



DBIM pricing method for 8X expansion

Submission from Selected Users

June 2021

Executive Summary

This submission is made in respect of Dalrymple Bay Infrastructure Management (DBIM)'s 8X Expansion Application for Ruling on Pricing Method on behalf of the Submitting Users comprising:

1. Anglo American Metallurgical Coal Pty Ltd
2. BHP Mitsubishi Alliance (BMA);
3. Foxleigh Management Pty Ltd;
4. Glencore Coal Assets Australia Pty Ltd, representing Clermont Access Pty Ltd, Oaky Creek Holdings Pty Ltd and Hail Creek Coal Holdings Pty Ltd;
5. Peabody Energy Australia Pty Ltd;
6. Pembroke Olive Downs Pty Ltd; and
7. Stanmore Resources Ltd.

The Submitting Users are a collection of users of existing terminal capacity at the Dalrymple Bay Coal Terminal (DBCT). Together, the Submitting Users hold contracts for approximately 85% of the current capacity at DBCT of 84.2mtpa.

The 2017 Access Undertaking (AU) establishes the default position that a cost sensitive expansion will be subject to differentiated pricing, unless the circumstances exist to justify socialisation. When regard is had to the relevant criteria required to be considered by the QCA, the view of Submitting Users is that, as a point of principle, existing users of DBCT should not be disadvantaged, either from a cost or a risk position, from a decision to expand the terminal to provide capacity to meet claimed additional demand.

However, based on the information submitted by DBIM, the 8X expansion, if socialised in the manner proposed by DBIM in its application, will:

- (a) materially and disproportionately increase both the cost and risk to existing DBCT users; and
- (b) result in expanding users not bearing the true costs imposed by the 8X expansion, thus promoting the expansion to occur in circumstances where it may not be economically efficient and potentially leading to distortions in other related markets.

In order to properly assess if socialisation is justified (either wholly or in part), stakeholders must have a clear understanding of the expected position of terminal users

without the 8X project and, assuming 8X proceeds, of the implications to existing and new users under a socialised or differential pricing approach.

DBIM's application fails to provide this clear understanding largely due to two aspects:

- (a) *DBIM has applied an unconventional costing methodology* – The methodology applied by DBIM to assess unit costs under a differentiated pricing methodology does not align with the approach conventionally used by the QCA, with the result that DBIM has significantly amplified the unit cost premium for new users under a differentiated pricing model.
- (b) *Insufficient information has been presented to clearly identify the benefits, if any, of 8X to existing users.* While Submitting Users accept that 8X, in its proposed form, may provide some benefit to existing users, there is insufficient information to identify the extent of any benefit. This is entirely inconsistent with previous QCA decisions that have repeatedly determined that existing users should only be required to fund capacity expansions where it has been sufficiently demonstrated that existing users will clearly benefit.

These issues are discussed in more detail below.

DBIM has applied an unconventional costing methodology

Based on a review of the limited information that DBIM has provided, it appears that the extremely high reference tariff (referred to in this submission as the Unit TIC) and Unit Total Access Charge (Unit TAC) that DBIM has calculated under a differentiated pricing method is driven not by the underlying costs of the investment, but by the unconventional methodology DBIM has adopted in calculating unit costs under the differentiated pricing approach, in particular:

- the allocation of costs between existing and new users, where new users are allocated a pro-rata share of all existing terminal costs, as well as all costs of the 8X program, including works that DBIM claims will be future or likely NECAP in the absence of 8X; and
- the different depreciation profiles for 8X investments adopted under the two approaches. While under the differential pricing method, the 8X investments are depreciated over ten years, depreciation is not accelerated under socialised pricing, indicating that 20-30 year life assets are being underpinned by a ten year commitment from expansion users with users of the existing terminal funding the assets for more than half of their useful lives.

DBIM's costing methodology inappropriately amplifies the apparent price differential between existing and new users under the differentiated pricing methodology. This appears to attempt justification for socialisation of the 8X investments by minimising the apparent impact of socialisation for existing users while at the same time artificially distorting the price increase likely to occur for new users under differentiated pricing and claiming that this will create a barrier to the investment proceeding.

Submitting Users consider that the information on Unit TIC impacts from the expansion, under socialisation or differential pricing, should be undertaken using the conventional application of the differential pricing methodology and with consistent assumptions on asset life.

Insufficient information has been presented to clearly demonstrate benefits to existing users from 8X

Issues of socialised pricing for expansions of coal supply chain infrastructure has been the subject of extensive debate over the last decade, and this position has been reached following extensive QCA led consultation through numerous reviews and regulatory processes. While the QCA must invariably consider the pricing of new access capacity on a case-by-case basis, regulatory precedent indicates that evidence is required to support claims that capacity expansion will deliver tangible operational, economic and financial benefits for those users that are being asked to bear the cost of the expansion proceeding.

As the QCA has previously noted in assessing similar capacity expansion pricing proposals involving coal supply chain infrastructure (more specifically, in relation to Aurizon Network's pricing methodology for its Wiggins Island Rail Project):¹

It is our view that in order for the allocation of expansion costs to non-expanding users to be considered appropriate, we must be affirmly satisfied, based on all the material placed before it, that there will be clear economic benefits to those existing users. Therefore, objective supporting material evidence demonstrating how the economic benefits arise needs to be submitted by the expanding users, as it will not be sufficient simply to assert a subjective view that there are economic benefits without providing the evidence of this conclusion.

The Submitting Users acknowledge that aspects of the 8X expansion may provide some benefits to existing users, mostly in relation to its potential interaction with the Non-Expansionary Capital Expenditure (NECAP) program. As a result, some form of partial

¹ QCA (2016), Final decision – Aurizon Network's 2014 draft access undertaking Volume III – Pricing and tariffs, April 2016, p.42.

socialisation may ultimately be able to be justified under the assessment criteria (e.g. socialisation of certain project phases or allocation of some expansion costs to existing users). However, at this stage there is significant uncertainty as to the actual benefit to existing users from these works. The impact on the NECAP program is described in only approximate terms and in any case, bringing forward NECAP works not only comes at a cost, but may not ultimately be required to meet the capacity requirements of existing users.

Further, DBIM's claims as to the impact of 8X on existing users relies on the ongoing existence of user contracts for around 99mtpa of capacity, however DBIM has not provided sufficient reliable information on its total terminal demand expectations beyond 2028, when 8X will be completed.

DBIM's application, in its current form, does not demonstrate to a sufficient level of confidence the benefits that are likely to arise and how they will translate into financial or other benefits for existing users. Regulatory approval of pricing for capacity expansions elsewhere in the coal supply chains (e.g. Wiggins Island Rail Project, Goonyella to Abbot Point Expansion) has clearly shown proposals for socialised prices need to be transparent and sufficiently detailed to ensure efficient and fair pricing outcomes.

Socialisation will increase cost and risk to existing users

Submitting Users consider that DBIM's estimated increase in existing users' Unit TIC misrepresents the true long term impact of socialisation, as it implicitly assumes that demand for terminal capacity remains at approximately 99mtpa over the full economic life of the terminal. Notwithstanding this, to the extent that it is reliable, DBIM's anticipated 13% increase in Unit TIC remains a material increase. Even if this increase were expected to be fully offset by a reduction in the Handling Charge, this would not leave existing users in a neutral position, primarily due to users' exposure to increased volume and cross default risk and the reduced opportunity to optimise terminal costs to reflect long term demand.

However, if DBIM were to properly reflect the expected term of demand for the expansion capacity under socialisation, the likely increase in TIC for existing terminal users is much higher, with an indicative Unit TIC increase of nearly 40% when depreciation of the 8X assets is accelerated over ten years.

Summary position

In these circumstances, the Submitting Users consider that DBIM's application for a socialised pricing method for 8X should be rejected by the QCA. Instead, a differential pricing method should be preferred, based on the following principles:

- for so long as the true unit cost of the expansion is higher than the true unit cost of the existing terminal, it is reasonable for the expanding users not to be required to contribute to the existing terminal costs (either in TIC or in Handling Costs); and
- if it can be demonstrated that 8X will provide a clear benefit to existing users at and from the time that 8X is delivered (e.g. through a reduction in the NECAP that would otherwise be incurred for the existing terminal), then it may be reasonable for some form of partial socialisation to be applied (e.g. socialisation of certain project phases or allocation of some expansion costs to existing users equivalent to the benefits received). However, this should only occur where there is a high degree of confidence in the timing and the amount of the expected benefit.

DBIM has to date provided insufficient information to allow an adequate assessment of any benefits of 8X to existing users and the likely price impacts under socialised or differentiated price methods. Not only is the current FEL2 scope and related estimated cost not sufficiently certain to inform a reliable view on costs and benefits, DBIM has also not provided critical information in other areas, such as longer term demand outlook and current forecasts of costs for operating (and ultimately rehabilitating) the terminal. At this stage, DBIM's assessment of the impact of 8X on NECAP and operating and maintenance costs is only cursory, with reliable information not likely to be achieved prior to completion of the FEL3 study. It is therefore not currently possible to assess that the circumstances exist for any socialisation to be justified.

Submitting Users acknowledge that this position differs from DBCT User Group's preliminary consideration of the 8X project, where it was considered that requirements for socialisation may have been met based principally on the limited information provided in DBIM's Master Plan. This did not imply any form of support or agreement, and importantly was made when users did not have access to full details of the 8X project benefits, costs and risks, and where it was anticipated that DBIM would ultimately be able to substantiate the benefits to existing users, particularly in relation to the anticipated impacts on the NECAP program, in a way that has not been achieved in its application. Further, the DBCT User Group's earlier consideration of this issue was made in an environment where it was anticipated that reference tariffs would continue to be a feature of DBIM's access undertakings, providing the benefit of a transparent price applying to all users of the terminal.

However, following DBIM's price ruling application, Submitting Users have undertaken further assessment of the nature and extent of benefits to existing users in an environment where reference tariffs will not be applied in future access undertakings, and on this basis do not consider that socialisation is justified having regard to the criteria established in s.11.13 of the 2017AU. This ability to develop and refine positions as further information becomes available is a key benefit of the QCA's assessment process for a price ruling application.

And in this regard, Submitting Users consider that seeking to understand the scope and cost of 8X, and its implications to the NECAP program and the terminal operating and maintenance costs based on FEL2 level of study is premature and unreliable. DBIM should be required to substantiate the extent to which 8X will provide benefits to existing terminal users based on the FEL3 study (should it proceed) upon its completion. Such substantiation of benefits is essential in order to assess whether it is reasonable for any socialisation, or allocation of expansion costs to existing users, to be applied.

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1 Introduction

In February 2021, Dalrymple Bay Infrastructure Management (DBIM) completed the FEL 2 Feasibility Study for the 8X expansion project, which is designed to increase the capacity at Dalrymple Bay Coal Terminal (DBCT) from 84.2mtpa to 99.1mtpa at a total cost of \$1.276bn.

In March 2021, DBIM submitted to the QCA an Application for Ruling on Pricing Method in relation to its 8X expansion project, seeking the QCA's endorsement for a socialised pricing method to be applied to the expansion.

This submission is made on behalf of the Submitting Users comprising:

1. Anglo American Metallurgical Coal Pty Ltd
2. BHP Mitsubishi Alliance (BMA);
3. Foxleigh Management Pty Ltd;
4. Glencore Coal Assets Australia Pty Ltd, representing Clermont Access Pty Ltd, Oaky Creek Holdings Pty Ltd and Hail Creek Coal Holdings Pty Ltd;
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7. Stanmore Resources Ltd.

The Submitting Users are a collection of users of existing terminal capacity at the Dalrymple Bay Coal Terminal (DBCT). Together, the Submitting Users hold contracts for approximately 85% of the current capacity at DBCT of 84.2mtpa.

This submission follows the following structure:

- Section 2 sets out the factors that the QCA must consider in making a price ruling, both having regard to the requirements of DBIM's current access undertaking (the 2017 access undertaking, or 2017AU) and the requirements of the QCA Act;
- Section 3 addresses the 2017AU considerations; and
- Section 4 addresses the QCA Act considerations.

2 Considerations for determining expansion pricing approach

2.1 Access Undertaking requirements

The 2017 AU sets out the principles that should be applied in respect of a proposed Terminal Capacity Expansion.² In particular, section 11.13 provides that:

- (a) where socialisation of a terminal capacity expansion would decrease the reference tariff for users of the existing terminal, then the expansion should be socialised;
- (b) however, where socialisation would increase the reference tariff for users of the existing terminal, then subject to s 11.13(c), this should be treated as a cost sensitive expansion, with its own regulatory asset base (RAB), reference tariff and annual revenue requirement (i.e. a differentiated expansion component)
- (c) a cost sensitive expansion may be treated as part of the existing terminal where circumstances exist that justify socialisation. In determining this, consideration will be given to:
 - (i) the materiality of the expected increase in the existing reference tariff;
 - (ii) the extent to which the expansion will operate in an integrated way with the existing terminal;
 - (iii) the extent to which the expansion is likely to benefit users of the existing terminal (eg higher efficiency, reliability or flexibility);
 - (iv) any differences in the risks of providing access to users of existing terminal;
 - (v) any other factors the QCA considers relevant.

It is specifically acknowledged that there may be circumstances in which parts, but not the whole, of the expansion may be socialised.

In its March 2021 application to the QCA for a ruling on the pricing method, DBIM [¶2] has identified the 8X project as a cost sensitive expansion, but has sought that it be socialised having regard to factors in s 11.13(c) [¶3].

While DBIM's application has been made under the 2017 AU, it is recognised that a new access undertaking (based on DBIM's 2019 Draft Access Undertaking process) is likely to take effect during the QCA's consideration of the application.

² A copy of the 2017AU is available at https://www.qca.org.au/wp-content/uploads/2019/05/33818_06-Trading-SCB-DAAU-clean-1300187_1-1.pdf.

In this regard, it is noted that the QCA's final decision on the 2019 DAU provides for the QCA to make a ruling on the expansion pricing method to apply using essentially the same considerations as in the 2017 AU, except that, instead of assessing the expected impact of the expansion on reference tariffs for users of the existing terminal, it will assess the expected impact on the unit costs relevant to the Terminal Infrastructure Charge (TIC).³

Part 3 of this submission addresses DBIM's application for a socialised pricing method having regard to the requirements of the 2017 AU, however where relevant, comment has also been provided on the implications of the different arrangements expected to be included in DBIM's next access undertaking, having regard to the requirements of QCA's final decision on DBIM's 2019 DAU.

2.2 QCA Act

Under the terms of the 2017 AU, the QCA will make a price ruling pursuant to s.150F in which it must have regard to the criteria in s.120(1) and 138(2) of the *Queensland Competition Authority Act 1997* (QCA Act).

The matters that the QCA is to have regard to in s.120(1) are set out in the box below.

Box 1 Section 120(1) of the QCA Act

120 Matters to be considered by authority in making access determination

1. In making an access determination, the authority must have regard to the following matters—

- a) the object of this part;
- b) the access provider's legitimate business interests and investment in the facility;
- c) the legitimate business interests of persons who have, or may acquire, rights to use the service;
- d) the public interest, including the benefit to the public in having competitive markets;
- e) the value of the service to—
 - (i) the access seeker; or
 - (ii) a class of access seekers or users;
- f) the direct costs to the access provider of providing access to the service, including any costs of extending the facility, but not costs associated with losses arising from increased competition;
- g) the economic value to the access provider of any extensions to, or other additional investment in, the facility that the access provider or access seeker has undertaken or agreed to undertake;
- h) the quality of the service;
- i) the operational and technical requirements necessary for the safe and reliable operation of the facility;

³ QCA (2021), Final decision – DBCT 2019 draft access undertaking, March 2021, p.71.

- j) the economically efficient operation of the facility;
- k) the effect of excluding existing assets for pricing purposes;
- l) the pricing principles mentioned in section 168A.

Source: <https://www.legislation.qld.gov.au/view/html/inforce/current/act-1997-025#sec.120>

Section 138(2) lists those matters that the QCA must have regard in assessing draft access undertakings. The provisions for s.138(2) are set out below.

Box 2 Section 138(2) of the QCA Act

138 Factors affecting approval of draft access undertaking

2. The authority may approve a draft access undertaking only if it considers it appropriate to do so having regard to each of the following—
- a) the object of this part;
 - b) the legitimate business interests of the owner or operator of the service;
 - c) if the owner and operator of the service are different entities—the legitimate business interests of the operator of the service are protected;
 - d) the public interest, including the public interest in having competition in markets (whether or not in Australia);
 - e) the interests of persons who may seek access to the service, including whether adequate provision has been made for compensation if the rights of users of the service are adversely affected;
 - f) the effect of excluding existing assets for pricing purposes;
 - g) the pricing principles mentioned in [section 168A](#);
 - h) any other issues the authority considers relevant.

Source: <https://www.legislation.qld.gov.au/view/html/inforce/current/act-1997-025#sec.138>

Section 138(2) and s.120(1) are broadly aligned. The only material difference is that, pursuant to s.138(2)(h), the QCA can also consider any other issues it considers relevant.

Part 4 of this submission addresses DBIM's application for a socialised pricing method having regard to these legislative criteria.

3 Do circumstances exist to justify socialisation of 8X

The 2017AU establishes the default position that a cost sensitive expansion will be subject to differentiated pricing, unless the circumstances exist to justify socialisation. The question of differential or socialised pricing for expansions of coal supply chain infrastructure has been the subject of extensive debate over the last decade, and this default position was reached following QCA led consultation through numerous reviews and regulatory processes.⁴

In each of these processes, the QCA has consistently adopted the following principles as the most effective means of promoting economic efficiency, fairness and governance:⁵

- users requiring an expansion should generally pay an access charge that reflects at least the full incremental costs of access;
- existing users should not experience a material increase in tariffs due to an expansion triggered by expanding users;
- if expanding users face a higher cost than existing users, a zero contribution to common costs from expanding users is generally acceptable;
- an allocation of expansion costs to existing users may be appropriate where an expansion has clear benefits to those users.

The QCA highlighted the last point as reflecting why it is not possible to define hard and fast rules for major capacity expansions, and that there should be a case-by-case consideration of whether it is appropriate to move away from the general ‘averaging down/incremental up’ principle in certain circumstances⁶ – which is the process provided for in the 2017AU.

Importantly however, in order to support a move away from the default position, it is important to clearly establish that the circumstances exist to justify socialisation – it is not enough for DBIM to simply assert this to be the case. This in turn requires that stakeholders have a clear understanding of the expected position of terminal users without the 8X project and, assuming 8X proceeds, of the implications upon delivery to existing and new users under a socialised, partly socialised or differential pricing approach.

⁴ See the QCA’s reviews of Aurizon Network’s capacity expansion pricing methodology for the Wiggins Island Rail Project and Goonyella to Abbot Point Expansions (GAPE). See also the QCA’s 2013 Discussion Paper on capacity expansion pricing and approach. See also the QCA’s reviews of capacity expansion pricing in the context of DBCT’s 2017AU and 2019 DAU.

⁵ See, for example, QCA (2015), Draft Decision – DBCT Management Differential Pricing Draft Amending Access Undertaking, May 2015, pp.iii-iv.

⁶ See QCA (2016), Final decision – DBCT Management’s 2015 draft access undertaking, November 2016, p.235

3.1 Expected outcome of alternate pricing models

Amongst the information required to be provided in support of an application for a price ruling in accordance with s.5.12(b) of the 2017AU is an estimate of the reference tariff that will be applied to the terminal component subject to the capacity expansion if it were differentiated and if it were socialised. The impact on tariffs for existing and new users under alternate pricing models has been an issue that the QCA has closely investigated when considering other pricing applications under the 'averaging down/incremental up' principle,⁷ hence this information is a critical component of DBIM's application.

A key plank of DBIM's argument for socialisation is that, if socialised, the increase in the reference tariff (for convenience, given DBIM's next access undertaking will not include reference tariffs, this is referred to in this submission as the Unit Terminal Infrastructure Charge (TIC)) would be offset by a reduction in operating and maintenance costs (recovered via the Handling Charge) such that the Total Access Charge (TAC) would not increase [DBIM ¶12.5]. As a result, when presenting the impact on Unit TIC from 8X under either a socialised or differentiated approach, DBIM has also presented the estimated impact on Handling Charge and Unit TAC.

In Table 2 of its submission, DBIM has presented its estimated impact on tariffs as a result of 8X, under either the socialised or differentiated pricing method. This indicates that socialisation will have only a modest impact on existing users, but that differentiation will result in the Unit TIC and Unit TAC for new users being much higher than for existing users, creating a barrier to investment [DBIM ¶12.5].

However if socialisation is, as put forward by DBIM, likely to result in a moderate increase in Unit TIC and a slight reduction in Unit TAC, then simple mathematics would require that the incremental Unit TIC for the 8X project be modestly higher than for the existing terminal, and the incremental Unit TAC be slightly lower than that of the existing terminal. Instead, DBIM submits [DBIM Table 2 ¶12.5] that if 8X were differentiated, the Unit TIC for new users would be more than six times that paid by existing users, and the Unit TAC would be more than three times that paid by existing users.

⁷ The QCA has considered 'averaging down/incremental up' in the context of the WIRP pricing capacity expansion e.g. see QCA (2016), Final decision - Aurizon Network 2014 draft access undertaking Volume III - Pricing and tariffs, April 2016, pp.39-41. See also QCA (2013), Discussion Paper - Capacity Expansion and Access Pricing for Rail and Ports, April 2013. The QCA has noted that 'averaging down/incremental up' also played a role in the expansion pricing framework under Aurizon Network's 2014 DAU. See QCA (2015), Supplementary Draft Decision - Aurizon Network 2014 DAU: Reference Tariffs for Wiggins Island Rail Project Train Services, July 2015, pp.46-47.

DBIM has not provided sufficient transparency of its modelling assumptions to enable Submitting Users to replicate its assessment of the impact of 8X under either a socialised or differentiated pricing model. However, based on a review of the information that DBIM has provided, it appears that the extremely high Unit TIC and Unit TAC that DBIM has calculated under a differentiated pricing method is driven not by the underlying costs of the investment, but by the unconventional methodology DBIM has adopted in calculating unit costs under the differentiated pricing approach, in particular the allocation of costs between existing and new users, and the use of different depreciation profiles for 8X investments under the alternate pricing approaches.

These issues are explained below, followed by an assessment of the impact of these assumptions on the comparison of unit costs under the alternate pricing methodologies.

3.1.1 Expected contribution by expansion users to existing terminal costs

In developing its estimated differentiated price, DBIM has applied a pro-rata allocation of existing terminal costs to new users, in addition to them meeting the full cost of the expansion. This approach has been adopted for both the Unit TIC and Handling Charge, with the result that, if 8X were to proceed under a differential pricing approach, existing users would receive a significant benefit via a reduction in Unit TIC of nearly 20%, and a reduction in Handling Charge of around 14%. DBIM's stated rationale for this is that it "would be appropriate considering the existing facilities are shared equally by new users" [DBIM ¶155].

However, this outcome is inconsistent with the 'averaging down/incremental up' principle which forms the basis of the default pricing methodology established in the 2017AU. This pricing philosophy would typically see, in a cost sensitive expansion, expanding users only paying the incremental cost and making a zero contribution to existing common costs.

In the range of reviews undertaken by the QCA in relation to the 'averaging down/incremental up' principle for pricing expansions (including the detailed application of similar principles for Aurizon Network's WIRP expansion)⁸ there has been no expectation by the QCA, or by any other party, that where the unit cost of an expansion already exceeded the tariffs paid by existing users, the expanding users

⁸ Capacity expansion pricing principles have been extensively reviewed by the QCA in relation to GAPE, WIRP, Aurizon Network's 2014 DAU as well as the QCA's 2013 Discussion Paper on capacity expansion pricing. see QCA (2016), Final decision – Aurizon Network 2014 draft access undertaking Volume III – Pricing and tariffs, April 2016, pp.39-41. See also QCA (2013), Discussion Paper – Capacity Expansion and Access Pricing for Rail and Ports, April 2013. See QCA (2015), Supplementary Draft Decision – Aurizon Network 2014 DAU: Reference Tariffs for Wiggins Island Rail Project Train Services, July 2015, pp.46-47

should be required to contribute to existing fixed costs in addition to meeting the cost of the expansion.

Given previous QCA views, it is unclear why DBIM has concluded that, under a differential pricing method, it is appropriate that expanding users pay both the full cost of the expansion as well as a pro-rata share of existing terminal costs.

While Submitting Users do not wish to be disadvantaged by a cost sensitive expansion (in cost or risk terms), they are not looking to gain an advantage from such an expansion. Therefore, in estimating charges under differentiated pricing, Submitting Users consider that the conventional approach should be applied whereby both the Unit TIC and the estimated Handling Charge should reflect only the incremental costs associated with the expansion, with the costs of the existing terminal reflected in the Unit TIC and estimated Handling Charge for existing users.

Further, in its discussion on the scope of the 8X expansion project, DBIM has highlighted the extent to which the 8X expansion incorporates clear NECAP or NECAP-type works, supporting its claims as to the high level of integration of the terminal and benefits to existing users from the expansion. However, in its presentation of the differentiated pricing approach, DBIM has not sought to offset any of these NECAP 'savings' against the expansion cost, a modelling approach that would more accurately reflect the incremental cost of the expansion.

3.1.2 Depreciation profile for 8X investment

In developing its estimated differentiated price, DBIM has depreciated the 8X investments over ten years, being the term for which it has conditional contracts in place. However, this acceleration of depreciation has not been applied under the socialised pricing method [DBIM ¶155]. Presumably under the socialised case, DBIM has depreciated the expansion assets over the shorter of their physical lives or the ultimate economic life of the terminal. However, the extent of the difference in the asset life assumption between the two pricing approaches, and the reason for the different approach, has not been disclosed by DBIM.

By adopting a longer asset life under the socialised model DBIM is simply passing onto users of the existing terminal a risk that it is not willing to accept itself (likely reflecting in excess of 50% of the assets usable life), and without transparently disclosing this in its application. Aside from cross default risk, this approach will see existing terminal users paying a higher price as demand for the expansion capacity diminishes beyond the initial contract term.

In order to make a valid and fair comparison between the differentiated and socialised pricing methods, a consistent depreciation profile should be adopted for the 8X expansion, reflecting the expected period of demand for the expansion capacity.

3.1.3 Implications for comparison of Unit TIC under alternate pricing methods

To understand the implications of these costing methodology issues, Synergies Economic Consulting (on behalf of Submitting Users) has undertaken a high level analysis of the costing information provided in the application in order to proxy the more detailed modelling that will have been undertaken by DBIM. While this high level modelling relies on a number of simplifying assumptions (including the timing of NECAP and capital expenditure, the timing of throughput increases, and the calculation of depreciation charges) Synergies’ results are quite similar to those presented by DBIM, as shown in Table 1.

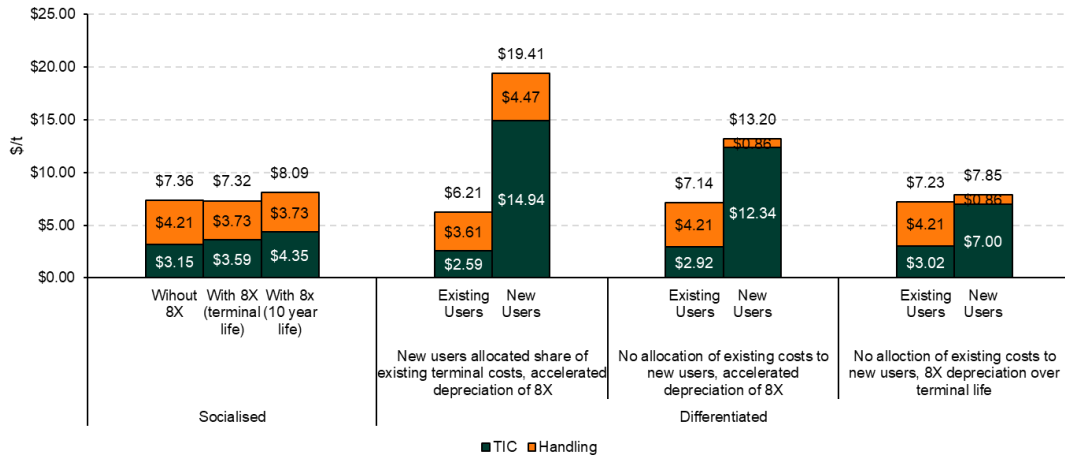
Table 1 Comparison of unit costs – DBIM modelling and Synergies modelling - 10 year average \$/t

	DBIM			Synergies		
	TIC	Handling	TAC	TIC	Handling	TAC
Without 8X						
Existing users	3.14	4.21	7.34	3.15	4.21	7.36
With 8X						
<i>Socialised pricing method</i>						
All users	3.55	3.73	7.29	3.59	3.73	7.32
<i>Differentiated pricing method</i>						
Existing users	2.51	3.61	6.12	2.59	3.61	6.21
New users	15.44	4.49	19.93	14.94	4.47	19.41

Source: DBIM Table 2, Synergies modelling

This comparison indicates that Synergies’ high level results are sufficiently robust to enable testing of alternate modelling assumptions. Figure 1 then shows average modelled unit costs over the ten years from 2028 to 2037, but adjusting the costing methodology to reflect a more conventional application of the ‘averaging down/incremental up’ principle. For consistency, these modelled unit costs continue to use DBIM’s input cost and fully contracted volume assumptions, however this does not imply acceptance of these assumptions by Submitting Users and it is noted that actual unit costs may vary significantly from this due to cost or volume variations.

Figure 1 Unit cost under different modelling assumptions (Synergies modelling) – 10 year average \$/t



Data source: Synergies modelling based on DBIM's input cost assumptions

This shows a very different picture of the implications of the differentiated and socialised pricing methods to that presented by DBIM in Table 2 of its application.

In particular, where the 8X assets are depreciated over the existing terminal economic life, then a socialised pricing methodology would result in Unit TIC increasing by 14% and Unit TAC decreasing by 1%, as presented by DBIM. However, under a conventional application of the differentiated pricing methodology, the price difference between new and existing users would be much closer than presented by DBIM – while the Unit TIC for new users would be more than double that of existing users, this would be offset by a much lower Handling Charge, so that the Unit TAC for new users would only be \$7.85/t - \$0.62/t (or 9%) higher than the Unit TAC for existing users (as shown by the bars on the far right of Figure 1).⁹

However, DBIM's costing methodology inappropriately amplifies the apparent price differential between existing and new users under the differentiated pricing methodology. This appears to attempt justification for socialisation of the 8X investments by minimising the apparent impact of socialisation for existing users while at the same time artificially distorting the price increase likely to occur for new users under differentiated pricing and claiming that this will create a barrier to investment proceeding.

⁹ Under this modelling approach, existing users continue to derive some benefit from the 8X expansion due to DBIM's anticipated reduction in the costs of the ongoing NECAP program. In the event that the benefits of reductions in NECAP expenditure were instead offset against the capital costs of 8X (an issue discussed in the next section), the unit cost difference between existing and new users would be narrower again.

Submitting Users consider that the information on reference tariff impacts from the expansion, under socialisation or differential pricing, should be undertaken using a conventional application of the differential pricing methodology and with consistent assumptions on asset life. Based on the costing and contract volume parameters presented by DBIM, a more appropriate calculation of the relevant unit cost comparisons is shown in Table 2 **Error! Reference source not found.**

Table 2 Comparison of unit costs (Synergies' modelling) - 10 year average \$/t

	8X Depreciation over terminal economic life			8X Depreciation over accelerated 10 year term		
	TIC	Handling	TAC	TIC	Handling	TAC
Without 8X						
Existing users	3.15	4.21	7.36	3.15	4.21	7.36
With 8X						
<i>Socialised pricing method</i>						
All users	3.59	3.73	7.32	4.35	3.73	8.09
% change for existing users	14%	-11%	-1%	38%	-11%	10%
<i>Differentiated pricing method</i>						
Existing users	3.02	4.21	7.23	2.92	4.21	7.14
New users	7.00	0.86	7.86	12.34	0.86	13.20
% change for existing users	-4%	0%	-2%	-7%	0%	-3%
% new user premium	132%	-80%	9%	322%	-80%	85%

Source: Synergies modelling

3.1.4 Information required to assess the expected outcome of alternate pricing models

Submitting Users consider that, as an absolute minimum, DBIM must provide full transparency around the methodology used to assess the expected outcomes of alternate pricing models (both Unit TIC and Unit TAC), and that consistent cost and contract volume parameters should be used in each pricing model in order to provide a valid comparison.

Beyond this, if DBIM genuinely wants to facilitate a robust assessment of the socialised pricing approach, it is also necessary for DBIM to provide sufficient information on forecast demand, costs and risks, supported by evidence, to allow stakeholders to understand the likely costs and risks to users (including both existing users and expanding users) *with and without 8X* and, hence, whether the costing parameters used in the unit cost comparison shown in Table 2 are appropriate.

DBIM's current application does not provide sufficient information to allow this understanding. The information provided by DBIM in its application is vague and uncertain such that it is unable to be discerned what elements of each phase the 8X project are genuinely brought forward NECAP and what is truly incremental expansion. The FEL2 study scope and costs are not yet sufficiently robust with some elements not yet determined to be within or out of scope, and therefore cost. For example, it is understood that in phase 1, an outloading optimisation scope has been generated for further study in FEL 3 including reclaim bucketwheel upgrades, surge bin control system modifications and hatch change automation software [DBIM ¶59]. In any case, DBIM acknowledges that no detailed assessment of the NECAP program has yet been undertaken, with this to be included in FEL 3 [DBIM ¶285.2].

Further, DBIM has based its comparison of unit costs on the costing parameters adopted for the 2017 AU, without regard to the material changes that have occurred since then, and simply assuming that all existing contracts will be renewed beyond 2028. DBIM specifically emphasises that its presented unit costs cannot be treated as forecasts [DBIM ¶12.5].

A genuine analysis of DBIM's socialised pricing application must be based on credible forecasts rather than outdated 'placeholders', and requires the following additional information to be provided:

- for the existing terminal, on the assumption that 8X does not proceed:
 - the long term demand profile for the terminal (i.e. over the economic life of the terminal);
 - the long term NECAP profile, together with supporting information demonstrating how this has been optimised to the long term demand profile in order to reflect optimised 'whole of remaining life' cost;
 - the long term operating and maintenance cost estimate, together with supporting information demonstrating how this has been determined having regard to the long term demand profile and the long term NECAP profile; and
 - the building block cost elements assumed in the assessment of the Unit TIC should be clearly disclosed;
- the change in this information assuming 8X were to proceed, in particular:
 - the revised long term demand profile, including providing an estimate of the impact on terminal demand beyond the initial 10 year contract term;
 - the revised long term NECAP profile, showing the truly incremental impact of each phase of 8X on future NECAP expenditure, together with supporting information demonstrating the basis for these changes;

- the revised long term operating and maintenance cost estimate, showing the impact of 8X, together with supporting information demonstrating the basis for these changes; and
- any other changes to the building block cost elements assumed for the existing terminal as a result of 8X, including for example the likely impact on remediation costs, given the expanded terminal footprint; and
- Further details on the extent of NECAP works contained in the 8X program, including:
 - a robust assessment of the works contained in each phase of the 8X project that would otherwise be expected to be undertaken as part of the NECAP program within a reasonable timeframe, rather than a simple categorisation of works as definitely NECAP, likely NECAP and expansion; and
 - a comprehensive evaluation of the benefits of including these works in the 8X program rather than in the ongoing NECAP program.

In order to demonstrate the robustness and credibility of this information, it should be accompanied by supporting analysis from DBIM, together with the results of an independent review undertaken by a suitably qualified independent party.

However, DBIM's application does not provide information in a form, or at a level of detail, that provides this clear understanding. Therefore, while DBIM describes a range of benefits to existing users, there is little in the application to substantiate these benefits or allow them to be robustly quantified or separately costed. The onus is on DBIM to make available the information necessary to provide this understanding. If DBIM is unwilling, or indeed unable to provide this information, then it is simply not possible to conclude that the benefits to existing terminal users are sufficiently clear to support any degree of socialisation.

3.2 2017 AU required considerations

3.2.1 Materiality of increase in Unit TIC

Expected increase in Unit TIC under socialisation

Under DBIM's presentation of comparative reference tariffs, socialisation of 8X would result in an increase in Unit TIC of, on average over the 10 years from 2028 to 2037, \$0.42/t or 13%. However, this TIC increase would only be reflective of the long term impact on existing users in the event that the terminal capacity (including the expansion capacity) is fully contracted over the entire economic life of the terminal. Further, this

presented TIC increase relies upon the costs and related pricing analysis being sufficiently robust to provide a reliable indicator of the likely TIC increase.

In reality, the demand outlook for the expansion is far more uncertain. DBIM recognises this in its estimation of the Unit TIC under a differentiated pricing approach, where it would require the expansion assets to be depreciated over the ten-year life of the expansion contracts. However, if this is a reasonable estimate of the period of demand for the increased capacity, then DBIM's socialisation proposal will result in the Unit TIC for users of the existing terminal being much higher beyond ten years than would be the case without socialisation, with more than 50% of the value of the expansion assets remaining in the asset base following the expiry of the expansion contracts.

If demand is only expected to be sustained for ten years (as indicated by DBIM's adoption of a ten-year asset life under the differentiated pricing methodology), then (using DBIM's costing parameters) Table 2 shows that socialisation would instead result in the ten-year average Unit TIC for existing users increasing by around \$1.20/t, nearly 40%.

Offsetting reductions in Handling Costs

DBIM has argued that, in considering the impact on access charges from socialisation, it is the Unit TAC (representing the sum of the Unit TIC and the Handling Cost), rather than the Unit TIC alone, that is the important consideration.

DBIM has previously put this position to the QCA.¹⁰ However, the QCA's view was that the use of Unit TAC is likely to be subject to greater forecasting risk and potential error, and will introduce a higher degree of emphasis on cost allocation issues relating to operations and maintenance. As a result, the QCA considered that the better balance would be achieved by using TIC as the initial basis for determining whether differential pricing should be adopted, but allowing for DBIM or other stakeholders to point to operating or other cost factors as a relevant factor in considering socialisation.¹¹

Submitting Users agree with the QCA that the merits of socialisation should not simply be considered through an assessment of the anticipated impact on Unit TAC.

Importantly, existing users are not neutral between their current TAC and one that increases the TIC component on the expectation of a reduction in Handling Charge. A higher capex solution embeds higher fixed costs into the terminal, and provides less opportunity for the terminal to adjust its operating cost structure in response to long

¹⁰ DBCTM (2016), DBCT 2015 DAU – Response to QCA's Draft Decision, 8 July 2016, p.58.

¹¹ QCA (2016), Final decision – DBCT Management's 2015 draft access undertaking, November 2016, p.242.

term variations in demand. The increased capex will cause a certain increase in TIC, but there is significant uncertainty around DBCT's operating and maintenance costs, particularly as the terminal ages, which in turn causes uncertainty around the operational savings that may be achieved in practice.

Further, the higher TIC will increase the take or pay obligation on existing users, increasing their risk exposure in the event of variations in their own production levels and, more importantly, in relation to increased cross default risk under socialisation, given the materiality of the increase in the terminal asset value.

These issues are particularly important where there is an expectation that contracted volume and throughput may peak and then decline from the time 8X is to be delivered and beyond. Where there is uncertainty about long term usage of the terminal, this will significantly reduce the attractiveness of bringing forward NECAP in order to reduce ongoing operating costs. In this regard, it is understood that most of the contracted capacity – in the order of 70mtpa, is due for renewal around 2028-29, a similar time to when the 8X expansion is due to be completed.

Materiality of increase in TIC

In previous consideration of differential pricing at DBCT, the QCA has consistently taken the view that existing users should not be required to bear a material increase in their access charges (due to an expansion triggered by other users) and that it is economically efficient for expanding users to be required to bear the incremental costs associated with their access agreements.^{12 13}

While acknowledging that the QCA has avoided providing a 'hard-and-fast' threshold on an assessment of materiality,¹⁴ DBIM has cited as a relevant benchmark the QCA's

¹² In its consideration of Aurizon Network's proposed pricing for the WIRP expansion project, the QCA noted that it considered it was unreasonable for the economic viability of a mine that is already operating to be adversely impacted by a material increase in access charges resulting from an expansion triggered by other users. The QCA further noted that existing users should, to the extent practicable, be confident of a relatively stable risk and access charge profile over time. This treatment of incremental costs for a major expansion was reflected in Aurizon Network's 2013 DAAU pricing proposal for GAPE train services, where it was proposed that the incremental costs associated with GAPE infrastructure be allocated to expanding customers. Aurizon Network's proposed revenue deferral approach in 2013 in the context of the Newlands to Abbot Point expansion (NAPE) customer share of GAPE project costs was similarly designed to ensure that existing users did not see a material impact in their access charge. See QCA (2015), Supplementary Draft Decision – Aurizon Network 2014 DAU: Reference Tariffs for Wiggins Island Rail Project Train Services, July 2015, pp.22, 24, 46, 50, 51.

¹³ In relation to WIRP, the QCA preferred the system premium approach as it included a premium to reflect WIRP users' higher incremental cost. See QCA (2015), Supplementary Draft Decision – Aurizon Network 2014 DAU: Reference Tariffs for Wiggins Island Rail Project Train Services, July 2015, p.vi.

¹⁴ QCA (2015), Final Decision – DBCT Management Differential Pricing Draft Amending Access Undertaking, August 2015, pp.27-28.

consideration of materiality in its review of the declaration of services at DBCT [DBIM ¶102-103]. However, this ignores the different contexts for these assessments.

In its declaration review, the QCA was analysing the potential for differences in the TAC between existing and new users to impact on competition in the coal tenements market and, in particular, whether a difference in TAC would be likely to be material such that it would deter more efficient (new) entrants from participating in the coal tenements market.¹⁵ In this context, the QCA did indeed conclude that a TAC increase for new users of \$8.50/t (as opposed to a TAC for existing users of around \$5.00/t) would not appear materially different in terms of their impact on competition in that tenements market (noting that users do not agree with that view and the Minister ultimately determined there was insufficient evidence to determine whether the price differential would have a material impact on competition).¹⁶

However, the QCA's current assessment requires materiality to be considered in an entirely different context. For this application, the QCA's focus will again properly be on an assessment of the impact on economic efficiency. However, when assessing the pricing approach to be applied for an expansion, economic efficiency relies on ensuring that the costs of the expansion are borne by the parties who will benefit from the works.

This context requires that the assessment of materiality under a socialised pricing proposal should be narrowly applied. Except to the extent that existing users gain a clear benefit from the expansion, any increase in the Unit TIC for existing users increases the risk that the expansion will proceed in circumstances where it is not efficient, that is, where the value that the beneficiaries place on the expansion is less than its cost.

Such a narrow interpretation of materiality is consistent with QCA's approach to assessing the acceptability of price increases for existing users under a socialised pricing model for Aurizon Network.¹⁷ Further, in the QCA's previous assessments in relation to Aurizon Network, the QCA was unwilling to accept a benchmark materiality threshold of even five per cent, noting that judgement should be applied in assessing the need for a new expansion tariff.¹⁸

¹⁵ QCA (2018); Draft Recommendation – Part C: DBCT declaration review; December 2018; p.83.

¹⁶ QCA (2018); Draft Recommendation – Part C: DBCT declaration review; December 2018; p.86.

¹⁷ In the context of the WIRP train services, the QCA did not consider that it was appropriate to apply a materiality threshold. The QCA considered that consistent with the pricing limit principle which was common to both the 2010 AU and the 2014 AU, the pricing arrangements for WIRP train services should at least cover the incremental WIRP costs. The QCA noted that this was consistent with the system premium approach in the 2010 AU, which had no materiality threshold in determining whether a system premium applies. See QCA (2016), Final decision – Aurizon Network's 2014 draft access undertaking Volume III – Pricing and tariffs, April 2016, p.238.

¹⁸ QCA (2016), Final decision – Aurizon Network's 2014 draft access undertaking Volume III – Pricing and tariffs, April 2016, pp.63-64.

In this context, Submitting Users consider that, notwithstanding that DBIM's estimated increase in existing users' Unit TIC misrepresents the true long term impact of socialisation, to the extent that it is reliable, a 13% increase in Unit TIC remains a material increase. Further, as explained above, even if this increase were expected to be fully offset by a reduction in the Handling Charge, this would not leave existing users in a neutral position.

However, if DBIM were to properly reflect the expected term of demand for the expansion capacity under socialisation, the likely increase in TIC for existing terminal users is much higher, with Table 2 showing a Unit TIC increase of nearly 40% when depreciation of the 8X assets is accelerated over ten years, and clearly unable to be offset by the anticipated reduction in average Handling Costs, even before considering the impact on cross default risk.

3.2.2 Integration with the existing terminal

Submitting Users acknowledge that the 8X expansion is designed to be highly integrated with the existing terminal, largely due to the extent to which it is bringing forward NECAP or NECAP-type projects. However, as has been previously highlighted by the QCA, operational integration alone is not sufficient to support a requirement that the expansion costs are socialised.¹⁹

The argument that operational integration supports socialisation is predicated on the terminal providing a common service for all users, with individual segments of terminal infrastructure unable to be isolated and dedicated to a particular user or group of users. In previous submissions to the QCA, DBCTM (as it then was) was concerned that differential pricing could result in different tariffs applying to different users for tonnages handled by the same infrastructure, leading to non-cost-reflective outcomes.²⁰

The QCA has previously concluded that, where access is sold under long-term capacity contracts (as is the case at DBCT) the issue of physical separability is unlikely to have a strong bearing on whether capacity expansions should be uniformly priced.²¹ In any case, this factor now seems less relevant given the pricing methodology being taken by DBIM in its next access undertaking. Where, in future, reference tariffs will no longer be included in the access undertaking, uniform pricing may not be achieved, regardless of whether the Unit TIC is calculated on a socialised basis or not.

¹⁹ QCA (2015), Final Decision - DBCT Management Differential Pricing Draft Amending Access Undertaking, August 2015, p.16.

²⁰ QCA (2015), Final Decision - DBCT Management Differential Pricing Draft Amending Access Undertaking, August 2015, p.16.

²¹ QCA (2013), Discussion Paper, Capacity Expansion and Access Pricing for Rail and Ports, April 2013, p.v.

In contrast, the QCA's view that operational integration was a factor that should be considered in determining whether socialisation was justified in part reflected the QCA's recognition that an integrated expansion may involve the introduction of new or replacement infrastructure which either has lower operating costs than existing (and older) capacity, or gives rise to benefits (including reduced costs) for existing users, and that it may be appropriate for the cost of these benefits to be appropriately shared between expanding and non-expanding users.²²

Importantly, this view remains consistent with the QCA's philosophy that an allocation of expansion costs to existing users may be appropriate where the expansion has clear benefits to those users.

For these reasons, Submitting Users consider that any operational integration between 8X and the existing terminal does not provide a sufficient basis to justify socialised pricing. However, given the extent of operational integration between 8X and the existing terminal, it is appropriate to have regard to any benefits that will clearly accrue to existing users in considering how costs should be assigned between existing and expanding users, as foreshadowed by the QCA. This is addressed in the following section.

3.2.3 Benefits to users of the existing terminal

DBIM [¶53, 54, 55] has identified the following categories of benefit to existing users of the terminal.

- a reduction in Handling Costs, which forms part of the TAC;
- cost reductions in the ongoing NECAP program; and
- improvements in terminal reliability and flexibility.

These issues are discussed in turn.

Reduction in Handling Costs

Assuming the FEL3 study scope and cost does not differ materially from the current proposal, Submitting Users acknowledged that 8X could (during the period that expansion user contracts remain on foot and existing user contracts are extended) lead to a reduction in the average (per tonne) terminal operations and maintenance costs, given the extent to which existing equipment is being replaced by new, higher capacity

²² QCA (2015), Final Decision - DBCT Management Differential Pricing Draft Amending Access Undertaking, August 2015, p.16.

equipment with commensurately lower operating and maintenance costs, and a spreading of fixed/overhead costs among greater contracted tonnes. However, Submitting Users consider that there is significant uncertainty around future operations and maintenance costs, both given uncertainty around future demand as well as the inherent uncertainty in operating a coal terminal. As a result, caution must be applied in judging the extent of these benefits to existing users.

Handling Charges vary from year to year and are subject to significant forecasting risk. These charges are reset annually, based on the Operator's budgeted costs and are subject to an annual 'true up' adjustment. This process does not and cannot provide users with certainty regarding future movements in the Handling Charge. Instead, if users were assessing the feasibility of a terminal investment based on an anticipated reduction in Handling Charges, they would require a high degree of rigour in the forecast demand, and the operations and maintenance cost with and without the investment, in order for them to form a judgement on whether the investment provided sufficient benefit to justify proceeding.

However, DBIM has provided little in the way of evidence to support its anticipated Handling Charges, with and without 8X. DBIM's description of its process for estimating future Handling Charges [DBIM ¶285] demonstrates the very preliminary nature of these estimates. Operating and maintenance costs for the existing terminal are simply forecast to increase by 3%pa, with no consideration given to how this might change with the anticipated major NECAP program, nor with potential changes in throughput volume. The increase in operating and maintenance costs with 8X have been forecast by the Operator as an annual cost per 8X phase in 2020 terms, which is simply then escalated at 3%pa over the modelling term. Again, no consideration is given as to how this might change with the anticipated major NECAP program, nor with potential changes in throughput volume.

While DBIM's submission refers to Appendix 4 (the Operator's annual and 5-year operations, maintenance and capital plans) this supporting information has been redacted from DBIM's application. This removes the ability for Submitting Users to understand how this estimate has been developed and the degree of rigour that has been applied. In any case, it is assumed that these plans are for the next five years only (and not from 2028), in which case they would have limited relevance to an assessment of the likely impact of 8X on either operations and maintenance costs or on the NECAP program, other than to determine what NECAP work may be done before then, whether 8X proceeds or not.

Submitting Users consider that any robust assessment of the extent of the impact of 8X on Handling Costs requires disclosure of more detailed information by DBIM,

identifying the expected terminal operating and maintenance cost with and without 8X over time, and having regard to changes likely to result from the NECAP program or changes in anticipated throughput volume over the relevant period.

In the event that that DBIM can demonstrate that existing users will reliably benefit from reduced average operating and maintenance costs due to 8X, it may be reasonable to allocate some 8X investment costs to existing users to reflect this benefit. However, an alternate approach would be to direct the benefit of the reduced average Handling costs to the expanding users. This may be able to be achieved through the cost allocation rules that DBIM would be required to develop under s.11.11 of the 2017 AU, specifying how operating and maintenance costs will be allocated between different terminal components.

Submitting Users acknowledge that an assessment of how actual annual operating costs vary as a result of 8X would be a difficult and, likely, impractical approach, as this would assume extrapolation of an ongoing annual budget for the notional 'existing terminal' as well as for the actual expanded terminal. However, once a robust assessment of the anticipated change in operating and maintenance costs was developed and verified, it would be possible to use this to develop a pragmatic set of rules as to the allocation of ongoing costs that resulted in the new users being allocated an amount consistent with the expected incremental operating and maintenance cost for 8X.

Given the ability to direct the benefits of improvements in operations and maintenance costs specifically to expanding users, Submitting Users do not consider that the existence of potential reductions in average operations and maintenance savings is sufficient to justify socialisation of the 8X project across existing terminal users.

Cost reductions in NECAP

DBIM [¶55] has identified that existing users will benefit from significant cost reductions in the ongoing NECAP program as a result of the 8X project, which will replace existing equipment with new, higher capacity assets. Submitting Users acknowledge that the 8X expansion, as proposed, may lead to some cost reductions due to aspects of the forthcoming major NECAP program being brought forward, however, again consider that there remains substantial uncertainty about the extent of this benefit.

DBIM is forecasting a large forthcoming NECAP program, based on major equipment replacements identified in the Operator's long term asset management plan, with DBIM providing an indicative costing for this program. DBIM has identified a number of specific opportunities for cost savings in this NECAP program if 8X proceeds [DBIM Table 11 ¶146].

However, Submitting Users consider that the level of confidence in the timing and cost of this major NECAP program, with and without 8X based on the FEL2 study, is inevitably low, particularly as the timeframe extends. This reflects that:

- this program is specified at only a high level, showing 15 items of expenditure, with a total cost of \$900m without 8X or \$696m with 8X;
- it is understood that the Operator's long term asset management plan, including NECAP program, has been created in relation to the existing terminal configuration for long term planning purposes and does not reflect a firm capital program based on maximising availability. As the timing for expected major equipment replacement approaches (particularly from 2028 onwards), detailed analysis will be undertaken to ensure the optimal investment decision (e.g. enhanced maintenance, refurbishment or replacement), timing and value based on forecast throughput and contracted demand at that time;
- the source of the changes in the estimated program with 8X, and the extent of scrutiny that has been applied to these changes, is unclear. For example, DBIM has identified that the installation of a new SL4 – which will increase terminal capacity by allowing for higher utilisation of the outloading systems - will allow the existing shiploaders to be subsequently refurbished rather than replaced (a decision unlikely in the absence of SL4 given the much longer shutdown required for refurbishment than replacement), with no throughput loss during the refurbishment period. However, given the increased system capacity from the higher utilisation of the outloading systems will have been committed to new users, the acceptability of then removing a shiploader for the extended period of time required for refurbishment needs to be further substantiated based on expected demand. Detailed modelling of system capacity impacts, including assumptions, is required to substantiate to confirm the reasonableness of DBIM's assumptions, including consideration of the risks of unplanned outages over a longer outage period that may come with refurbishment compared to replacement; and
- the economic life of the terminal is currently assessed to be 2054 (although DBIM has in recent regulatory processes argued for this to be shortened²³). With an expected remaining economic life of 33 years, it would be expected that options to extend the life of existing assets will be closely examined. The preference to avoid investment in major asset replacement will increase as the economic life of the terminal approaches.

²³ A summary of DBIM's submitted position to adopt a shorter economic life is set out in the QCA's final decision on the DBCT 2019 DAU. See QCA (2021), Final decision - DBCT 2019 draft access undertaking, March 2021, pp.169-170.

DBIM has also claimed that substantial parts of the 8X program, although not contemplated in the Operator's long term asset management plan, are either definitely or likely to be NECAP in nature [DBIM Table 12]. However, while these works may involve replacing existing assets (and therefore be 'NECAP in nature'), is flawed as it does not represent the actual expected NECAP requirements beyond 2028, which would be determined based on asset condition, asset renewal options and forecast throughput and contracted capacity at that time. Even if it is assumed DBIM's capital sequencing is appropriate, it is based on the assumptions that the terminal will be fully contracted with throughput of around 99mtpa over the period 2028 to 2039, and that this demand will continue for the remaining useful life of the terminal, requiring all NECAP-type works to be undertaken. DBIM has not provided evidence of a reliable demand profile reflecting this assumption.

This 'NECAP in nature' investment will only provide a benefit to existing terminal users if replacement of the relevant asset is expected to be required within a reasonable timeframe in order to maintain sufficient terminal capacity to meet expected demand at that time. At this stage, DBIM has provided no substantial evidence to support any of these works being required within a reasonable timeframe in the absence of delivery of 8X. As a result, based on the information provided by DBIM, Submitting Users do not consider that these works will provide a clear benefit to existing users.

In the face of uncertainty over future demand, existing users will benefit in delaying NECAP works for as long as possible, as this allows them to maintain the option of more effectively optimising the future NECAP program as better information on the likely demand outlook becomes available, not just from a cost/capacity trade-off perspective, but particularly if asset replacement ultimately becomes unnecessary as current users reach end of life of mine. In this regard, a decision to avoid future NECAP through upfront investment in 8X imposes an additional cost on users, as this optionality is no longer available to them.

Finally, it is not clear from the information provided by DBIM whether it is *necessary* for all of these NECAP-type works to be brought forward into the 8X expansion program, or whether there is the option to exclude them from the 8X project and undertake them if and when required through the NECAP program. This would have the benefit of allowing the NECAP program to be optimised having regard to better information on terminal demand, as the end of asset life approaches.

The QCA has previously concluded that it is reasonable to allocate expansion costs to existing users where there is a *clear benefit* to existing users.²⁴ Submitting Users accept this principle. Therefore, if it is able to be established with a high degree of confidence that 8X program will result in a cost reduction in major necessary NECAP within a reasonable timeframe, it may be reasonable for some form of partial socialisation to be applied (e.g. socialisation of certain project phases or allocation of some expansion costs to existing users equivalent to the benefits received). However, this is clearly unable to be determined based on the information currently available.

In any case, Submitting Users do not consider that the likelihood of future reductions in the NECAP program due to 8X is sufficient to justify a full socialisation of the costs of the 8X program across the existing terminal users.

Improvements in terminal reliability and flexibility

DBIM [¶17, Table 6 ¶55] has identified a number of improvements that are expected in terms of increased terminal reliability and flexibility, in support of its application for justify socialisation. These improvements primarily relate to the NECAP related components of 8X, and include:

- plant throughput outloading optimisations across the terminal;
- reduced risk of throughput loss due to an unplanned event as a result of improved access to spare shiploader and berth;
- increased outloading availability for improved throughput;
- chronic reliability issues resolved by replacement of IL1; and
- more stockyard space for better management of coal stock.

The question arises however, as to the identity of the beneficiaries of these improvements, or whether they are merely installation of latent capacity.

In some cases, improvements to terminal reliability and flexibility will serve to increase the reliability and flexibility of the supply chain, and ultimately be reflected in an increase in system capacity, as has been modelled by the ILC. However, it is assumed that any such increase in system capacity will be contracted to and absorbed by the expanding users. While such investments may increase the resilience and flexibility of the coal supply chain, this will not result in any direct increase in capacity entitlement or contracted service standard for existing users and cannot be guaranteed by DBIM. To

²⁴ QCA (2016), Final decision – Aurizon Network 2014 draft access undertaking Volume III – Pricing and tariffs, April 2016, p.61.

the contrary, depending upon where the expansion demand is coming from and the investments that have occurred in complementary supply chain infrastructure, the expansion may have a detrimental impact on some users service reliability and flexibility.

In other cases, the improvements to terminal reliability may provide a benefit to existing users (e.g. reduced outages for major equipment maintenance and therefore greater availability). However, the information presented by DBIM in its application is insufficient to allow an assessment of the extent of the claimed benefit to existing users, separate from any benefit of additional supply chain capacity contracted to new users.

Further, as the QCA has previously recognised, the existence of operational improvements does not necessarily imply that existing users are willing to pay a higher price for a service they contracted for at agreed performance levels. This was specifically addressed by the QCA in relation to the pricing methodology to be applied to Aurizon Network's WIRP project. Aurizon Network, in its pricing proposal to the QCA, had claimed that 94% of the capital value of WIRP related to multiuser infrastructure and that 70% of the capital value of WIRP related infrastructure would be utilised by non-WIRP customers in the Blackwater and Moura systems delivering considerable operational efficiency.²⁵

In response, the QCA noted that:²⁶

...our view is that none of the Blackwater duplications would have proceeded in the absence of the WIRP project.

...

...unless existing users are actually gaining additional contracted capacity as a result of WIRP, it is not clear how they could reasonably be assigned a portion of benefit arising from the additional network capacity.

We consider that at times of high capacity utilisation, for operational improvements to translate into economic benefits, existing users would need to have access to the additional train paths that exist. No compelling evidence has been provided to show the extent to which non-WIRP users would have access to such paths at times of high capacity utilisation, what would be a fair distribution of those train paths between WIRP and non-WIRP users and the dollar-value that should be attributable to those

²⁵ Aurizon (2015), Aurizon Network Access Undertaking (2010), Reference Tariffs for Wiggins Island Rail Project Train Services, Response to QCA Draft Decision, September 2015, p.15.

²⁶ QCA (2016), Final decision – Aurizon Network 2014 draft access undertaking Volume III – Pricing and tariffs, April 2016, pp.169 and 206.

train paths. Indeed, it is entirely possible that all such train paths will be utilised by WIRP users. In such a scenario it is not clear that non-WIRP users derive any tangible economic benefit from WIRP infrastructure.

As a result, Submitting Users do not consider that the claimed existence of operational benefits to existing users is a sufficient reason to justify socialisation of the 8X project or, indeed, to justify an allocation of any part of the cost of the 8X project to existing users.

3.2.4 Impact on risks to users of the existing terminal

The 8X expansion has the potential to impact on risks to users of the existing terminal in the following areas:

- demand risk;
- counterparty risk (including risk of default);
- cost risk; and
- operational risk.

These issues are discussed in turn.

Demand risk

In its application, DBIM [¶83 – 88] has not identified any changed impact to existing users as a result of throughput volume risk following the expansion. When discussing demand for the expansion, DBIM has focussed only on additional demand over the initial ten-year period for which it has conditional contracts in place. This assumes all existing and expanding users are bearing the costs for the entire period without any non-renewals or default. However, in the order of 70% of existing terminal contracts are due for renewal around 2028 [DBIM ¶87, Figure 6 Chart 1], and DBIM simply assumes these contracts are renewed by existing users in order to sustain existing terminal demand beyond that date. The only evidence that DBIM has presented regarding total terminal demand appears to be in Figure 6 Chart 4 where DBIM projects foreseeable demand by aggregating the capacity queue with an extrapolation of existing contract volumes, but this is then only provided until 2030.

At no point in its application has DBIM addressed likely contracted or throughput demand beyond 2028, when delivery of 8X is to be complete. However, under the differentiated pricing model (which relies solely on demand from new users to recover the 8X investment) DBIM would require the 8X investment to be depreciated over ten

years. Further highlighting the risks to terminal demand beyond this time, in the 2019 DAU process DBIM argued for the economic life of the terminal to be brought forward.²⁷

Given the longer term coal market outlook and the possibility of terminal demand declining beyond the contracted pricing period, the DBIM socialised pricing model which depreciates the 8X investment over the life of the terminal clearly results in the users of the existing terminal bearing a significantly increased demand risk – a risk which has not been clearly disclosed by DBIM in its application.

It is inappropriate for socialisation of 8X to leave existing terminal users bearing a higher cost once the additional capacity and improvements to be delivered by 8X is no longer required by either the expanding users or non-renewing existing users. While existing users accept the demand risk associated with the non-renewal of existing access agreements, the demand risk for the expansion should be borne by the expanding users. This will, more appropriately, result in DBIM seeking to recover the 8X investment over the period which it is reasonably likely to be used, based on the conditional access agreements it has in place.

A differential pricing approach may in fact encourage DBIM to seek greater commitment by expanding users to the term of their demand, providing sufficient confidence to depreciate the assets over a longer time frame and reducing the Unit TIC under a differentiated method. Alternately, if DBIM considers it likely that there is additional demand for terminal capacity beyond 10 years, it may be willing to apply a longer asset life in anticipation of being able to recover the remaining value in future contracts, as is the usual approach. The ability to negotiate access arrangements with a different risk sharing arrangements was a key basis for DBIM’s arguments to move away from a reference tariff in the 2019 DAU, and should support the ability for DBIM to negotiate agreements with new users that address the demand risk associated with the 8X expansion within the group of expanding users, and avoid transferring this risk back to existing terminal users.

Counterparty risk, including risk of default

Across all four phases, 8X will create an additional 14.9mtpa capacity [¶12.4]. DBIM has identified that this is fully contracted under conditional expansion contracts. While the identity of the expanding users is confidential, the following information is known from DBIM’s application [¶85]:

- demand is constituted by five access seekers [DBIM ¶84] – it is assumed that this is made up of the first five access seekers in the queue presented in Table 7, whose

²⁷ QCA (2021), Final decision – DBCT 2019 draft access undertaking, March 2021, pp.169-170.

aggregated demand is 14.87mtpa. The individual demand from these access seekers ranges from 0.8mtpa to 7.5mtpa;

- while the majority of these access seekers are said to produce coking coal, the largest applicant will produce a combination of coking and thermal coal;
- 35% of foreseeable demand for 8X is from existing users, with the remaining 65% from new applicants [DBIM ¶182], however it is unclear from DBIM's application whether these proportions relate to users with conditional expansion contracts, or the total access queue; and
- no information is provided on what proportion of this demand relates to greenfields mining projects, and the current status of those projects (e.g. the extent to which required approvals have been granted).

DBIM [¶132] contends that the expansion parties include existing users and new users with large throughput requirements, and who have risk profiles comparable to existing users. Submitting Users consider that this claim does not withstand scrutiny, as there is a much higher uncertainty associated with forecast coal production volumes from mine developments rather than from existing mines with access agreements that have been in place for some time, given the additional project development risks involved.

There can be significant variation from a new development's planned production schedule (both in terms of timing and production volumes) due to a range of technical and project risks. Superimposed on this is the financial risk associated with a new project, particularly in the event that changed conditions in the coal market require a material adjustment to the anticipated project cashflows, which can impact on the producer's ability to finance and deliver the development.

Critically, the project development risks associated with greenfield mine projects are significantly higher than brownfields expansions. Brownfields expansions are able to lessen technical risks, by leveraging off existing mine infrastructure and operational capability. Further, cashflow from the existing production can reduce the projects vulnerability to financial risk. Importantly, the demand from new users will almost certainly relate to greenfield mine developments, while the demand from expanding existing users may relate to either brownfield expansions or a smaller proportion of greenfield developments.

The risks associated with such developments cannot be completely addressed through counterparty screening, contracting arrangements and security provisions. Further, in the event of a downturn in the coal market resulting in a default by an expanding user, the environment is unlikely to support this capacity being taken up by another party in the queue. The Wiggins Island Coal Export Terminal, in combination with Aurizon

Network's WIRP project, provides a clear example of how this risk can play out. While the rail and port terminal capacity was fully contracted at the time of project commitment, the subsequent downturn in the coal market led to a number of parties defaulting on their commitments, with some new projects being abandoned, and some project proponents in receivership. While there had been strong demand for capacity prior to project commitment, this had dissipated as a result of the market downturn, and surplus capacity remains uncontracted.

The unavoidably high counterparty risk associated with developers of greenfields and brownfields expansions contrasts starkly with the low counterparty risk associated with existing terminal users made up largely of global commodity producers and some smaller operators with mines that have been producing for some time through the market cycles.

The low existing counterparty risk is confirmed by DBIM [¶134], who notes that no existing user has ever defaulted on payments to DBIM.

Submitting User therefore consider that a socialised pricing approach will result in the higher counterparty risk associated with proposed expansion tonnages, largely from greenfields mine developments, ultimately being borne by existing users, with 8X delivering additional capacity that may never be used or required. This is inconsistent with the principles of economic efficiency and does not reflect the optimal allocation or sharing of risk.

Cost risks

A further risk that DBIM has not considered in its application is cost risk associated with delivery of the 8X project. Based on the current FEL2 level study (with P50 confidence), there remains significant uncertainty as to the scope and cost of the 8X project. Any decision to socialise the 8X project based on information at this confidence level would expose existing users to significant cost risk, as variations to the scope and resulting cost of 8X will be borne by all users of the terminal, regardless of whether such variations created any benefit to existing users.

Operational risk

DBIM's claims regarding its processes for managing operational risk associated with the 8X construction program are noted [¶126 - 128].

However, this does not appear particularly relevant to a justification for a socialised pricing method, as the operational risk will need to be effectively managed regardless of the pricing method to be applied.

In this regard, it should also be noted the operational intensity and coal contained in the yard will increase. It is not clear if a risk analysis has been undertaken on increasing this intensity within the existing areas.

There also appears to be no detailed risk assessment into the interaction of 8X with other elements of the supply chain, including harbour/pilots/tugs, Aurizon Network and any interaction with the Hay Point Coal Terminal.

Submitting Users expect that, prior to any decision to proceed with 8X, DBIM will have fully analysed these operational issues, both within the terminal and across the supply chain more broadly, and strategies to mitigate any operational risks associated with the delivery of 8X will be embedded into the project.

3.2.5 Conclusions on Access Undertaking considerations

While this is the first application for a pricing ruling under DBIM's access undertaking, it raises very similar issues to those considered previously by the QCA, both in principle terms in relation to DBCT, and in response to Aurizon Network's WIRP project. In considering these issues, the QCA has consistently taken the view that:

- expanding users should bear the cost and volume risk associated with an expansion, and existing users should not be exposed to a material increase in tariffs due to an expansion triggered by access seekers²⁸; and
- if there is a genuine benefit to existing users, then an allocation to these parties is appropriate. However, there needs to be objective supporting material evidence demonstrating how the economic benefits arise – it is not sufficient to assert a subjective view.²⁹

Submitting Users consider this approach remains appropriate in the context of DBIM's 8X expansion, in the following way:

- a differential pricing methodology will most effectively allocate the cost and volume risk of the expansion to the expanding users, rather than pass these risks onto the existing terminal users;

²⁸ See section 18 of QCA decision at QCA (2016), Final decision – Aurizon Network's 2014 draft access undertaking Volume III – Pricing and tariffs, April 2016.

²⁹ QCA (2016), Final decision – Aurizon Network's 2014 draft access undertaking Volume III – Pricing and tariffs, April 2016, p.42.

- for so long as the unit cost of the expansion is higher than the unit cost of the existing terminal, it is reasonable for the expanding users not to be required to contribute to the existing terminal costs (either in TIC or in Handling Costs); and
- if it can be demonstrated that 8X will provide a clear benefit to existing users through a reduction in the NECAP that would otherwise be incurred for the existing terminal, then it may be reasonable for some form of partial socialisation to be applied (eg socialisation of certain project phases or allocation of some expansion costs to existing users equivalent to the benefits received). However this should only occur where there is a high degree of confidence in the timing and the amount of expenditure that will be avoided.

This approach should be preferred over full socialisation, which would have a material impact on the cost and risk of access to existing users, with these impacts expected to exceed the benefits that existing users are likely to receive as a result of the 8X project.

However, DBIM has to date provided insufficient information to allow a rigorous assessment of the benefits of 8X to existing users. Not only is the current FEL2 scope and related estimated cost (with only a P50 level of confidence) not sufficiently certain to inform a reliable view on costs and benefits, DBIM has also not provided critical information in other areas, such as longer term demand outlook and current forecasts of costs for operating (and ultimately rehabilitating) the terminal. It is therefore not currently possible to assess that the circumstances exist for even partial socialisation to be justified. A FEL3 study will provide a higher level of confidence and therefore more robust analysis of the relevant considerations.

4 QCA Act criteria

This section examines the statutory factors that the QCA is required to consider in s.120(1) and s.138(2) of the Act when making rulings. All of the issues that the QCA is required to consider in accordance with the Act have previously been addressed in numerous QCA reviews of socialised and differential pricing methodologies, both at a principle level for DBCT and in relation to specific Aurizon Network expansions. In these reviews, the QCA has repeatedly concluded that the statutory criteria are best met by ensuring that pricing signals are set to encourage an efficient investment decision. Where the average cost of the expansion is greater than the average cost of the existing facility, the QCA has concluded that this is best achieved by adopting a fully or partially differentiated pricing methodology, with the expansion costs borne by the expanding users, but with expansion costs able to be allocated to existing users to the extent that they will receive a *clear benefit* from the works.

These issues are examined further below, in order to consider what pricing methodology would best meet the statutory criteria, referring to previous regulatory precedent where relevant.

4.1 The Object of Part 5

The object of Part 5 of the QCA Act is to promote the economically efficient operation of, use of, and investment in significant infrastructure by which services are provided, with the effect of promoting effective competition in upstream and downstream markets.³⁰

4.1.1 Promoting economic efficiency

The QCA has previously set out that the primary consideration in evaluating whether a specific pricing proposal or structure is justified from a public policy perspective is whether it is clearly consistent with increasing overall economic efficient efficiency on a net present value basis.³¹

In defining economic efficiency, the QCA has determined that it entails a consideration of (a) efficient investment (b) efficient use (c) efficient operation (d) efficient allocation of risk and (e) externality risks.³²

³⁰ See Section 69E of the QCA Act.

³¹ QCA (2013), Discussion Paper – Capacity Expansion and Access Pricing for Rail and Ports, April 2013, p.2.

³² QCA (2013), Discussion Paper – Capacity Expansion and Access Pricing for Rail and Ports, April 2013, pp.2-3.

Parties that benefit should bear the cost of expansions

The QCA has previously identified that a relevant economic efficiency pricing principle in considering the question of who should pay for use of capacity is cost causative pricing. As the QCA has noted:³³

Allocative efficiency requires prices to reflect marginal costs. If an entity's use of a service causes costs to increase at the margin, then for allocative efficiency to be achieved, the entity needs to face a price that reflects the marginal contribution of its use to costs. This principle is sometimes referred to as the 'user pays' or 'impactor pays' principle. The costs that are caused should include the cost of imposing any adverse externalities or reduced to reflect the value of positive externalities.

In considering DBCT Management's Differential Pricing DAU in 2015, the QCA stated that it considered that application of the legislative criteria indicating that it must consider whether the proposed arrangements would provide cost-reflective price signals to access seekers and holders which promote economically efficient investment in and use of the terminal.³⁴

QCA has consistently considered that the objects of Part 5 would be promoted where:³⁵

- existing users are not exposed to a material increase in tariffs due to an expansion triggered by access seekers; and
- expanding users should bear the cost of the expansion, except where there are *clear benefits* to existing users.

Reflecting this view, in considering tariffs to apply for expansions of Aurizon Network's rail network, the QCA has effectively required that existing users not bear any pricing increase from an expansion except, and to the extent that, they receive clear benefits from the expenditure.^{36 37}

Having regard to the objects of the QCA Act, and consistent with the QCA's previous findings on this issue, Submitting Users consider that promoting economically efficient

³³ QCA (2013), Discussion Paper - Capacity Expansion and Access Pricing for Rail and Ports, April 2013, pp.2-3.

³⁴ QCA (2015), Draft Decision - DBCT Management Differential Pricing Draft Amending Access Undertaking, May 2015, pp.iv

³⁵ See for example the QCA's discussion paper on Capacity Expansion and Access Pricing for Rail and Ports (April 2013) at https://www.qca.org.au/wp-content/uploads/2019/05/1920_CI-CapExpAccPRP-QCA-PricePaper-0413-1.pdf

³⁶ See for example QCA (2016), Final decision - Aurizon Network 2014 draft access undertaking Volume III - Pricing and tariffs, April 2016, p.38.

³⁷ QCA (2013), Draft Decision, Goonyella to Abbot Point Expansion Reference Tariff - Draft Amending Access Undertaking, July 2013, p.20.

investment in the 8X project requires that the parties that benefit from the expenditure bear the cost; if expanding users do not place sufficient value on the benefit to support the incremental expansion expenditure, then the investment cannot be considered allocatively efficient.

In the event that 8X were to proceed on the basis that it was to be subsidised by existing terminal users, particularly given the exposure to cross default risk and market volatility, this may in turn introduce distortions in other, related markets, including promoting inefficient investment in new coal developments.

Partial price differentiation

DBIM [¶168] has claimed that partial differentiation would be inefficient because all users benefit from the claimed increase in System Capacity which applies to the entire terminal and cannot be separated.

This position is misleading. As discussed in section 3.2.3, while it is accepted that all users will utilise the terminal in common, any increases in System Capacity will be required to be contracted to the expanding users. Where existing users do not require an increase in System Capacity (as they have sufficient contracted capacity entitlements throughout the system to meet their demand) they should not be required to bear an increased cost in order to expand System Capacity from which they do not derive any benefit. Any increase in inloading/outloading capacity at the terminal does not necessarily mean there will be a corresponding increase in utilisation or throughput. It should be noted that Aurizon Network is yet to assess and determine whether and when an increase in system capacity requires any capital expansion and related pricing based on the volumes and locations of the loadpoints within the network for the relevant expanding users.

Further to this, the QCA's 2013 Discussion Paper on capacity expansion pricing noted that:³⁸

Note that even if established and new capacity is inseparable in use, i.e. it is not practical to physically allocate all new capacity to new users for their exclusive use, and established capacity to established users for their exclusive use; the new capacity costs can still be identified and charged to the new users.

Importantly, this view remains consistent with the QCA's philosophy that an allocation of expansion costs to existing users may be appropriate where an expansion has clear benefits to those users.

³⁸ QCA (2013), Discussion Paper – Capacity Expansion and Access Pricing for Rail and Ports, April 2013, p.v.

For these reasons, the Submitting Users consider efficiency is best promoted by a pricing method that requires expansion costs to be met by expanding users, except that expansion costs may be allocated to existing users where (and to the extent that) there are clear benefits to those users, as set out under the assessment criteria.

4.1.2 Promoting effective competition in dependent markets

In providing guidance as to the application of the object of Part 5 in respect of expansion pricing, the QCA has previously noted:³⁹

To ensure that effective competition is promoted in both upstream and downstream markets, we consider that ... the expansion pricing arrangements for DBCT should:

- enable users to confidently commit to long-term investments
- be underpinned by clear and transparent legal and regulatory frameworks, which all stakeholders can understand
- provide users with reasonable certainty about the level of infrastructure they will be expected to fund.

DBIM [¶166] contends that all users expect the 8X expansion to be socialised and that no users have objected to this expected outcome. In its view, DBIM concludes that this expectation, in turn, means that socialisation will promote regulatory certainty and predictability with respect to the level of infrastructure they all need to fund, and that the access undertaking is working as intended by allowing a cost sensitive expansion to be socialised where this is justified in the circumstances.

Submitting Users acknowledge that, following preliminary consideration of the 8X project, the DBCT User Group considered that requirements for socialisation may have been met, based principally on the limited information provided in DBIM's Master Plan. This did not imply any form of support or agreement. Importantly these statements were made when Submitting Users did not have access to full details of the 8X project benefits, costs and risks, and where it was anticipated that DBIM would ultimately be able to substantiate the benefits to existing users, particularly in relation to the anticipated impacts on the NECAP program, in a way that has not been achieved in its application. Further, these statements were made in an environment where Submitting Users anticipated that reference tariffs would continue to be a feature of DBIM's access undertakings. Submitting Users see a benefit in a transparent price applying to all users

³⁹ QCA (2015), Final Decision – DBCT Management Differential Pricing Draft Amending Access Undertaking, August 2015, pp.10-11.

of the terminal – a benefit that was provided through the reference tariff model. However, in an environment without reference tariffs, there will be no transparency of pricing for all users, and it is likely that the negotiated access agreements will result in different arrangements applying for different users. Therefore, socialisation will no longer provide a benefit to users of a single price transparently applied to all users. The implications of the removal of reference tariffs on previously accepted socialisation frameworks has been acknowledged by the QCA in its final decision on the 2019DAU which stated:⁴⁰

We consider that it is not appropriate for socialisation terms to be specified in an undertaking that does not contain a reference tariff.

In this context, following DBIM's price ruling application, Submitting Users have undertaken further assessment of the nature and extent of benefits to existing users in an environment where reference tariffs will not be applied in future access undertakings, and on this basis do not consider that socialisation is justified having regard to the criteria established in s.11.13 of the 2017AU. This ability to develop and refine positions as further information becomes available is a key benefit of the QCA's assessment process for a price ruling application.

In these circumstances, Submitting Users disagree that regulatory certainty and predictability is promoted by socialisation of the 8X project. Differential pricing has been known to be the QCA's recommended approach to cost sensitive expansions since the release of its 2013 discussion paper on pricing for rail and port expansions.⁴¹ Not only does the 2017AU provide for differential pricing as the default pricing method for a cost sensitive expansion, but all major expansions on the adjoining Aurizon Network railway (where a similar average down/incremental up pricing philosophy is applied) have proceeded using a differentiated pricing approach, albeit with some expansion costs allocated to existing users. For each of the Aurizon Network expansions, the QCA has taken a rigorous approach to assessing whether the circumstances apply (as per Aurizon Network's access undertaking) to support socialisation.

Against this background, regulatory certainty and predictability would point to the QCA undertaking a robust assessment of an application for socialised pricing for a cost sensitive expansion at DBCT, with a likely outcome being a differentiated pricing method. Preliminary expressions of support for socialised pricing are not sufficient to mount a case that regulatory certainty in this instance supports a socialised approach.

⁴⁰ QCA (2021), Final Decision – DBCT 2019 draft access undertaking; March 2021; p.55

⁴¹ QCA (2013), Discussion Paper – Capacity Expansion and Access Pricing for Rail and Ports, April 2013

4.2 The interests of the access provider

Section 138(2)(b) requires the QCA to have regard to the legitimate business interests of the DBIM. “Legitimate business interests” is not defined in the QCA Act, but the QCA has provided guidance for it to mean:

- the commercial interests in recovering revenue for the service that is least enough to meet the efficient costs in providing the relevant service in earning a return on investment commensurate with the regulatory and commercial risks involved in supplying the declared service;
- a balanced risk position in the allocation of contractual risks and liabilities between owner/operator of the service and access holders;
- appropriate incentives to maintain, improve and invest in the efficient provision of the facility to provide the declared service;
- incentives to improve commercial returns, where these returns are generated from, for example, innovative investments or cost-efficiency measures.⁴²

DBIM [¶175-176] has claimed its legitimate business interests are better served if 8X is socialised, as it will allow it to better manage and maintain a ‘tolerable’ risk profile, and in the absence of socialisation, the expansion is likely to be unreasonable and uneconomic and not proceed.

The Submitting Users disagree that DBIM’s *legitimate* business interests are better served by transferring the 8X project risk to existing users. An efficient risk allocation framework is one where risks are allocated to the party that is best able to manage it. In this case, the risks associated with the 8X project would seemingly most effectively be managed by either the expanding users or DBIM. DBIM’s attempt to manage 8X project risk by seeking full socialisation and thereby transferring risk to users of the existing terminal is not consistent with the Part 5 object of achieving economic efficiency.

Significantly, one of the key reasons that the QCA did not support a pure socialised pricing approach in relation to the WIRP project was that it could have the effect of shifting risk to existing users. For that reason, the QCA stated its preference for a system premium approach.⁴³ The QCA further stated:⁴⁴

⁴² QCA (2016), Final decision – Aurizon Network 2014 draft access undertaking Volume I – Governance & access, April 2016, p.9.

⁴³ QCA (2015), Supplementary Draft Decision – Aurizon Network 2014 DAU: Reference Tariffs for Wiggins Island Rail Project Train Services, July 2015, p.vi.

⁴⁴ QCA (2015), Supplementary Draft Decision – Aurizon Network 2014 DAU: Reference Tariffs for Wiggins Island Rail Project Train Services, July 2015 p.44.

For example, if WIRP customer volumes are lower than expected, and port take-or-pay provisions lead to the prioritisation of WICET over other destinations, take-or-pay obligations for non-WIRP customers may increase. This is not an appropriate allocation of risk and is counter to the pricing principles, the interests of access holders and the public interest.

DBIM's legitimate business interest is to recover at least the efficient cost of providing its services including a commercial return on investment commensurate with regulatory and commercial risks involved. Submitting Users consider that this outcome can effectively be achieved under a differentiated pricing model, similar to that which has been applied for Aurizon Network's major expansions, and therefore that socialisation is not required to meet DBIM's legitimate business interest.

DBIM has highlighted that the QCA has previously accepted that DBIM may also have a range of other legitimate business interests [¶177] including to:⁴⁵

- promote incentives to maintain, improve and invest in the Terminal and the efficient provision of the declared services;
- ...
- seek to attract additional tonnages from new and existing coal producers within the relevant region, and contract for these tonnages;

DBIM argues that, by making investment in the 8X terminal expansion more attractive, socialisation will promote these other legitimate business interests. However, Submitting Users consider that it is not legitimate for DBIM to pursue these other interests by promoting a terminal expansion on the basis that investment risks are inefficiently passed onto existing users of the terminal. As noted above, this was one of the key reasons for why the QCA did not accept a socialised price for the Aurizon Network WIRP project.

For these reasons, the Submitting Users consider that socialisation is not necessary to reflect the legitimate interests of the access provider.

4.3 Interests of users and access holders

Section 138(2)(e) and 120(1)(c) require the QCA to have regard for the interest of persons who may seek access to the service. The QCA also considers the rights of existing access

⁴⁵ QCA (2021), Final decision – DBCT 2019 draft access undertaking, March 2021, p.20.

holders under section 138(2)(h), to the extent that they are not already access seekers under section 138(2)(e).⁴⁶

DBIM [¶188] contend that differentiation will result in expansion users cross-subsidising existing users because the handling charges must effectively be socialised in order that new users also pay for their use of the existing facilities. However, as explained in section 3.1, this allocation of existing terminal costs to new users is not a requirement of the 2017AU or an expectation of Submitting Users.

More broadly, Aurizon Network made a similar claim in relation to pricing for its WIRP project in which it argued that, in the absence of a socialised price, expanding users would effectively be forced to subsidise improvements to existing services if they wish to proceed with an expansion and existing users refuse to state they want the benefit or are willing to pay for it.⁴⁷ The QCA did not accept this argument and refused to accept that the Blackwater duplication costs be shared evenly between WIRP and non-WIRP customers.⁴⁸

DBIM [¶189] also claim that socialisation is required in order to ensure an effective transition from one access undertaking to another, as it will help ensure the expectations of users (including existing user group) are met. Notwithstanding that this overstates the expectations of users (as discussed in section 4.1.1), this claim is inconsistent with the new 'negotiate/arbitrate' pricing regime expected to be incorporated in DBIM's next access undertaking, which creates significant uncertainty including in relation to how socialisation (if accepted by the QCA) would be applied in practice. In any case, any perceived benefits resulting from increased certainty regarding future pricing does not justify promoting a terminal expansion on the basis that investment risks are inefficiently passed onto existing users of the terminal.

For these reasons, the Submitting Users consider DBIM's application is not in the interest of users and access holders.

4.4 The public interest

Section 138(e) and 120(1)(d) requires the QCA to have regard to the public interest when making its ruling. Public interest is not defined in the QCA Act, however by way of

⁴⁶ QCA (2016), Final decision - Aurizon Network 2014 draft access undertaking Volume I - Governance and access, April 2016, p.11.

⁴⁷ Aurizon (2015), Aurizon Network Access Undertaking (2010), Reference Tariffs for Wiggins Island Rail Project Train Services, Response to QCA Draft Decision, September 2015, pp.41-42.

⁴⁸ QCA (2016), Final decision - Aurizon Network 2014 draft access undertaking Volume III - Pricing and tariffs, April 2016, p.34.

guidance, the QCA has previously considered the public interest to relate to matters including:

- competition in markets (whether or not in Australia);
- investment effects, including investment in facilities and markets that depend on access to the DBCT service;
- the incidence of costs, including administrative and compliance costs, and costs associated with having multiple users of the service;
- the sustainable and efficient development of the Queensland coal industry and related industries;
- economic and regional development issues, including employment and investment growth; and
- environmental considerations, including legislation and government policies relating to ecologically sustainable development.⁴⁹

Furthermore, the QCA has previously indicated that the public interest criterion will be served by cost-reflective, stable and transparent pricing arrangements which support the continued efficiency and competitiveness of Queensland's coal industry.⁵⁰

DBIM [¶192] contends that socialisation of the 8X expansion is in the public interest in terms of (1) the benefits associated with the expansion and (2) the benefits associated with the Queensland Government's ownership of DBI. DBIM [¶209] further contend that the public interest benefits are lessened under a differentiated pricing approach, given the lower likelihood that the expansion will proceed.

4.4.1 Public benefits from expansion

DBIM's argument that socialisation is in the public interest is based on socialisation improving the prospects of 8X proceeding [DBIM ¶197], with the expansion creating public benefit. However, in order for the expansion to promote the public interest it must meet the test of economic efficiency. If the beneficiaries of the expansion do not value it sufficiently to bear the cost, then the expansion will not promote the efficient development of the coal industry. In this case, it cannot be deemed that the public interest criterion is satisfied to justify the expansion proceeding.

⁴⁹ QCA (2021), Final decision – DBCT 2019 draft access undertaking, March 2021, p.21.

⁵⁰ QCA (2015), Consolidated draft decision – Aurizon Network 2014 draft access undertaking Volume 1 – Governance and access, December 2015, p.15.

This is consistent with the QCA's decision in relation to WIRP expansion pricing, in which the regulator concluded that⁵¹:

We consider it in the public interest that pricing arrangements are cost-reflective, stable and transparent. If pricing arrangements are unclear, volatile or provide inappropriate signals, investors may be unwilling to invest in the coal mining sector due to uncertainty regarding future cash flows and their ability to generate sufficient return to compensate for the associated greater level of risk.

We consider that the public interest will be served by cost-reflective, stable and transparent pricing arrangements which support the continued efficiency and competitiveness of Queensland's coal industry.

It should also be noted that DBIM assumes that, in the absence of 8X, a large NECAP program (incorporating elements of the 8X program) will continue. As a result, some of the public benefits that DBIM claims are attributable to 8X may be achieved in any case.

4.4.2 Queensland Government ownership stake in DBIM

DBIM has indicated that the public interest is served by 8X in part as a result of it being consistent with the expected commercial benefits that will accrue to the Queensland Government through its ownership stake in DBIM [DBIM ¶197]. However, this represents an improper assessment of the 'public interest' from an economic and public policy perspective.

The matters that the QCA has previously considered in forming a view on the 'public interest' all relate to benefits that accrue to the public at large, and which are unable to be captured by any single stakeholder or group of stakeholders. Notably, even though the QCA has long regulated businesses that are either fully or partially owned by the Queensland Government, it has never treated the ownership benefits earned by the Queensland Government as equity owner of a commercial business as a 'public benefit'. This reflects that the benefits conferred by equity ownership are a private benefit, albeit in this case a private benefit held by the Queensland Government.

The risks and the benefits of an asset, or a business, are fundamentally the same regardless of whether owned by the Government or by private investors, with the commercial rate of return being the amount required to compensate the owner for the level of risk that it bears. The Queensland Government will be seeking a commercial return from DBIM, as will other equity owners. If the Queensland Government were

⁵¹ QCA (2016), Final decision – Aurizon Network 2014 draft access undertaking Volume III – Pricing and tariffs, April 2016, p.2.

not to invest in DBIM, it would presumably seek an alternate investment that would also deliver a commercial return that reflects the risk of the investment. Importantly however, this does not create a public benefit over and above reimbursement for the risk adjusted cost of capital.

This treatment is also consistent with the competitive neutrality principle that underpins Australia's competition policy framework. Competitive neutrality requires that businesses not be given any advantages or disadvantages as a result of their Government ownership status. The attribution of private profits from Government owned businesses as a public benefit would create an uneven playing field in the assessment of public interest, inappropriately preferencing Government owned investment vehicles.⁵²

Submitting Users consider that the interests of Government as an owner, or partial owner, of DBI is not properly considered to form part of the public interest.

4.4.3 Public interest in rigorous assessment process

The need for rigorous assessment in public policy matters is a key feature of Australian regulatory frameworks. The Productivity Commission (PC) has previously identified that effective public policy requires two key 'pillars', which relate to the testing of evidence and a transparent process. For instance, the PC has stated that:⁵³

Effective policy development demands careful analysis of different options, drawing on available evidence...evidence-based analysis and good process matter because getting policy right matters. Public policy measures can have pervasive effects on the wellbeing of the community.

Irrespective of the outcome, such rigorous assessments are a common feature of QCA decisions. The Queensland Government's Guide to Better Regulation further emphasises the role that effective regulatory impact analysis plays in assessing proposals.⁵⁴

DBIM's current application does not provide sufficient evidence to enable a rigorous assessment of whether circumstances exist to justify socialisation of 8X. Making a

⁵² The Hilmer review enunciated a set of principles intended to guide the development of policy to achieve competitive neutrality in relevant industry sectors. These principles were adopted by Australian governments and are still used today. These principles include that government businesses should not enjoy any net competitive advantage by virtue of their ownership when competing with other businesses; and government business should be subject to measures that effectively neutralise any net competitive advantage flowing from their ownership. The Competition Principles Agreement further stated that government business should not enjoy any net competitive advantage simply as a result of their public sector ownership. A copy of the Competition Principles Agreement is available at <https://www.coag.gov.au/about-coag/agreements/competition-principles-agreement>.

⁵³ PC (2010), Annual Report 2009-10, Annual Report Series, October 2010, p.1.

⁵⁴ See Queensland Government (2019), The Queensland Government Guide to Better Regulation, May 2019.

decision to socialise the 8X project in the absence of a rigorous assessment process would be contrary to the public interest.

For these reasons, the Submitting Users consider DBIM's application for a socialised pricing method does not meet the public interest criterion.

4.5 The value of the service

Section 120(1)(e) requires the QCA to have regard for the value of the service for the access seeker, or a class of seekers or users. These parties include users of existing capacity as well as users (i.e. existing and new) of future capacity.

DBIM [¶12.5, 212-13] contend that, if 8X is socialised, the Unit TAC would be lower than the value of the service to expanding parties and therefore will promote the investment. But under differentiation, the Unit TAC may exceed the value of service to expanding parties, making the expansion less likely to occur.

This, again, is the outcome of DBIM's unconventional methodology for costing the Unit TIC and Handling Charge under the differentiated model, where in addition to requiring expanding users to meet the full cost of the expansion, it has required the expansion investment to be depreciated over a very short life, as well as requiring new users to also make a pro-rata contribution to existing terminal costs. These are the key factors contributing to the very high Unit TAC under the differentiated pricing approach. As noted previously in this submission, this is not consistent with an efficient pricing outcome and does not reflect the conventional approach to the average down/incremental up pricing philosophy.

However, socialisation will result in the Unit TIC for expanding users being set at a level below that required to recover the incremental cost of the expansion, with the balance being met by existing users, with the result that, based on current information:

- the price for existing users will increase by more than the additional value that they gain from the expansion; and
- the price for expanding users will be less than the incremental cost of the expansion, with the risk that the expansion may proceed even where the beneficiaries of the expansion do not value it sufficiently to bear the cost.

As a result, Submitting Users consider that a differentiated pricing method (with no allocation of existing terminal costs to expanding users and expansion costs allocated to existing users where they receive a clear benefit) will be more effective than the socialised pricing method in aligning the expansion costs with the value that the existing and expanding users derive from the expansion.

4.6 The direct cost of providing access

Section 120(1)(f) of the QCA Act requires the QCA to have regard to the direct costs to the access provider of providing access to the service, including any costs of extending the facility, but not costs associated with losses arising from increased competition.

DBIM [¶225] claim that the direct cost of providing access under socialisation is lower, as the lower risk profile of the expansion will result in lower financing costs.

The Submitting Users do not accept this claimed benefit. The effect of socialisation is to transfer risk from DBIM and its financiers to existing terminal users, with the resulting reduction in financing costs simply reflecting the value of the increased risk being borne by existing users. This outcome is not consistent with an efficient allocation of risk.

This issue has previously been considered by the QCA in its 2016 decision to refuse to approve Aurizon Network's proposal to apply socialised pricing for the WIRP expansions, on the basis such a pricing approach could cause existing users to bear an inappropriately high level of expansion financial risks.⁵⁵ The QCA proposed amendments to enable a better allocation of risk, among other reasons.

4.7 The pricing principles in section 168A

Pursuant to section 120(1)(l), the QCA must also have regard to the pricing principles listed in section 168A for which the price should:

- generate expected revenue for the service that is at least enough to meet the efficient costs of providing access to the service and include a return on investment commensurate with the regulatory and commercial risks involved;
- allow for multi-part pricing and price discrimination when it aids efficiency;
- 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
- provide incentives to reduce costs or otherwise improve productivity.

DBIM's claims that a socialised price will promote consistency with section 168A largely reflect three points:

⁵⁵ QCA (2016), Final decision – Aurizon Network 2014 draft access undertaking Volume III – Pricing and tariffs, April 2016, p.11.

- the Unit TAC for new users under a differentiated price will be more than three times that of existing users, with very high price for new users creating a risk to revenue [DBIM ¶254] and cause cross subsidisation from new users to existing users [DBIM¶259];
- differentiation will increase risk, potentially leading to unreasonably high financing costs for the expansion [DBIM ¶249-50] and increased default risk [DBIM ¶255]; and
- differentiation will lead to price discrimination which may distort incentives [DBIM ¶264-265].

As previously discussed in section 3.2.1, the first of these issues is largely the result of DBIM's unconventional approach to assessing Unit TIC and Unit TAC under the differentiated model. A more conventional approach would avoid the claimed cross subsidy and significantly reduce the Unit TAC premium applied to new users. Therefore, DBIM's concerns about the differentiated pricing method creating inefficient cross subsidy and creating a risk to DBIM revenue are misplaced.

Also previously discussed (including in section 3.2.4), the second point reflects the transferral of risks associated with the 8X project to existing users under socialisation. However, if the expanding users do not value the service sufficiently to bear the incremental cost and risk of the expansion, the investment would not appear to promote efficiency, a fundamental objective of Part 5. Rather, a differentiated pricing model that more effectively aligns the cost of the expansion to the beneficiaries would more clearly align with the pricing principles, which specifically provides for price differentiation to be applied where it aids efficiency.

Finally, the concerns raised by DBIM in relation to the potential for a differentiated price model to lead to less effective incentives are unclear, particularly as DBIM is about to transition to a new access undertaking where reference tariffs will no longer apply. Where historically Unit TIC has directly translated into a reference tariff, which was applied to all users, there was a clear relationship between average costs (including for example average NECAP costs) and price. However, in future, the Unit TIC may not directly correlate with the price paid by a user, and different prices may be applied to various users. User incentives are therefore likely to be more disparate, depending on the pricing and risk sharing arrangements negotiated. In this environment, it is difficult to draw a direct link between a differentiated pricing method and lower alignment of incentives, as any reduced alignment may well occur regardless of the pricing method adopted.

4.8 Other matters

The Submitting Users consider that DBIM's application does not have sufficient regard to the economic value of the expansion (section 120(1)(g)) and the economically efficient operation of the facility (section 120(1)(j)) for all of the reasons listed above.

Irrespective of who bears the cost of expansion, Submitting Users agree with DBIM that the legislative criteria relating to the quality of the service (section 120(1)(h)) and the safe and reliable operation of the facility (section 120(1)(i)) are not affected by the pricing rule method.

Further, DBIM's application is not a relevant consideration in the context of section 120(1)(k) being the effect of excluding assets for pricing purposes.

4.9 Conclusions on QCA Act criteria

For the reasons discussed in this section, Submitting Users consider that the socialised pricing method for 8X will be less effective in meeting the QCA Act criteria than will the differentiated pricing method. On this basis, the QCA should reject DBIM's application for a socialised pricing method for 8X.

Instead, consideration of the QCA Act criteria supports the adoption of a differentiated pricing method which is aimed at aligning the costs of the expansion with the beneficiaries. This is consistent with the preferred outcome determined having regard to the 2017AU criteria, set out in Section 3.