at: <https://www.qca.org.au/wp-content/uploads/2019/05/appendix-1-revised-ut5-daaau.pdf>

¹⁷ Aurizon Network (2019), Revised UT5 DAAU, Pages 399-401

approach did not represent its “preferred approach to these matters” but considered it unnecessary to investigate given the general support of stakeholders.¹⁸

In the absence of circumstances similar to those outlined above, and relevantly applicable to DBCTM, we have not considered any discretionary WACC uplift for the 2019 DBCTM DAU in our analysis. Similarly our analysis has not considered any performance-based mechanisms related to the rate of return.

2.2 WACC Parameters

2.2.1 Risk-free rate

Table 3 outlines QCA decisions subsequent to its final decision on the DBCT 2015 Access Undertaking. In its decision on QR’s 2020 DAU, the QCA applied a 10 year risk-free rate.¹⁹ This represented a shift away from the ‘term-matching’ methodology applied in the QCA’s Aurizon UT5 decision, which used a four year bond term.²⁰

A 10 year risk-free rate has been applied by other Australian regulators in recent decisions including the AER, ACCC, ESC, ESCOSA and IPART.²¹ Given its application by the QCA and other regulators, our analysis adopts a 10 year risk-free rate.

Table 3 - QCA - Risk-free rate decisions

Decision	Risk-free rate (%)	Decision date
DBCT 2015 Access Undertaking (Final Decision) ²²	1.82	November 2016
Aurizon 2017 Access Undertaking - UT5 (Draft Decision) ²³	1.90	December 2017
Aurizon 2017 Access Undertaking - UT5 (Final Decision) ²⁴	1.90 ²⁵	December 2018
QR 2020 Draft Access Undertaking (Draft Decision) ²⁶	2.28	April 2019
Rural irrigation price review 2020–24 (Draft Decision) ²⁷	1.40	August 2019
Rural irrigation price review 2020–24 (Final Decision) ²⁸	1.16	February 2020
QR 2020 Draft Access Undertaking (Final Decision) ²⁹	1.18	February 2020

¹⁸ QCA (2019), *Decision - Aurizon Network’s 2019 draft amending access undertaking*, Page 17

¹⁹ A 20 day averaging period to 15 November 2019 was used in the QCA’s decision on QR’s 2020 DAU. This averaging period was nominated in advance and represented a fall of 110 basis points from the draft DAU decision (which was based on a 20 day averaging period to 31 January 2019).

²⁰ QCA (2018), *Appendices - Aurizon Network’s 2017 draft access undertaking*, available at: https://www.qca.org.au/wp-content/uploads/2019/05/34326_Final-decision-Appendices-A-G-1.pdf

²¹ QCA (2019), *Draft Decision - Queensland Rail’s 2020 Draft Access Undertaking*, Page 32

²² QCA (2016), *Final Decision - DBCT Management’s 2015 draft access undertaking*, available at: https://www.qca.org.au/wp-content/uploads/2019/05/31145_DBCT2015DAUFINALDECISION-1.pdf, Page 59

²³ QCA (2017), *Draft Decision - Aurizon Network’s 2017 draft access undertaking*, available at:

https://www.qca.org.au/wp-content/uploads/2019/05/32485_QCA-Draft-decision-1.pdf

²⁴ QCA (2018), *Decision - Aurizon Network’s 2017 draft access undertaking*

²⁵ QCA (2018), *Decision - Aurizon Network’s 2017 draft access undertaking*, Page 78. The QCA determined that no revision was necessary in relation to the risk-free rate averaging period across the draft and final decisions.

²⁶ QCA (2019), *Draft Decision - Queensland Rail’s 2020 Draft Access Undertaking*, Page 27

²⁷ QCA (2019), *Draft Report - Rural irrigation price review 2020–24 - Part A: Overview*, available at: <https://www.qca.org.au/wp-content/uploads/2019/05/qca-qr-2020-dau-decision-and-secondary-undertaking-notice.pdf>

²⁸ QCA (2020), *Final Report - Rural irrigation price review 2020–24 - Part A: Overview*, available at:

<https://www.qca.org.au/wp-content/uploads/2020/02/irrigation-price-review-final-report-part-a-overview-final.pdf>

²⁹ QCA (2020), *Decision - Queensland Rail’s 2020 Draft Access Undertaking*, Page 33

Figure 1 shows that the yield on 10 year Commonwealth Government bonds has largely trended downwards since the 2015 DBCT DAU decision. The fall in bond yields was particularly steep in 2019.

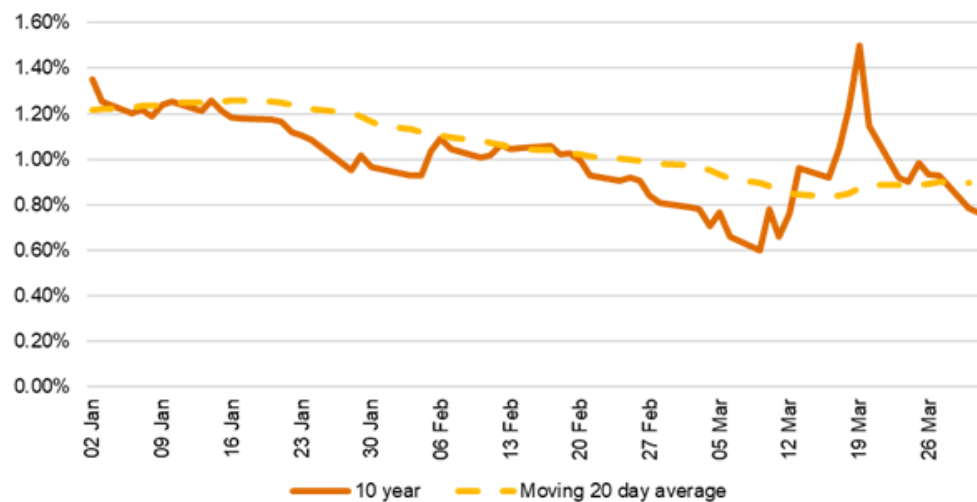
Figure 1 - 10 year Commonwealth Government bond yield (2016-2020)



Source: RBA, PwC Analysis

The outbreak of COVID-19 has had a significant impact on global economies and financial markets, including sovereign bond markets. Figure 2 highlights the impact of COVID-19 on 10 year Commonwealth Government bonds and the risk-free rate.

Figure 2 - 10 Year Commonwealth Government bond yield (Jan-Mar 2020)



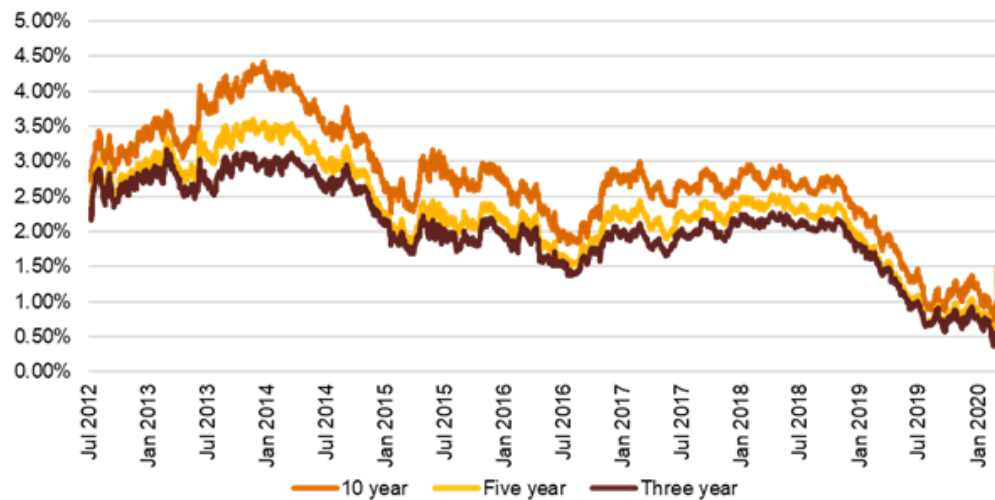
Source: RBA, PwC Analysis

As part of quantitative easing measures intended to reduce the economic impact of the outbreak, the RBA has set a target yield on three year Commonwealth Government

bonds of ‘around’ 0.25 per cent.³⁰ The RBA has committed to keeping this target until ‘progress is being made towards the goals for full employment and inflation.’³¹

Commonwealth Government bonds tend to follow the same trajectory regardless of tenor (Figure 3), noting (there is generally) a premium on the longer term bonds. Over the past five years the premium on 10 year bonds over three year bonds has been roughly 61 basis points, over the past 10 years it has been roughly 64 basis points.

Figure 3 - Commonwealth Government bond yield by tenor (2012-2020)



Source: RBA, PwC Analysis

The RBA's April Monetary Policy Decision³² indicates that the RBA is satisfied the yield on three year Commonwealth Government bonds has settled around the target of 0.25 per cent. Over the course of the 20 day period to 31 March, the premium on 10 year bonds over three year bonds has been erratic, shifting from between 23 basis points and 116 basis points.

The potential longer term impact of COVID-19 (and the RBA's quantitative easing program) on the bond market and the economy more broadly is difficult to measure as the longevity and potential spread of the virus is unknown. Market evidence to date does not provide concrete evidence on whether the yield on 10 year bonds will stabilise similar to the yield on three year bonds, or continue to fluctuate as investors' appetite for risk evolves. As to the extent the RBA's monetary policy decisions influence the risk-free rate, we note a previous comment from the QCA in which it noted "[t]he QCA does not consider the effects of monetary policy to be relevant to setting the term of the risk-free rate."³³

The QCA's calculation methodology, as applied in the QR 2020 DAU and rural irrigation price decisions, and a 20 day averaging period to 31 March 2020, results in a risk-free

³⁰ RBA (2020), *Statement by Philip Lowe, Governor: Monetary Policy Decision (March)*, available at: <https://www.rba.gov.au/media-releases/2020/mr-20-08.html>

³¹ RBA (2020), *Statement by Philip Lowe, Governor: Monetary Policy Decision (April)*, available at: <https://www.rba.gov.au/media-releases/2020/mr-20-11.html>

³² RBA (2020), *Statement by Philip Lowe, Governor: Monetary Policy Decision (April)*, available at: <https://www.rba.gov.au/media-releases/2020/mr-20-11.html>

Statement by Philip Lowe, Governor: Monetary Policy Decision

³³ QCA (2018), *Appendices - Aurizon Network's 2017 draft access undertaking*, Page 37

rate of 0.90 per cent. Given the current volatility of yields, using a different averaging period may result in the calculation of a materially different risk-free rate.

Based on regulatory precedent, we understand the QCA would seek to update any calculated risk-free rate closer to the date of the final decision (slated to be February 2021). Further, we understand that the QCA is open to a longer averaging period of up to 40 days which may help to smooth out some market volatility.³⁴

2.2.2 Market risk premium

The QCA moved its estimate of the equity market risk premium down from 7.00 per cent to 6.50 per cent between its decisions on Aurizon and Queensland Rail's Draft Access Undertakings (Table 4). This downwards movement reflects the QCA's move to a term-matched approach whereby the QCA calculated the market risk premium based on its usage of a 10 year risk-free rate. The QCA noted that 6.50 per cent, in the context of a 10 year risk-free rate, was equivalent to 7.00 per cent for Aurizon, which was based on a four year risk-free rate.³⁵

Table 4 outlines recent market risk premium decisions made by the QCA.

Table 4 - QCA - Market risk premium decisions

Decision	Market risk premium (%)	Decision date
DBCT 2015 Access Undertaking (Final Decision) ³⁶	6.50	November 2016
Aurizon 2017 Access Undertaking - UT5 (Draft Decision) ³⁷	7.00	December 2017
Aurizon 2017 Access Undertaking - UT5 (Final Decision) ³⁸	7.00	December 2018
QR 2020 Draft Access Undertaking (Draft Decision) ³⁹	6.50	April 2019
Rural irrigation price review 2020–24 (Draft Decision) ⁴⁰	6.50	August 2019
Rural irrigation price review 2020–24 (Final Decision) ⁴¹	6.50	January 2020
QR 2020 Draft Access Undertaking (Final Decision) ⁴²	6.50	February 2020

The QCA's final QR decision was based on a weighted average of five estimation methodologies (Ibbotson, Siegel, Survey and independent expert, Cornell DGM and Wright), 6.35 per cent, rounded upwards to the nearest half per cent, 6.50 per cent.

This sits higher than recent market risk premium estimates by other regulators (Table 5) with the exception of IPART. Where many regulators use an approach which

³⁴ QCA (2019), *Draft Decision - Queensland Rail's 2020 Draft Access Undertaking*, Page 33

³⁵ QCA (2019), *Draft Decision - Queensland Rail's 2020 Draft Access Undertaking*, Page 37

³⁶ QCA (2016), *Final Decision - DBCT Management's 2015 draft access undertaking*, Page 81

³⁷ QCA (2017), *Draft Decision - Aurizon Network's 2017 draft access undertaking*, Page 63

³⁸ QCA (2018), *Decision - Aurizon Network's 2017 draft access undertaking*, available at: https://www.qca.org.au/wp-content/uploads/2019/05/34327_Final-decision-1.pdf

³⁹ QCA (2019), *Draft Decision - Queensland Rail's 2020 Draft Access Undertaking*, Page 39

⁴⁰ QCA (2019), *Draft Report - Rural irrigation price review 2020–24 - Part A: Overview*, available at: <https://www.qca.org.au/wp-content/uploads/2019/05/qca-qr-2020-dau-decision-and-secondary-undertaking-notice.pdf>

⁴¹ QCA (2020), *Final Report - Rural irrigation price review 2020–24 - Part A: Overview*, available at: <https://www.qca.org.au/wp-content/uploads/2020/02/irrigation-price-review-final-report-part-a-overview-final.pdf>

⁴² QCA (2019), *Draft Decision - Queensland Rail's 2020 Draft Access Undertaking*, Page 39

exclusively or heavily weighs historic excess returns, IPART's approach considers both current and historical excess returns.⁴³ IPART's long term estimate of the market risk premium is 6.00 per cent.

By contrast, the AER uses market risk premium of 6.10 per cent⁴⁴ over the yield to maturity on 10 year Commonwealth Government bonds. This was calculated using historical excess returns since 1988. The AER notes that, based on this methodology, it expects the market risk premiums to move relatively slowly over time. This estimate was adopted by the ACCC in its decision on the Australian Postal Corporation's 2019 price notification.⁴⁵

Table 5 - Australian regulators - market risk premium decisions

Regulator	Decision	Market risk premium (%)	Date
ERAWA	2018 and 2019 Weighted Average Cost of Capital for the Freight and Urban Networks, and the Pilbara Railways (Final Decision) ⁴⁶	5.90	August 2019
AER	Energex Nominal Rate of Return (Draft Decision) ⁴⁷	6.10	October 2019
ACCC	Australian Postal Corporation 2019 price notification (Final Decision) ⁴⁸	6.10	December 2019
ERAWA	Proposed Revisions to the Goldfields Gas Pipeline Access Arrangement (Final Decision) ^{49,50}	6.00	December 2019
IPART	Sydney Water Price Review (Draft Decision) ⁵¹	8.80	March 2020

Recent market risk premium regulatory precedent is relatively concentrated, largely sitting between 5.90 per cent and 6.50 per cent. As such, our WACC estimate incorporates an equity market risk premium of 6.50 per cent based on the expectation the QCA would continue applying its current estimate.

⁴³ IPART (2018), *Review of our WACC method*, available at: <https://www.ipart.nsw.gov.au/files/sharedassets/website/shared-files/investigation-administrative-legislative-requirements-sea-wacc-methodology-2017/final-report-review-of-our-wacc-method-february-2018.pdf>

⁴⁴ AER (2018), *Rate of return instrument - explanatory statement*, Page 220

⁴⁵ ACCC (2019), *Decision on Australian Postal Corporation 2019 price notification*, available at:

<https://www.accc.gov.au/system/files/ACCC%20Decision%20on%20Australia%20Post%20price%20notification%202019.pdf>

⁴⁶ Economic Regulation Authority Western Australia (2019), *Final Determination - 2018 and 2019 Weighted Average Cost of Capital - For the Freight and Urban Networks, and the Pilbara Railways*, available at:

<https://www.erawa.com.au/cproot/20655/2/2018-and-2019-Rail-WACC-Final-Determination.PDF>

⁴⁷ AER (2019), *Draft Decision - Energex Distribution Determination 2020 to 2025 - Attachment 3 - Rate of Return*, available at: <https://www.aer.gov.au/system/files/AER%20-%20Energex%202020-25%20-%20Draft%20decision%20-%20Attachment%203%20-%20Rate%20of%20return%20-%20October%202019.pdf>

⁴⁸ ACCC (2019), *Decision on Australian Postal Corporation 2019 price notification*

⁴⁹ ERAWA (2019), *Final Decision on Proposed Revisions to the Goldfields Gas Pipeline Access Arrangement for 2020 to 2024*, available at: <https://www.erawa.com.au/cproot/20931/2/GGP---GGT---AA4---Final-Decision---Public.PDF>

⁵⁰ ERAWA (2018), *Final Gas Rate of Return Guidelines Explanatory Statement*, available at: <https://www.erawa.com.au/cproot/19969/2/2018%20Final%20Gas%20Rate%20of%20Return%20Guidelines%20Explanatory%20Statement.PDF>

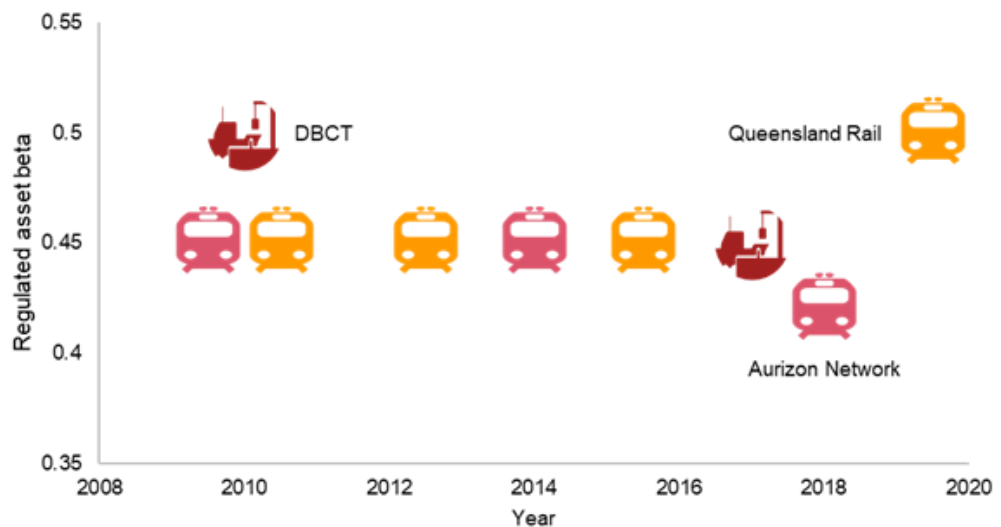
⁵¹ IPART (2020), *Review of Prices for Sydney Water from 1 July 2020*, available at: <https://www.ipart.nsw.gov.au/files/sharedassets/website/shared-files/pricing-reviews-water-services-metro-water-prices-for-sydney-water-corporation-from-1-july-2020/legislative-requirements-prices-for-sydney-water-corporation-from-1-july-2020/draft-report-review-of-prices-for-sydney-water-march-2020.pdf>

2.2.3 Asset beta

In its decision on the 2017 DBCT AU, the QCA settled on an asset beta of 0.45.⁵² However, the QCA agreed that Incenta analysis⁵³, which suggested that a lower asset beta of 0.40 would be more appropriate, “*represented the best empirical value available.*” The QCA noted, however, that a reduction from 0.50 to 0.40 would “*represent a significant change*” and the difficulty of calculating betas precisely meant they would exercise ‘caution’. The QCA also noted that 0.45 was in-line with the value proposed (at that time) for Aurizon.⁵⁴

As shown in Figure 4, the QCA has historically been relatively conservative in adjusting over time the asset beta of the entities it regulates. The QCA’s previous DBCT decision highlighted the potential for changes in beta estimates across regulatory periods to cause “*investment uncertainty.*”⁵⁵

Figure 4 - QCA asset beta decisions (2008-2020)



The Incenta report commissioned by the QCA pointed to the regulated energy and water sectors as the best points of comparison for DBCT, highlighting four key factors:

- revenue protection provided by the regulatory regime
- strong long term demand for the services offered
- the long term nature of the take-or-pay contracts in place and
- the socialisation of costs among users.⁵⁶

⁵² QCA (2016), *Final Decision - DBCT Management's 2015 draft access undertaking*, Page 87

⁵³ Incenta (2016), *DBCT 2015 DAU: Review of WACC parameters*, available at:

https://www.qca.org.au/wp-content/uploads/2019/05/30365_IncentaMarch2016-1.pdf, Page 8

⁵⁴ QCA (2016), *Final Decision - DBCT Management's 2015 draft access undertaking*, Page 87

⁵⁵ QCA (2016), *Final Decision - DBCT Management's 2015 draft access undertaking*, Page 104

⁵⁶ Incenta (2016), *DBCT 2015 DAU: Review of WACC parameters*, Page 44

Incenta noted the regulatory framework in place meant that DBCT was less exposed to fluctuations in the volume of commodities than the port and railroad companies in their comparator sample. These factors identified by Incenta remain relevant for the 2019 AU with the regulatory framework remaining (largely) unchanged since the approval of the 2017 AU. Data provided by DBCTM⁵⁷ and analysis conducted by the QCA⁵⁸ suggests that contracted demand (as measured by capacity entitlement) over the 2019 AU period will meet or exceed terminal capacity.

Noting the similarities between DBCT and firms across the regulated energy and water sectors, we note further analysis by Incenta (engaged by the QCA as part of its Queensland Rail 2020 DAU review) which estimated the asset beta of these firms to be 0.38.⁵⁹

Table 6, below, sets out the equity beta, credit rating and gearing of various regulated assets in Australia, including those in the energy and water sectors which serve as relevant comparators for DBCT. Note that among regulators there are different approaches to calculating WACC parameters, as such some caution should be exercised in comparing parameters like-for-like.

⁵⁷ DBCTM (2018), *DBCT declaration review - DBCT Management submission to the QCA*, available at: https://www.qca.org.au/wp-content/uploads/2019/05/33690_1-DBCT-Management-Submission-2.pdf, Page 44

⁵⁸ QCA (2018), *Draft recommendation - Part C: DBCT declaration review*, available at: https://www.qca.org.au/wp-content/uploads/2019/05/34433_Draft-recommendation-Part-C-DBCT-2.pdf, Page 45

⁵⁹ Incenta (2019), *Estimating Queensland Rail's WACC for the 2020 DAU – asset beta, benchmark gearing, and credit rating Report for the QCA*, available at: https://www.qca.org.au/wp-content/uploads/2019/05/34870_Incenta-2020-DAU-WACC-Apr-2019.pdf, Page 19

Table 6 - Overview of regulated Australian assets

Entity	Industry	Regulator	Date	Equity beta	Asset beta	Credit rating	Capital structure
DBCT ⁶⁰	Ports	QCA	Nov 16	0.87	0.45	BBB	60%
Aurizon Network ⁶¹	Rail	QCA	Dec 18	0.73	0.42	BBB+	55%
ARTC ⁶²	Rail	ACCC	Dec 18	1.20	0.60	BBB	50%
Energex ⁶³	Energy	AER	Oct 19	0.60	0.24^	BBB+	60%
Port of Melbourne ⁶⁴	Ports	ESCV	Dec 19	1.00	0.70	BBB	30%
Goldfields Gas Pipeline ⁶⁵	Energy	ERAWA	Dec 19	0.70	0.28	BBB+	55%
Sunwater ⁶⁶	Water	QCA	Jan 20	0.755	0.40	BBB	60%
Queensland Rail ⁶⁷	Rail	QCA	Feb 20	0.71	0.50	BBB	40%
Sydney Water ⁶⁸	Water	IPART	Mar 20	0.70	0.28^	BBB	60%

^ Estimated based on Harris and Pringle asset beta formula and equity beta value.

* The Essential Services Commission of Victoria (ESCV) issues annual commentary on the Port of Melbourne's compliance with tariffs. The ESCV will commence its first compliance inquiry sometime after 1 July 2021.

Figure 5 shows that regulators tend to assign higher assets beta to ports and rail companies than water and energy companies, reflecting their (generally) greater exposure to risk.

⁶⁰ QCA (2016), *Final Decision - DBCT Management's 2015 Draft Access Undertaking*, available at: https://www.qca.org.au/wp-content/uploads/2019/05/31145_DBCT2015DAUFINALDECISION-1.pdf

⁶¹ QCA (2018), *Decision - Aurizon Network's 2017 draft access undertaking - Appendices*, available at: https://www.qca.org.au/wp-content/uploads/2019/05/34326_Final-decision-Appendices-A-G-1.pdf

⁶² ACCC (2018), *Draft decision - Australian Rail Track Corporation's 2018 Interstate Access Undertaking*, available at: <https://www.accc.gov.au/system/files/ARTC%20-%20IAU%20-%202018%20Draft%20Decision.pdf>

⁶³ AER (2019), *Draft Decision - Energex Distribution Determination 2020 to 2025 - Attachment 3 - Rate of Return*

⁶⁴ Essential Services Commission (2019), *Interim commentary - Port of Melbourne tariff compliance statement 2019-20*, available at: https://www.esc.vic.gov.au/sites/default/files/documents/interim-commentary-port-of-melbourne-tariff-compliance-statement-2019-20-20191216_0.pdf

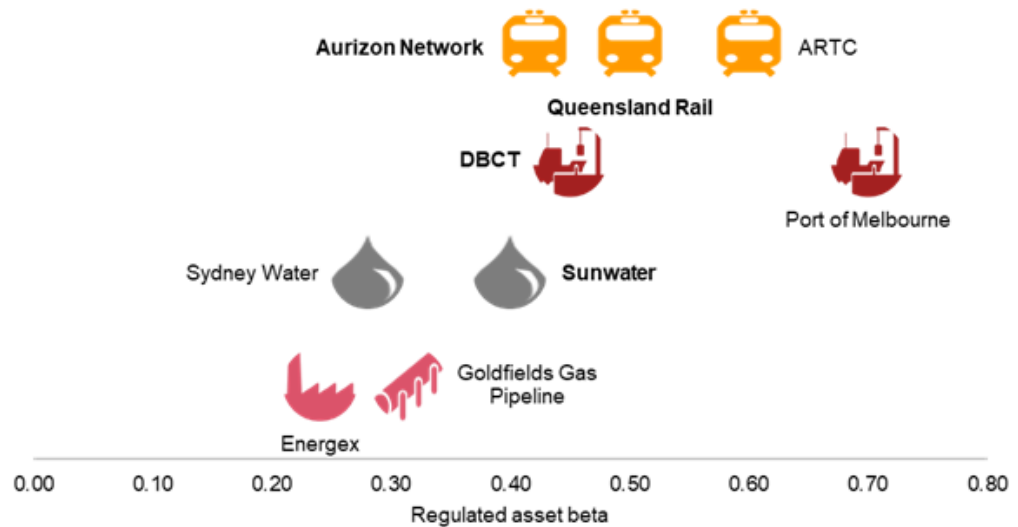
⁶⁵ ERAWA (2019), *Final Decision on Proposed Revisions to the Goldfields Gas Pipeline Access Arrangement for 2020 to 2024*, available at: <https://www.erawa.com.au/cproot/20931/2/GGP---GGT---AA4---Final-Decision---Public.PDF>

⁶⁶ QCA (2020), *Final Report - Rural irrigation price review 2020-24 - Part A: Overview*

⁶⁷ QCA (2019), *Draft Decision - Queensland Rail's 2020 Draft Access Undertaking*

⁶⁸ IPART (2020), *Review of Prices for Sydney Water from 1 July 2020*, available at: <https://www.ipart.nsw.gov.au/files/sharedassets/website/shared-files/pricing-reviews-water-services-metro-water-prices-for-sydney-water-corporation-from-1-july-2020/legislative-requirements-prices-for-sydney-water-corporation-from-1-july-2020/draft-report-review-of-prices-for-sydney-water-march-2020.pdf>

Figure 5 - Regulatory asset beta decisions by industry



Source: ACCC, AER, ESCV, ERAWA, QCA, PwC analysis.

There are parallels between asset beta decisions made by the QCA with respect to Aurizon and DBCT. Prior to its UT5 decision, Aurizon and DBCT both had a regulated asset beta of 0.45. In its UT5 decision, the QCA moved Aurizon’s asset beta from 0.45 down to 0.42 (Figure 3).

In its earlier Aurizon UT4 decision, the QCA decided to maintain the asset beta estimate from its UT3 decision (0.45). Like its decision on the 2017 DBCT AU, this value was higher than the 0.42 which the QCA said reflected “the most appropriate empirical estimate of Aurizon Network’s beta.”⁶⁹ An Incenta report commissioned by the QCA as part of its UT5 review outlined a similar group of comparators for Aurizon - being firms in the regulated energy and water sectors.⁷⁰

Comparing DBCT to regulated firms with comparable revenue and regulatory protections suggests that 0.45 should serve as the upper bound for DBCT’s asset beta, and further evidence presented by Incenta (namely the estimated asset beta of 0.38 for regulated energy and water firms comparable to DBCT) suggests a lower parameter could be adopted by the QCA.

Our estimate of the WACC for DBCT incorporates a reduction in the asset beta from 0.45 to 0.42, reflecting a continuation of the downward adjustment flagged by the QCA in its decision on the 2017 DBCT AU, and aligns with the regulator’s most recent decision for Aurizon Network.

⁶⁹ QCA (2016), *Aurizon Network 2014 Access Undertaking — Volume IV—Maximum Allowable Revenue*, available at: https://www.qca.org.au/wp-content/uploads/2019/05/30479_QCA-UT4-Final-Decision-Volume-IV-MAR-FINAL-for-distribution-1.pdf, Page 268

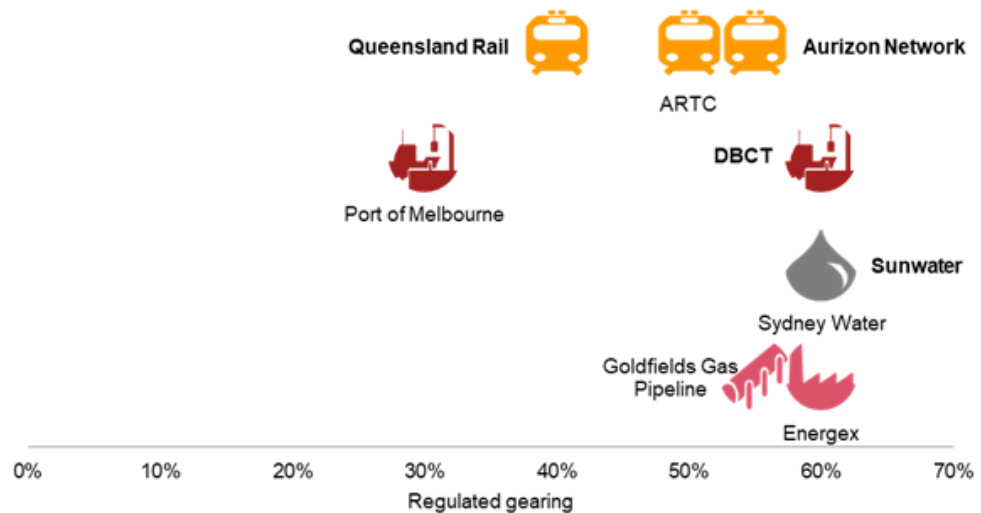
⁷⁰ Incenta (2017), *Aurizon Network’s WACC for the 2017 DAU*, available at: https://www.qca.org.au/wp-content/uploads/2019/05/32478_Incenta-Economics-Aurizon-Network_s-WACC-for-the-2017-DAU1275899_1-1.pdf

2.2.4 Capital structure

Rather than taking the actual gearing of a particular entity, regulators tend to apply gearing that reflects a view of what an efficient level of gearing would be. We note that the actual gearing levels of an associated entity such as DBCT Finance Pty Ltd may not be reflective of the determined regulatory capital structure.

Figure 6 outlines recent capital structure decisions by the QCA and other Australian regulators. Typically capital structure levels are relatively inverse to asset betas, in that firms with lower risk levels are regarded as being capable of maintaining higher leverage.

Figure 6 - Regulatory capital structure decisions by industry



Source: ACCC, AER, ESCV, ERAWA, QCA, PwC analysis.

A benchmark capital structure of 60 per cent has been applied by the QCA for DBCT since 2006. Similarly, Aurizon's capital structure of 55 per cent has remained unchanged since the QCA's UT1 decision (at the time QR).⁷¹

While the QCA has historically remained static on capital structure, it shifted QR's capital structure from 55 per cent to 40 per cent in its decision on QR's 2020 DAU, reflecting its assessment of risks associated with West Moreton coal operations. Previously the QCA had judged QR to have a level of business risk equivalent to Aurizon.⁷²

We consider maintaining a capital structure of 60 per cent for DBCT is appropriate, noting consistency with regulatory gearing assumptions for assets across the regulated energy and water sectors.⁷³

⁷¹ QCA (2009), *Draft Decision - QR Network 2009 Draft Access Undertaking - December 2009*, available at: https://www.qca.org.au/wp-content/uploads/2019/05/27833_QCA-Draft-Decision-QR-Network-s-2009-DAU-Dec-09-1.pdf, Page 5

⁷² QCA (2014), *Queensland Rail's 2013 Draft Access Undertaking*, available at: https://www.qca.org.au/wp-content/uploads/2019/06/25892_qca-draft-decision-on-queensland-rail-june-2013-dau.pdf, Page 143

⁷³ The AER's rate of return instrument specifies gearing of 60 per cent while many State water regulators have adopted a benchmark gearing level of 60 per cent. These include: IPART (2019), *Review of Central Coast Council's water, sewerage and stormwater prices To apply from 1 July 2019*, available at: <https://www.ipart.nsw.gov.au/files/sharedassets/website/shared-files/pricing-reviews-water>

2.2.5 Equity beta

Our analysis adopts a gamma estimate reflecting recent QCA decisions (Table 7). The QCA has held its gamma estimate, 0.484, constant since its Final Aurizon UT5 decision.⁷⁴ The isolated impact of the QCA's updated gamma estimate is less than 0.002 on the equity beta value and equivalent to roughly 0.5 basis points on the overall WACC.

Table 7 - QCA - Gamma decisions

Decision	Gamma	Date
DBCT 2017 Access Undertaking (Final Decision) ⁷⁵	0.47	November 2016
Aurizon 2017 Access Undertaking - UT5 (Draft Decision) ⁷⁶	0.46	December 2017
Aurizon 2017 Access Undertaking - UT5 (Final Decision) ⁷⁷	0.484	December 2018
QR 2020 Draft Access Undertaking (Draft Decision) ⁷⁸	0.484	April 2019
Rural irrigation price review 2020–24 (Draft Decision) ⁷⁹	0.484	August 2019
Rural irrigation price review 2020–24 (Final Decision) ⁸⁰	0.484	January 2020
QR 2020 Draft Access Undertaking (Final Decision) ⁸¹	0.484	February 2020

Based on the Conine formula used by the QCA and the parameters outlined in Table 8, we estimate an equity beta of 0.80 for DBCT.

Table 8 - Equity beta parameters

Parameter	2017 AU	2019 DAU
Asset beta	0.45	0.42
Capital structure	60%	60%
Gamma	0.47	0.484
Corporate tax rate	30%	30%
Debt beta	0.12	0.12
Equity beta	0.87	0.80

[-services-metro-water-prices-for-central-coast-council-from-1-july-2019/legislative-requirements-prices-for-central-coast-council-from-1-july-2019/final-report-review-of-central-coast-councils-water-sewerage-and-stormwater-prices-may-2019.pdf](#); Independent competition and regulatory commission (2018), *Final report- Regulated water and sewerage services prices 2018–23*, available at: https://www.icrc.act.gov.au/_data/assets/pdf_file/0019/1250236/Report-1-of-2018-Final-Report-Water-Sewerage-Services-2018-23.pdf; Economic Regulation Authority Western Australia (2017), *The efficient costs and tariffs of the Water Corporation, Aqwest and Busselton Water - Final Report*, available at: <https://www.erawa.com.au/cproof/18490/2/Inquiry%20into%20efficient%20costs%20and%20tariffs%20of%20the%20Water%20Corporation.%20Aqwest%20and%20Busselton%20Water%20-%20Final%20Report.pdf>; ESCOSA (2016), *SA Water Regulatory Determination 2016 - Final Determination*, available at: <https://www.escosa.sa.gov.au/ArticleDocuments/334/20160606-Water-SAWaterRegulatoryDetermination2016FinalReport.pdf.aspx?Embed=Y>

⁷⁴ QCA (2018), *Decision - Aurizon Network's 2017 draft access undertaking*, Page 73

⁷⁵ QCA (2016), *Final Decision - DBCT Management's 2015 draft access undertaking*, Page 121

⁷⁶ QCA (2017), *Draft Decision - Aurizon Network's 2017 draft access undertaking*, Page 175

⁷⁷ QCA (2018), *Decision - Aurizon Network's 2017 draft access undertaking*, Page 73

⁷⁸ QCA (2019), *Draft Decision - Queensland Rail's 2020 Draft Access Undertaking*, Page 27

⁷⁹ QCA (2019), *Rural irrigation price review 2020–24 - Part A: Overview*, Page 79

⁸⁰ QCA (2020), *Final Report - Rural irrigation price review 2020–24 - Part A: Overview*, Page 96

⁸¹ QCA (2020), *Decision - Queensland Rail's 2020 Draft Access Undertaking*, Page 33

2.2.6 Cost of debt

The QCA applied a credit rating of BBB in its decision on the 2017 DBCT AU. This marked a move away from the rating of BBB+ that had applied since the 2006 DBCT Access Undertaking. As with determining an appropriate regulatory capital structure, the benchmark credit rating assigned to a business for regulatory pricing purposes is typically determined based on the notional credit rating that would be applied to an efficient benchmark firm in that industry/market, rather than its actual credit rating.

As outlined in Table 6, regulators in Australia tend to apply a benchmark credit rating in the range of BBB to BBB+. Based on this, we believe that a credit rating of BBB for DBCT remains suitable. Further, the lack of liquidity in the Australian corporate bond market would make it difficult to obtain applicable/usable data for credit rating lower than BBB.⁸²

In its recent decisions on QR's 2020 DAU and its rural irrigation pricing review, the QCA used third-party data from Bloomberg's Valuation Service (BVAL) and the RBA (extrapolated to an effective ten year term) and averaged these to calculate the debt risk premium. This approach mirrors the methodology outlined in the AER's Rate of Return Instrument.⁸³

While ideally we would mirror this approach, we note the RBA have delayed the publication of the series used to estimate the debt risk premium calculation⁸⁴ as a result of 'operational restrictions' related to COVID-19. As such, we have estimated the debt risk premium solely on Bloomberg data⁸⁵, rather than the average of the Bloomberg and RBA series.

Using BBB-rated corporate bonds and a 20 day averaging period to 31 March 2020, we estimate a debt risk premium of 2.20 per cent. Per QCA precedent, we understand the debt risk premium would be updated at a time closer to the final decision (slated to be February 2021).

As illustrated in Figure 7, the outbreak of COVID-19 has had a large impact on both sovereign bond (see section 2.2.1) and corporate bond markets. Over the course of the 20 day averaging period to 31 March, the debt risk premium has moved upwards from 1.88 per cent to 2.20 per cent.⁸⁶

⁸² QCA (2020), *Decision - Queensland Rail's 2020 Draft Access Undertaking*, Page 43

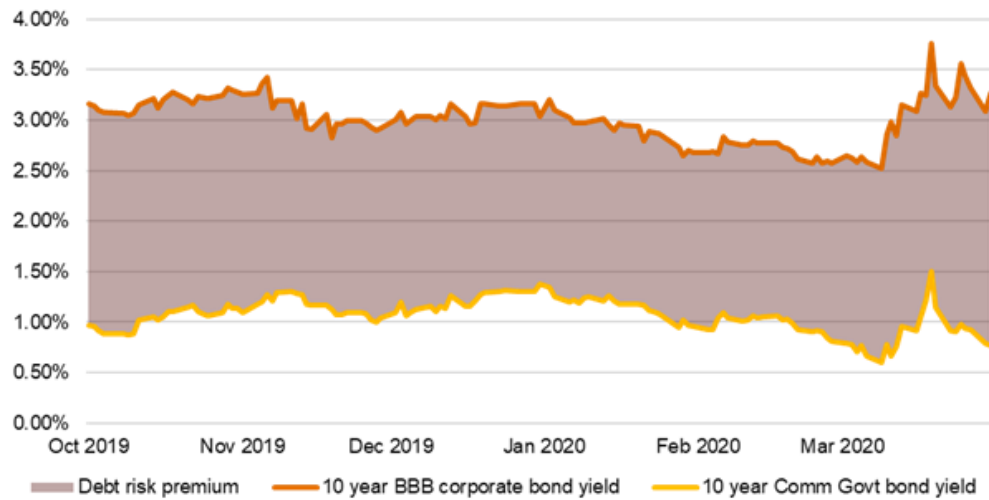
⁸³ AER (2018), *Rate of return instrument*, available at: https://www.aer.gov.au/system/files/2018%20Rate%20of%20Return%20Instrument%20%28Version%201.02%29_1.pdf

⁸⁴ F3 - Aggregate Measures of Australian Corporate Bond Spreads and Yields: Non-financial Corporate (NFC) Bonds

⁸⁵ Noting that this may have the effect of increasing the standard error of the estimate.

⁸⁶ Based on Bloomberg's BVAL 10 year BBB rated series.

Figure 7 - Debt risk premium - BBB-rated bonds (Oct 2019 - Apr 2020)



Source: Bloomberg, RBA, PwC analysis.

As noted in section 2.2.1 with reference to the risk-free rate, the selection of the averaging period may have a material impact on the debt risk premium.

Table 9 shows our calculated total cost of debt (rounded to two decimal places), incorporating a financing cost of 10.8 basis points, consistent with recent QCA decisions.

Table 9 - Cost of debt

Parameter	Value (%)
Risk-free rate	0.90
Debt risk premium	2.20
Financing costs	0.11
Cost of debt	3.20

2.3 Overall WACC

Based on the parameters outlined in sections 2.2.1 through 2.2.6 and the application of the QCA's rate of return methodology, we estimate a post-tax, nominal WACC of 4.36 per cent for DBCTM's 2019 DAU. Our estimate represents a 146 basis point decrease in the approved WACC from the 2017 DBCT AU of 5.82 per cent.

Table 10 highlights the estimated WACC parameters that have changed from the 2017 AU, including the risk-free rate, asset beta, gamma and the debt risk premium, noting that the changes to the market parameters have had the greatest impact.

Table 10 - 2017 DBCT AU and proposed DBCTM 2019 DAU WACC parameters

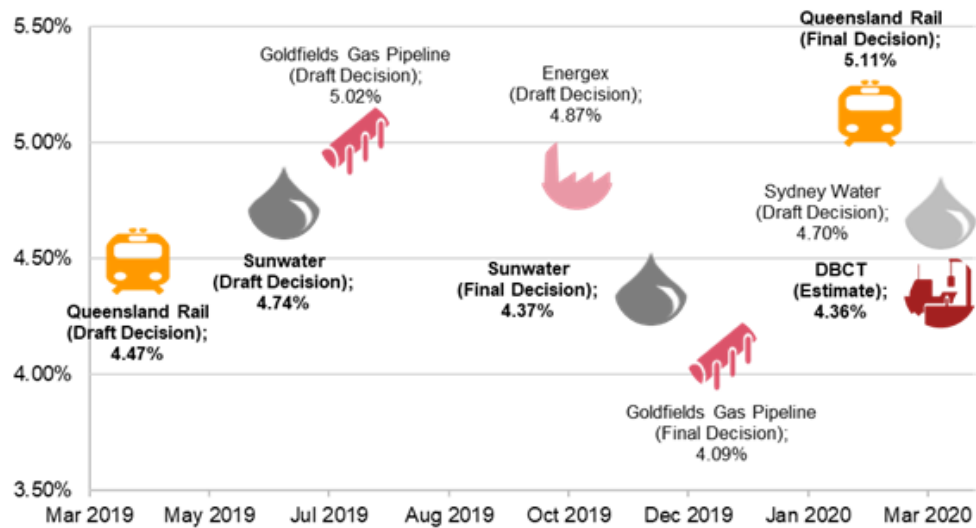
Parameter	2017 AU	2019 DAU
Risk-free rate	1.82%	0.90%
Market risk premium	6.50%	6.50%
Asset beta	0.45	0.42
Capital structure	60%	60%
Corporate tax rate	30%	30%
Gamma	0.47	0.48
Debt beta	0.12	0.12
Equity beta	0.87	0.80
Cost of equity	7.48%	6.10%
Debt risk premium	2.89%	2.20%
Financing costs	0.24%	0.11%
Cost of debt	4.72%	3.20%
WACC	5.82%	4.36%

Note that the figures above have been rounded to two decimal places.

A key focus of stakeholders in recent QCA rate of return decisions (namely Aurizon's UT5 and QR's 2020 DAU) has been striking a balance between the bottom-up WACC estimate and the provisions in the QCA Act - namely the consideration of 'legitimate business interests' and the inclusion of a 'return on investment commensurate with (...) regulatory and commercial risks.' How these factors should be considered, and what weight they should be given, is not explicitly defined in the Act.

The QCA has used a top-down assessment (benchmarking against decisions by other regulators) as one method of ensuring that its determined rate of return is appropriate. Figure 8 presents our estimated WACC in the context of recent regulatory rate of return decisions.

Figure 8 - Post-tax, nominal rate of return decisions (Mar 2019 - Mar 2020)



Source: ACCC, AER, ESCV, ERAWA, QCA, PwC analysis.

The time-sensitive nature of market parameters means that comparing headline WACC decisions across regulatory determinations/jurisdictions can capture more than just relative assessments of risk. We have not sought to ‘normalise’ the WACC values presented below given the challenge of presenting a ‘standardised’ calculation methodology that would maintain the different methodological approaches applied by each regulator.

With those caveats, the estimated WACC of 4.36 per cent represents a WACC broadly in-line with the QCA’s draft decision on QR’s 2020 DAU when market conditions were more conducive to a higher rate of return. As the QCA’s draft decision on QR’s 2020 was reflective of only the risk associated with QR’s coal operations on the West Moreton line,⁸⁷ this would suggest that a WACC of 4.36 per cent for DBCTM’s 2019 DAU would provide a return on investment that is commensurate with the regulatory and commercial risks.

⁸⁷ QCA (2019), *Draft Decision - Queensland Rail’s 2020 Draft Access Undertaking*, Page 26

