



16 July 2018

Professor Flavio Menezes
Chair
Queensland Competition Authority

Dear Professor Menezes

DBCT Declaration Review - Response to Initial Submissions

1. Attached for the QCA's consideration is DBCTM's response to initial submissions on the DBCT Declaration Review.

No rationally probative evidence to support declaration

2. Declaration of the DBCT service expires on 8 September 2020.
3. Accordingly, for the DBCT service to be declared after 8 September 2020 the QCA must be affirmatively satisfied that each of the access criteria in section 76(2) of the *Queensland Competition Authority Act 1997* are met.
4. To be affirmatively satisfied that each of the declaration criteria are met, the QCA must have a logical and rational basis for each such determination.
5. The QCA cannot have a logical and rational basis if it cannot be reasonably satisfied of the existence of critical and fundamental facts of a criterion.
6. The QCA cannot be reasonably satisfied of the existence of critical and fundamental facts of each criterion without rationally probative evidence of the existence of such facts.
7. Accordingly, the QCA cannot determine that an access criterion is satisfied based upon mere speculation and conjecture.
8. The User Group has provided no rationally probative evidence to the QCA of the existence of critical and fundamental facts required for the satisfaction of declaration criteria, only unsubstantiated assertions which are no more than speculation and conjecture and must be dismissed.
9. The User Group Submission is no more than unsubstantiated assertions because it does not contain any rationally probative evidence. Furthermore, there are serious questions as to the veracity of material sought to be relied upon by the User Group, to such a degree that it should be given no weight or very little weight by the QCA.
 - (a) Key factual premises relied upon by the User Group have not been provided. For example, the DBCT User Group and PwC do not disclose the production forecast numbers from which their demand forecasts are derived. Therefore, the lack of transparency means that these factual premises cannot be tested and accordingly cannot be given any weight by the QCA.
 - (b) Some key facts sought to be relied upon by the User Group have been manipulated by the User Group. For example, the User Group further manipulate Wood Mackenzie production forecast figures to determine an adjusted forecast of DBCT throughput, without disclosing the precise adjustments made to the Wood Mackenzie data. Therefore, serious questions as to the veracity of such manipulated data are raised and accordingly cannot be given any weight by the QCA.
 - (c) The User Group Submission contains misrepresentations of alleged facts. For example, the User Group and PwC incorrectly label an email from DBCTM showing a snapshot of DBCT's expected contract profile as at 21 February 2018 to be DBCTM's demand forecast.
 - (d) The PwC Report does not disclose the author of the report and accordingly the relevant experience and expertise of the author(s) is unknown. Until the QCA is satisfied that the author has relevant experience and expertise in declaration matters the QCA must treat the report as no more than a submission and not as an expert report. Furthermore, the underlying data relied upon by PwC has not been provided and accordingly the factual basis for the PwC opinions cannot be tested and therefore they cannot be given any weight by the QCA.

- (e) The Castalia Report does not disclose the author of the report and accordingly the relevant experience and expertise of the author(s) is unknown. DBCTM is aware that certain employees of Castalia have been involved in declaration matters and accordingly it is possible that the authors may have relevant experience and expertise sufficient for the QCA to give some weight to the opinions contained in the report. However, until the QCA is satisfied that the author has relevant experience and expertise in declaration matters the QCA must treat the report as no more than a submission and not as an expert report.

User Group's failure to engage

- 10. DBCTM offered on 12 June and 26 June to meet with members of the User Group to explain the operation of the DBCT Access Framework. DBCTM sought to provide the Users with an opportunity to ask questions about the operation of the Access Framework, to ensure that there was no misunderstanding as to how it will apply. Minimising misunderstanding as to the exact operation of the Access Framework should ensure future submissions to the QCA by the User Group are made on a fully informed and factual basis, to the benefit of all stakeholders and the QCA. In addition, DBCTM was seeking to determine if it could address any of the concerns the User Group may have with the proposed Access Framework.
- 11. The User Group (through their representative, Allens) expressly rejected both offers. Accordingly, serious questions are raised about the bona fides of the User Group's willingness to engage in constructive commercial discussions other than through a formal regulatory process relying upon the QCA to make determinations in the User Group's interests. The User Group notes in its submission that it is reliant on the QCA to consider and protect its position in this declaration review. Therefore, the QCA should give no weight to any future submission by the User Group expressly or impliedly that the operation of the Access Framework is uncertain as they have been provided two opportunities before submissions are due on 16 July to actively engage with DBCTM on the operation of the Access Framework.

QCA's failure to engage

- 12. DBCTM on 8 June 2018 offered to explain to the QCA material evidence upon which it relies. The QCA did not respond to this offer. The QCA's lack of engagement raises the possibility that the QCA could overlook or misunderstand the material evidence before it, increasing the risk of error. DBCTM expects that the QCA will in its draft recommendation fully describe the material evidence provided by DBCTM, the weight provided to such material and the reasons for the weighting.
- 13. Furthermore, the QCA on 3 July 2018 stated that it would not take into account the DBCTM submission of 29 June 2018, attaching the completed drafting of the DBCT Access Framework, and that this material could be provided as part of the submissions on the QCA draft recommendation in some 6 months' time. Considering the generous time periods the QCA has granted itself to consider material before it, there appears no rational basis for the QCA's express failure to consider this material until much later in the process. Further, the significant delay in the QCA's consideration of this material increases the risk of delay in the finalisation of the matter as DBCTM must be afforded the opportunity to respond to the QCA's comments and assessment of the material prior to the QCA's final recommendation.

Yours sincerely



Anthony Timbrell
Chief Executive Officer
DBCT Management

Attachment 1: DBCTM response to initial submissions on the DBCT declaration review

DBCT MANAGEMENT



DBCT declaration review

DBCT Management response to initial submissions

16 July 2018

Contents

Contents	2
Figures	3
1 Executive Summary	4
2 Criterion (b)	7
2.1 Summary	7
2.2 Lack of probative evidence	8
2.3 Relevance of previous Tribunal decisions to criterion (b)	9
2.4 Relevant period over which foreseeable demand should be measured	10
2.5 Maximum capacity of facility for the service	12
2.6 Service definition	14
2.7 Market in which the service is provided	15
2.8 Total foreseeable demand in the market	31
2.9 Meeting total foreseeable demand in the market at least cost	45
2.10 Response to QCA Staff questions on criterion (b)	53
2.11 Conclusion on criterion (b)	58
3 Criterion (a)	59
3.1 Summary	59
3.2 Interpretation of criterion (a)	63
3.3 Counterfactual and access without declaration	68
3.4 Pricing	78
3.5 No impact on competition in tenements market	82
3.6 No impact on secondary capacity trading competition	91
3.7 No impact on competition in coal haulage market	93
3.8 No impact on competition in other markets	95
3.9 Conclusion on criterion (a)	97
4 Criterion (d)	98
4.1 Summary	98
4.2 Mischaracterising the process and role of the Declaration Review	98
4.3 Substantive issues with the User Group Submission	100
4.4 Table of DBCTM's responses to the User Group's arguments	106
Appendix 1 HoustonKemp review of issues raised on criterion (a)	112
Appendix 2 HoustonKemp review of issues raised on criterion (b)	113
Appendix 3 Comparison of DBCT Access Framework to DBCT User Group concerns	114
Appendix 4 DBCTM analysis of market demand	122
Appendix 5 Rail capacity analysis	125
Appendix 6 Lake Vermont interactions timeline	127
Appendix 7 Wood Mackenzie letter	128

Figures

Figure 1: Geographic scope of Hay Point catchment Castalia (on left) and HoustonKemp (on right).....	25
Figure 2: Wood Mackenzie February 2018 DBCT throughput forecast.....	36
Figure 3: Wood Mackenzie June 2018 DBCT throughput forecast.....	38
Figure 4: Expected contract profile DBCT - as at July 2018.....	39
Figure 5: Alternative cost pathways for Capcoal mine using charges.....	48
Figure 6: Alternative cost pathways for Capcoal mine using incremental costs.....	49
Figure 7: DBCTM Access Requests.....	50
Figure 8: Comparison of future with and without declaration.....	62
Figure 9: Key steps to assess whether declaration would promote a material increase in competition.....	64
Figure 10: DBCT throughput vs coal prices.....	81
Figure 11: DBCT throughput vs terminal charges.....	81
Figure 12: Factual vs counterfactual - Tenements.....	83
Figure 13: DBCT expected contract profile.....	88
Figure 14: TIC as proportion of coal producer costs.....	91
Figure 15: Factual vs counterfactual - Secondary capacity trading.....	92
Figure 16: Factual vs counterfactual - Coal haulage.....	93
Figure 17: Factual vs counterfactual - Other markets.....	96
Figure 18: DBCT expansion history.....	102
Figure 19: Table of errors and misinterpretations in Section 10 of the User Group Submission.....	107
Figure 20: Total Foreseeable Demand in the 'Hay Point catchment' (Mtpa).....	123
Figure 21: Total Foreseeable Demand in the 'Hay Point catchment' (excluding BMA and BMC mines).....	124

1 Executive Summary

- 1 DBCT Management Pty Limited (**DBCTM**) provides this submission in response to initial submissions on the Queensland Competition Authority's (**QCA's**) review of the declared service at Dalrymple Bay Coal Terminal (**DBCT**) under the *Queensland Competition Authority Act 1997* (**QCA Act**).
- 2 This submission predominantly responds to the submission of the DBCT User Group (**User Group Submission**) and the reports by PricewaterhouseCoopers Consulting (Australia) Pty Ltd (**PwC Report**) and Castalia Strategic Advisors (**Castalia Report**) relied on in that submission .
- 3 As set out in DBCTM's Submission to the QCA dated 30 May 2018 (**DBCTM Submission**), in order to recommend that the DBCT service be declared by the Minister, the QCA must be satisfied about all of the access criteria for the service.¹
- 4 The initial submissions made to the QCA by other parties do not establish that the DBCT service satisfies the access criteria under the QCA Act or affect the conclusions in the DBCTM Submission or expert reports by HoustonKemp Economists. As set out in this submission, the User Group Submission and accompanying reports:
 - 4.1 provide no rationally probative evidence or substantiation to support their assertions regarding the satisfaction of the criteria; and
 - 4.2 contain fundamental legal, economic and factual errors.
- 5 In contrast, DBCTM has clearly established that there is no logical basis on which the QCA could be affirmatively satisfied that any of the access criteria are met.² Accordingly, the QCA must recommend to the Minister that, with effect from the expiry date, the DBCT service not be declared.

Criterion (b)

- 6 There is nothing in the User Group Submission or PwC Report that affects the conclusions in the DBCTM Submission and HoustonKemp Report on (b) that criterion (b) is not satisfied. The User Group Submission and the PwC Report do not constitute probative evidence upon which the QCA can be satisfied of criterion (b). The User Group's submissions are affected by a number of fundamental errors, including:
 - 6.1 The User Group and PwC do not assess the boundaries of the market by reference to a conventional framework. They inappropriately focus on the characteristics of potential suppliers and fail to form a view about the region from which potential customers of coal handling services at Hay Point would be drawn. Whereas, it is logical that all mines in the geographic scope of the market should be included in the demand side of the market in which the DBCT service is offered. As a result of their incorrect focus, the User Group and PwC erroneously exclude relevant customers from the market in which the DBCT service is supplied.
 - 6.2 The User Group and PwC's flawed approach to market definition results in a failure to correctly identify total foreseeable demand in the market in which the DBCT service is supplied (contrary to section 76(2)(b) of the QCA Act). They do not attempt to estimate total foreseeable demand in the *market*, but instead estimate the coal handling volumes that are expected to be served at DBCT. As a result, total foreseeable demand is constrained to be no more than the capacity of DBCT, and demand from mines proximate to DBCT which use other terminals is ignored. Consequently, the User Group and PwC significantly understate total foreseeable demand in the market. Their estimates of foreseeable demand do not represent demand in the market and are not realistic or credible. They cannot be relied on by the QCA.

¹ Section 76(1) and 87C(1) of the QCA Act

² With reference to criteria (a), (b), and (d). DBCTM has not commented on criterion (c)

- 6.3 The User Group and PwC make additional errors in assessing whether it is least cost for DBCT to meet total foreseeable demand in the market alone. Significantly, PwC's analysis of the costs associated with meeting foreseeable demand using existing capacity at DBCT compared with alternative terminals is not based on incremental resource costs to society, with the result that PwC significantly overstates the relative cost of those options.
- 7 These errors have the effect that the entire analysis of User Group and PwC of criterion (b) must be rejected by the QCA. Accordingly, there is no basis for a conclusion that criterion (b) is satisfied.

Criterion (a)

- 8 There is nothing in the User Group Submission (or accompanying Castalia Report) that affects the conclusions in the DBCTM Submission and HoustonKemp Report on (a) that criterion (a) is not satisfied. The issues raised in the User Group Submission are flawed and misplaced because (inter alia):
- 8.1 The User Group adopts an incorrect interpretation of criterion (a) that fails to address the required assessment of whether declaration would *promote a material increase in competition* in a market.
- 8.2 Critically, the User Group does not make any submission (let alone provide any rationally probative evidence) that declaration would promote a material increase in competition in the coal export markets (which are the primary dependent markets and are effectively competitive) or impact throughput at DBCT. Given declaration would not promote a material increase in competition in the coal export markets, there is unambiguous and relevant Australian Competition Tribunal (**Tribunal**) authority that there cannot be any flow-on effects in any dependent market. Accordingly, on this basis alone, the QCA must conclude that criterion (a) is not satisfied.
- 8.3 Contrary to the Tribunal authority, the User Group asserts that declaration would promote a material increase in competition in three dependent markets. In respect of those markets:
- 8.3.1 *Tenements*: The User Group's contentions regarding the tenements market are based on an overly narrow geographic market definition, are not supported by fact and are based on an incomplete and inaccurate view of the future without declaration (including the implications of the terminal being almost fully contracted under existing user agreements).
- 8.3.2 *Secondary capacity trading*: The User Group's contentions regarding the secondary capacity trading market are based on incorrect assumptions, including that DBCTM will continue to operate a secondary trading business and that DBCTM will not be constrained in the future without declaration in its operation of such a business.
- 8.3.3 *Coal haulage*: The User Group's contentions regarding the coal haulage market are similarly based on incorrect assumptions and are not supported by any evidence or probative material (including even the Castalia Report).
- 8.4 The submission is based on an incorrect assumption that there will be no framework in place to provide certainty of access and efficient pricing. However, as set out in the DBCTM Submission, in the future without declaration, DBCTM will continue to provide open access to terminal services on substantively the same terms as it does under the current access undertaking approved by the QCA. Access in the future without declaration will be available through:
- 8.4.1 existing evergreen user agreements, which will continue to apply and under which contracted tonnage makes up almost all of the current capacity of DBCTM (and will continue to do so without declaration); and

8.4.2 the binding and enforceable access framework (**Access Framework**) submitted by DBCTM,³ which addresses all concerns raised by the User Group regarding protections that it asserts would be 'lost' if the DBCT service is not declared.

9 For these reasons there is no rational basis on which the QCA could be satisfied that criterion (a) is met.

Criterion (d)

10 There is nothing in the User Group Submission that affects the conclusion in the DBCTM Submission that criterion (d) is not satisfied. The User Group Submission fails to put before the QCA any probative evidence sufficient to enable the QCA to be affirmatively satisfied that criterion (d) is met. The flaws in the User Group Submission include that the User Group:

10.1 Fails to substantiate any of its claims about declaration generating significant public benefits. In many cases, it makes the error of assuming that because an event occurred during the period of declaration, the event was caused by declaration.

10.2 Fails to acknowledge the main detriments resulting from declaration (including unnecessary regulatory burden and compliance costs, adverse impacts on incentives to invest in DBCT, and the distortion in inter-terminal patterns of investment created by regulating access to just one of the five terminals accessible to the Central Queensland Coal Network (**CQCN**).

10.3 Fails to meaningfully consider the counterfactual (including constraints on DBCTM and protections to Users that would apply without declaration) or to recognise that any change in pricing without declaration will not be detrimental in social welfare terms.

11 Accordingly, there is no basis for a conclusion that criterion (d) is satisfied.

³ DBCTM submitted the Access Framework and Standard Access Agreement under the Framework to the QCA with the DBCTM Submission on 30 May 2018, and (as foreshadowed in that Submission) the revised version of the Access Framework and Standard Access Agreement, containing the drafting to give effect to the pricing framework, in the DBCTM Submission on 29 June 2018. The material submitted by DBCTM on 29 June 2018 forms part of this submission as set out in this submission in the section on criterion (a).

2 Criterion (b)

2.1 Summary

- 13 DBCTM makes the following submission in response to the submissions received on the application of criterion (b) to the DBCT service.
- 14 In particular, DBCTM responds to the User Group Submission, which relies on a report from PricewaterhouseCoopers Consulting (Australia) Pty Ltd (**PwC Report**). The User Group Submission and PwC Report is also referred to by Peabody and Pacific National in support of their submissions.
- 15 The User Group Submission and PwC Report do not affect the conclusions in the DBCTM Submission and HoustonKemp Report that criterion (b) is not satisfied.⁴
- 16 The User Group Submission and the PwC Report do not constitute probative evidence upon which the QCA can be satisfied that the DBCT service satisfies criterion (b). The User Group Submission and the PwC Report are affected by a number of fundamental errors with the result that they fail to demonstrate that criterion (b) is satisfied in the case of the DBCT service. Accordingly, there is no basis for a conclusion that criterion (b) is satisfied.

Key errors

- 17 In summary, the key errors in the User Group Submission and PwC Report are:
- 17.1 The User Group and PwC do not assess the boundaries of the market by reference to a conventional framework. As a result they fail to form a view about the region from which potential customers of DBCT would be drawn.
- 17.2 The User Group and PwC incorrectly focus on the supply side of the market and whether other terminals are options for all mines within the Hay Point catchment. They fail to have due regard to the demand side of the market, in particular to the question of whether DBCT is an alternative for mines that predominantly use other coal terminals. Of particular interest are the BMA and BMC mines that have access to HPCT. DBCTM submits that all mines in the geographic scope of the market should be included in the demand side of the market in which the DBCT service is offered. As a result of their incorrect focus, the DBCT User Group and PwC erroneously exclude from the market Hay Point catchment users of port handling services at other terminals (including HPCT, AAPT and RGTCT).
- 17.3 The User Group and PwC's flawed approach to market definition results in a failure to correctly identify total foreseeable demand in the market in which the DBCT service is supplied (contrary to section 76(2)(b) of the QCA Act). They do not attempt to estimate total foreseeable demand in the market, but instead estimate the coal handling volumes that are expected to be served at DBCT. As a result, total foreseeable demand is constrained to be no more than the capacity of DBCT and demand from mines proximate to DBCT which use other terminals is ignored.
- 17.4 Consequently, the User Group and PwC significantly understate total foreseeable market demand. In addition, the User Group's estimates of foreseeable demand are not realistic when compared to public statements from members of the User Group, and should not be relied on by the QCA. DBCTM demonstrates that the User Group has manipulated Wood Mackenzie data, misused a chart provided by DBCTM showing a snapshot of the profile of DBCT's contracts at a

⁴ HoustonKemp has confirmed that PwC's Report provides no information that would cause it to revise its earlier assessment that the DBCT service does not satisfy criterion (b): See Appendix 2: HoustonKemp, *A review of the economic issues raised in relation to criterion (b)* (**HoustonKemp Review on (b)**).

particular date, and has not calculated foreseeable demand consistent with the geographic scope of the market determined by their advisor Castalia.

- 17.5 The User Group and PwC's flawed approach to market definition and estimating total foreseeable market demand in turn affects their least cost assessment:
- 17.5.1 they fail to recognise that there are already a number of terminals in addition to DBCT serving demand in the market in which DBCT operates; and
 - 17.5.2 their understatement of total foreseeable demand in the market has the result that the User Group's least cost assessment is undertaken on the incorrect premise that DBCT can meet foreseeable demand over the declaration period without expansion. Consistent with this error, PwC's analysis is undertaken on the basis of a low 'notional' demand estimate of 95Mtpa, which understates total foreseeable demand in the market.
- 17.6 The User Group and PwC make additional errors in assessing whether it is least cost for DBCT to meet total foreseeable demand in the market alone. In particular, in estimating costs associated with meeting foreseeable demand using existing capacity at DBCT or at alternative coal terminals, PwC's estimates:
- 17.6.1 are based on charges, which reflect average costs rather than incremental costs and therefore represent an incorrect basis for assessing the cost of meeting total foreseeable demand in the market; and
 - 17.6.2 appear to fail to account for rail charges to DBCT on a like-for-like basis.
- 18 These errors have the effect that their entire analysis of criterion (b) must be rejected by the QCA.

Essential factual determinations

- 19 The correct legal application of criterion (b) requires the QCA to make the following essential factual determinations:
- 19.1 total foreseeable demand in the market in which the DBCT service is supplied over the declaration period;
 - 19.2 the capacity of DBCT over the declaration period, including its maximum expanded capacity;
 - 19.3 whether DBCT can meet the total foreseeable demand in the market over the declaration period; and
 - 19.4 whether DBCT can meet the total foreseeable demand in the market at the least cost, requiring a determination of the cost of DBCT meeting the relevant demand alone over the declaration period and the cost of other options for meeting the relevant demand over the declaration period.
- 20 Each of these essential factual determinations must be based upon evidence or probative material such that the QCA can be satisfied of each particular matter as required by criterion (b). Further, making a decision that criterion (b) is satisfied in the absence of evidence or facts critical to any such determination would constitute an error by the QCA. DBCTM expects that the QCA will in its draft and final recommendations clearly set out its determinations of essential facts and the evidentiary basis for all such determinations.

2.2 Lack of probative evidence

- 21 The User Group Submission and the PwC Report do not constitute probative evidence upon which the QCA can be satisfied that the DBCT service satisfies criterion (b). The User Group Submission contains a large number of assertions and unsubstantiated comments. Further, the User Group and PwC rely on confidential, undisclosed material which cannot be tested, and are not transparent in their assessment of criterion (b).

- 22 In contrast, the DBCTM Submission and HoustonKemp Report and the reference material relied on are all transparent so that the material can be tested and assessed. As such, the QCA must give the material referred to in the DBCTM Submission and the expert opinion in the HoustonKemp Report greater weight than the unsubstantiated assertions and material in the User Group Submission and PwC Report.
- 23 The User Group and PwC are not transparent in their discussion or derivation of demand forecasts. Further, the demand forecast discussion in the User Group Submission and PwC Report is misleading. As explained in the discussion of foreseeable demand below:
- 23.1 the User Group and PwC do not disclose the production forecast numbers from which their demand forecasts are derived;
- 23.2 the User Group manipulate Wood Mackenzie production forecast figures to derive a forecast of DBCT throughput that is different to Wood Mackenzie's base forecast and seek to pass that off as a Wood Mackenzie forecast of DBCT throughput;⁵
- 23.3 the User Group further manipulate Wood Mackenzie production forecast figures to determine an adjusted forecast of DBCT throughput which they term an 'upper bound estimate', without disclosing the precise adjustments made to the Wood Mackenzie data;
- 23.4 the User Group and PwC incorrectly label an email from DBCTM showing a snapshot of the profile of DBCT's contracts as at 21 February 2018 to be DBCTM's demand forecast.
- 24 In contrast, HoustonKemp's explanation of how it determines foreseeable demand is comprehensive and HoustonKemp discloses the inputs to its derivation of demand, including production forecast numbers, so they can be properly assessed.⁶ Similarly, AME's forecast of DBCT throughput is specified on a mine by mine forecast production basis and disclosed.⁷
- 25 The PwC Report is by an undisclosed author of undisclosed expertise and, as explained below, contains many fundamental errors rendering it of no probative value.
- 26 In addition, PwC's assessment of the costs of meeting foreseeable demand using available capacity at existing terminals is based on data sourced from users rather than an independent body. The rail and port charge information provided by individual users of the User Group relied on by PwC⁸ has not been made available to the QCA or DBCTM in order for the veracity of that information to be tested. DBCTM notes the User Group members should not be considered independent of the declaration review process, and disputes the dubious claim made by the User Group that its users are "the best placed stakeholder" to provide certain information.⁹ Accordingly, the QCA should give that information no weight and instead accept the rail and port charge data used by DBCTM and HoustonKemp, which has been sourced from independent industry analysts Wood Mackenzie (rail charges) and AME (terminal charges).

2.3 Relevance of previous Tribunal decisions to criterion (b)

- 27 In respect of the relevance of previous Australian Competition Tribunal (**Tribunal**) decisions and NCC recommendations to the assessment of whether the DBCT service satisfies criterion (b),¹⁰ DBCTM observes that while aspects of previous Tribunal decisions may be of assistance, the QCA should generally exercise

⁵ Refer Appendix 7 – letter from Wood Mackenzie confirming that the User Group has changed its forecast of throughput at DBCT by moving throughput from DBCT to HPCT

⁶ HoustonKemp Report on (b), page 19, sections 4 and 5 and Appendices A1 and A3.

⁷ AME Coal Report, 21 May 2018, pages 18 to 20

⁸ PwC Report, pages 28 and 33, User Group Submission, page 23

⁹ User Group Submission, page 43

¹⁰ User Group Submission, pages 54 to 55

caution in having regard to previous Tribunal decisions and NCC recommendations in evaluating whether section 76(2)(b) of the QCA Act is satisfied.

- 28 As the Staff Issues Paper recognises, the text of section 76(2)(b) of the QCA Act is paramount.¹¹ That text requires the QCA to be satisfied that the facility for the service could meet the total foreseeable demand in the market over the period for which the service would be declared and at the least cost compared to any two or more facilities (which could include the facility for the service).
- 29 The approach to criterion (b) taken in previous NCC recommendations and Tribunal decisions has varied. The Tribunal has variously taken a natural monopoly approach,¹² net social benefit approach¹³ or private profitability approach.¹⁴ The NCC has taken a natural monopoly, net social benefit or private profitability approach depending on the applicable approach at the time.
- 30 DBCTM explains in the DBCTM Submission that prior to the recent changes to criterion (b), defining the market has not been a formal step in assessing criterion (b) - instead, the focus had been on considering demand for the facility's service, rather than demand in the market in which the service is supplied.¹⁵
- 31 As explained in the DBCT Submission, section 76(2)(b) of the QCA Act involves a natural monopoly approach and specifically requires a consideration of total foreseeable demand in the market in which the service is supplied.¹⁶ This is different to how the Tribunal and the NCC have approached criterion (b) in the past. The Productivity Commission made this clear in its 2013 report on its inquiry into the National Access Regime.¹⁷ Accordingly, in considering previous NCC recommendations and Tribunal decisions on criterion (b), the QCA must apply the market demand approach now enshrined in section 76(2)(b) of the QCA Act.
- 32 Nonetheless, some aspects of those decisions still provide guidance to the QCA. For example, DBCTM agrees that, as the extract from the Tribunal's decision in *Duke Eastern Gas Pipeline Pty Ltd* [2001] ACompT 2 at [137] in the User Group Submission reveals,¹⁸ the relevant costs for the least cost analysis are the incremental costs to society (or resource costs) that may be incurred in meeting foreseeable demand and not the private costs to miners of accessing different coal handling services. DBCTM observes that this is not the approach taken by PwC to the least cost analysis, which is based on charges that reflect average private costs, rather than incremental social costs. This is a material and fundamental flaw in the PwC analysis which renders it of no assistance to the QCA in assessing whether the DBCT service satisfies criterion (b).

2.4 Relevant period over which foreseeable demand should be measured

- 33 The User Group is incorrect in its assertion that 'criterion (b) will be satisfied if there is any period for which the test of foreseeable demand at least cost will be met'.¹⁹ The User Group makes this assertion by

¹¹ QCA, Staff Issues Paper, Declaration reviews: applying the access criteria, April 2018, page 10

¹² For example: *In the matter of Fortescue Metals Group Limited* [2010] ACompT 2 and *Duke Eastern Gas Pipeline Pty Ltd* [2001] ACompT 2 (in the context of the national gas access regime).

¹³ For example: *Sydney International Airport* [2000] ACompT 1; *Application by Services Sydney Pty Ltd* [2005] ACompT 7

¹⁴ *Applications by Robe River Mining Co Pty Ltd and Hamersley Iron Pty Ltd* [2013] ACompT 2

¹⁵ DBCTM Submission at [95]

¹⁶ DBCTM Submission at [51] to [52]

¹⁷ *Productivity Commission Inquiry Report, National Access Regime, No. 66, 25 October 2013*, pages 155 and 160. See also Explanatory Memorandum, Competition and Consumer Amendment (Competition Policy Review) Bill 2017 at [12.23] which states 'The approach under the new paragraph is market-based, requiring the market in which the infrastructure service under application is supplied to be defined. This includes any substitute services that serve or will serve the market'.

¹⁸ User Group Submission, page 55

¹⁹ User Group Submission, page 57. Pacific National's submission in response to the staff issues paper of 30 May 2018 makes a similar point at page 10

reference to the following statement in the Explanatory Memorandum, Competition and Consumer Amendment (Competition Policy Review) Bill 2017:²⁰

The Council and the Minister may need to consider multiple potential declaration periods in determining whether there is an appropriate declaration period over which criterion (b) would be met.

- 34 The User Group suggests that this means that if the QCA finds there is a period for which the QCA is not satisfied that DBCT can meet foreseeable market demand at least cost, then it is required to consider whether there are any other periods for which it would be so satisfied, and if the QCA finds such a period then criterion (b) is satisfied.²¹
- 35 DBCTM observes that the User Group's interpretation of the extract from the Explanatory Memorandum is contrived. The Explanatory Memorandum is simply noting that the declaration period is not set, but alternatives may be considered. The Explanatory Memorandum refers to an 'appropriate declaration period' – this cannot be 'any' declaration period, but rather it must be appropriate in the context of the declaration assessment. The period of declaration determined by the QCA for the criterion (b) assessment must be appropriate having regard to all of the declaration criteria and factors relevant to its assessment, including the regulatory burdens and costs of declaration, and not just whether criterion (b) might be satisfied over a particular period of time.
- 36 In addition, as set out in the DBCTM Submission, the requirement that the facility meet total foreseeable demand in the market over the period for which the service would be declared means that if the facility cannot meet total foreseeable demand in the market at any stage over the declaration period, then criterion (b) is not satisfied.²² Similarly, if the facility cannot meet total foreseeable demand in the market at the least cost at any stage of the declaration period, then criterion (b) is not satisfied.²³
- 37 The User Group submits that a 15 year declaration period is appropriate for giving regulatory certainty for the purposes of facilitating efficient investment in tenement and rail haulage markets.²⁴ In doing so, the User Group refers to statements made by Brookfield seven years ago in the context of the certification of the DBCT access regime. Certification of the DBCT access regime meant that DBCT would not also potentially be subject to regulation under Part IIIA of the *Competition and Consumer Act 2010 (CCA)*. Brookfield was not submitting that DBCT should be regulated for a longer period of time, but rather it should have certainty as to how and by whom DBCT would be regulated. That is, given DBCT was already being regulated by the QCA under the QCA Act, it should not also be potentially subject to regulation under Part IIIA of the CCA. This is shown in the following paragraph of the submission:²⁵
- Certification of the DBCT Access Regime will provide greater certainty to stakeholders in that regulation will be subject to only one access regime, thereby eliminating the potential uncertainty that different rights and obligations under two access regimes would create.
- 38 The Brookfield submission was made in the knowledge of the processes in Subdivisions 4A and 5 of Division 2 of the QCA Act for the QCA review of the declaration prior to its expiry and for revocation of the declaration.

²⁰ User Group Submission, page 57

²¹ User Group Submission, page 57

²² DBCTM Submission at [80]

²³ DBCTM Submission at [80]

²⁴ User Group Submission, page 58

²⁵ Brookfield Infrastructure Partners L.P., Submission on the Application for Certification of the Dalrymple Bay Coal Terminal Access Regime, 14 February 2011 at [15]

- 39 As noted in the DBCTM Submission, DBCTM will continue to provide access to DBCT on reasonable terms and conditions in the absence of declaration.²⁶ Accordingly, access seekers will have long-term certainty that access on reasonable terms and conditions will be available in the absence of declaration. Contrary to the User Group's submission, reliance on the existence of the revocation provisions is not a sufficient reason to support a 15 year declaration period.²⁷
- 40 In support of a 15 year declaration period, the User Group and PwC Report also refer to declaration periods in selective decisions made under Part IIIA of the CCA. Notably absent from the summary in the PwC Report is the five year declaration period determined by the Tribunal for the declaration of the airside services at Sydney Airport.²⁸
- 41 In considering any declaration period, it must be kept in mind that by the time the DBCT declaration expires on 8 September 2020, the DBCT service will have already been declared for 19 and a half years.²⁹ This can be contrasted with the Port of Newcastle and Goldsworthy railway declarations referred to in the User Group Submission.³⁰ As such, there has already been a significant period of time to facilitate investment.
- 42 In addition, in referring to the 20 year declaration period for the Goldsworthy railway the User Group states that 'the impacts on competition were in similar tenements and rail haulage dependent markets'.³¹ Contrary to the User Group's contention, the Tribunal found that access to the Goldsworthy railway would not promote a material increase in competition in the tenements market³² and the reason the Tribunal found that access to the Goldsworthy railway would promote competition in the rail haulage market was because it would enable firms other than the incumbent to offer a haulage service³³ – this is very different to the argument the User Group seeks to make in respect of the rail haulage market in this matter. Further, in making that submission, the User Group fails to acknowledge that the Tribunal declared the Robe railway for 10 years.³⁴

2.5 Maximum capacity of facility for the service

- 43 In the DBCTM Submission, DBCTM explains that the facility for the service is the DBCT coal handling facility located at the Port of Hay Point.³⁵ That facility is defined in section 250(5) of the QCA Act and is the relevant facility for the purpose of the QCA's declaration review. The current nameplate capacity of DBCT is 85Mtpa and the reasonably possible maximum coal handling capacity of DBCT in the declaration period is no more than 102Mtpa.
- 44 The User Group agrees that the facility for the service is DBCT.³⁶
- 45 In discussing potential expansions to DBCT, the User Group refers to the 2016 Master Plan.³⁷ DBCTM notes that as discussed in the DBCTM Submission and provided at Appendix 19 to that Submission, DBCTM's current Master Plan is its 2018 Master Plan. While the 2018 Master Plan also refers to an expansion pathway to 136Mtpa (the 9X expansion), that Master Plan notes that the likelihood of conditions being

²⁶ DBCTM Submission at [92]

²⁷ User Group Submission, page 58

²⁸ *Virgin Blue Airlines Pty Limited* [2005] ACompT 5 at [617]

²⁹ The DBCT service was first declared by the Queensland Competition Authority Amendment Regulation (No 1) 2001 (Qld) which amended the Queensland Competition Authority Regulation 1997 (Qld). The amendment was notified in the Government Gazette on 23 March 2001.

³⁰ User Group Submission, page 58

³¹ User Group Submission, page 57

³² *In the matter of Fortescue Metals Group Limited* [2010] ACompT 2 at [1130] and [1131]

³³ *In the matter of Fortescue Metals Group Limited* [2010] ACompT 2 at [1146] and [1148]

³⁴ *In the matter of Fortescue Metals Group Limited* [2010] ACompT 2 at [1337]. Note that the declaration of the Robe railway was successfully appealed by Rio Tinto: *Applications by Robe River Mining Co Pty Ltd and Hamersley Iron Pty Ltd* [2013] ACompT 2

³⁵ DBCTM Submission, page 21 and pages 38 to 47

³⁶ User Group Submission, page 55

³⁷ User Group Submission, page 55

favourable to underpin a 9X expansion project in the future has been diminished by numerous factors, including the difficulty of securing permits to complete the dredging required for the berths required for 9X, and also that significant delays are likely to be experienced during the environmental and planning approvals process for 9X.³⁸ As explained in the DBCTM Submission, it is not reasonably possible to expand DBCT's capacity beyond 102Mtpa during the declaration period and there is considerable uncertainty as to whether expanding beyond 102Mtpa will ever be viable.³⁹

- 46 The User Group's attempt to cast doubt on the estimated costs of expanding DBCTM is without any basis and must be rejected.⁴⁰ The User Group's assertion is not supported by any probative evidence. The PwC Report uses expansion cost estimates from DBCTM's submission to the QCA on the DBCT Incremental Expansion Study of 23 May 2017.⁴¹ These costs were estimated by Aurecon Hatch, an engineering and infrastructure advisory company with significant expertise in the area. The User Group has not provided any probative evidence to substantiate its assertion that these costs could be materially higher than efficient costs, nor has the User Group provided any probative evidence as to why DBCTM could possibly have any incentive to over-estimate costs of future expansions in its submission to the QCA or Master Plans which are approved by DBCT Holdings Pty Ltd.
- 47 DBCTM provides a response to the baseless assertions made by the User Group, where it contends that it is highly likely that the cost estimates in the Master Plan are materially higher than efficient costs due to:
- 47.1 The level of contingency being provided for. Contingency is an industry standard allowance for unforeseen costs. It does not form part of the costs of the project unless it is actually spent. DBCT has shown expansion costs at a P90 Contingency level. Irrespective of the contingency level adopted for communicating the estimate, the actual cost will ultimately be the same (as the higher the contingency level, the more likely DBCTM is to underrun the estimate). This is evidenced by the fact that DBCTM adopts a P95 Contingency level for NECAP and normally significantly underspends the estimate.
 - 47.2 The estimates having been made at a time of higher construction and development costs. This assertion is incorrect. The estimates in Master Plan 2016 and Master Plan 2018 were developed late in 2015 which was not a time of high development costs.
 - 47.3 DBCTM having incentives to over-estimate costs for future expansions. There are no incentives for DBCTM to over-estimate future expansion costs. Inflated estimates would make it more difficult for future Access Seekers to commit to an expansion. If anything, DBCTM would be incentivised to minimise the cost of an expansion because the lower the capital cost, the more likely it will meet the criteria for a socialised expansion which, in turn, substantially reduces the commercial risk associated with an expansion.
- 48 Furthermore, DBCTM has a track record of efficient and prudent delivery of expansion projects as evidenced by 100% of all capital expended since DBCT was declared being accepted by the QCA for inclusion in the RAB. DBCTM's approach to project governance is based on industry best practice and has been developed over many years of capital works at the terminal, including when the DBCT service was not declared. DBCTM's project management systems are designed to deliver the lowest whole of life cost. These systems would not change if DBCT was no longer a declared service. If anything, scrutiny of expansion costs is likely to increase as potential Access Seekers request more oversight in the lead up to

³⁸ Appendix 19 to DBCTM Submission 2018 DBCT Master Plan, pages 48 and 76 to 77

³⁹ DBCTM Submission at [191] to [199] and Appendix 18

⁴⁰ User Group Submission, page 56

⁴¹ PwC Report, page 30. DBCTM notes that the costs of 8X in the Incremental Expansion Study submission are \$491m, whereas the costs of 8X in the 2016 Master Plan and 2018 Master Plan are \$700m. This is because in the Incremental Expansion Study, 8X was a single phase of 11Mtpa whereas in the 2016 and 2018 Master Plan it is split into two phases totalling 13Mtpa to provide additional flexibility in responding to user requirements.

signing an agreement that will drive an expansion, especially if that expansion were to be differentially priced.

- 49 By way of example, for the 7X expansion to DBCT completed in 2009 the QCA approved expenditure of \$1,307 million as prudent. This was for an incremental capacity expansion of 25Mtpa, which on a cost per tonne basis is approximately \$52/t. The 11Mtpa expansion at HPCT which was completed in December 2015 cost \$US3 billion, which on a cost per tonne basis is approximately A\$300/t.⁴² WICET cost A\$5 billion for 27Mtpa of capacity, which on a cost per tonne basis is approximately \$185/t.⁴³

2.6 Service definition

- 50 The User Group refer to the relevant service as that defined in section 250(1) of the QCA Act being the 'handling of coal at Dalrymple Bay Coal Terminal by the terminal operator'.⁴⁴ Further, the User Group define the services/product dimension of the market as coal handling services.⁴⁵ However, the User Group define the market in which the service is provided as the 'Hay Point common user coal handling services market'.⁴⁶
- 51 The inclusion by the User Group of the reference to 'common user' in the market definition may have come from the PwC Report. PwC defines the DBCT service by reference to it handling 'common-user coal'.⁴⁷ HoustonKemp observes that PwC does not elaborate on what it means to handle common user coal. However, HoustonKemp takes this to be a reference to the fact that DBCT handles coal sourced from different mines, with each or many of these mines having different ownership interests.⁴⁸ HoustonKemp states:⁴⁹

By adopting this definition, PwC commences its assessment of criterion (b) on a presumption that the coal handling service provided at DBCT may be differentiated from other coal handling services on the basis that it handles 'common-user coal'. In our opinion, this distinction sets PwC's entire, subsequent analysis of criterion (b) down the wrong path.

- 52 HoustonKemp observes that the 'common-user' designation applied by PwC does not appear to change any of the fundamental characteristics of the service, the essence of which involves:⁵⁰
- 52.1 the receipt and unloading of coal transported by rail from various mines;
 - 52.2 stockyard and coal blending facilities, one purpose of which is to manage the receipt and temporary storage of different grades and types of coal, from different mines; and
 - 52.3 wharves, jetties, berths and ship loading systems, for transferring coal onto ships, including both the blending and keeping separate the different grades and types of coal at each stage so that any ship may transport more than one grade and/or type of coal.
- 53 The common-user designation is not a meaningful characteristic of the service provided at DBCT. Rather, it amounts to a description of the range of customers to whom the DBCT service is supplied.⁵¹ In defining the service as it does, PwC improperly extends the ordinary meaning of the term 'service' to incorporate considerations that are not characteristics of the service

⁴² BHP News Release: [New BMA Hay Point Coal Terminal Boosts Queensland's Coal Exports](#), 16-Dec-15 (DBCTM assumes AUD/USD = 1.10)

⁴³ The Australian, [\\$1bn cost blowout for Wiggins coal terminal at Gladstone](#)

⁴⁴ User Group Submission, page 9

⁴⁵ User Group Submission, page 18

⁴⁶ User Group Submission, page 15

⁴⁷ PwC Report, page 8

⁴⁸ DBCTM notes that if this interpretation of the term 'common user' is correct, then the term should be applied to HPCT as well. HPCT handles coal sourced from different mines, many of which have different ownership interests (including BHP, Mitsubishi and Mitsui)).

⁴⁹ HoustonKemp Review on (b), page 3

⁵⁰ HoustonKemp Review on (b), page 3

⁵¹ HoustonKemp Review on (b), page 4

- 54 HoustonKemp observes that this contrived definition of the service has the effect of constraining the subsequent market definition process to the consideration of common user facilities.⁵² As a result, at the outset PwC and the User Group erroneously exclude services provided by HPCT from the definition of the market, the assessment of foreseeable demand in the market, and the assessment of the least cost means of meeting that foreseeable demand.

2.7 Market in which the service is provided

- 55 As noted above, the User Group defines the market in which the DBCT Service is provided as the 'Hay Point common user coal handling services market'. The User Group concludes that DBCT is the only supplier in the market, the current acquirers are the existing users of DBCT and the potential acquirers are future coal producers within the Hay Point catchment.
- 56 The User Group and PwC's discussion of the market in which the DBCT service is provided is fundamentally deficient in the following respects, as they:
- 56.1 rely on market definitions previously adopted by the QCA and ACCC outside of the context of assessing criterion (b). This is discussed under the 'Preliminary' heading below;
 - 56.2 emphasise points of differentiation between coal handling services provided by DBCT and those of other terminals, which they say affect substitutability between those services instead of assessing the boundaries of the relevant market by reference to a conventional framework in which the area of close competition between firms is analysed by reference to the different dimensions of the market. This is discussed below in respect of the approach to market definition, the product dimension of the market, the time dimension of the market and the geographic dimension of the market;
 - 56.3 fail to form a view about the region from which potential customers of the DBCT service would be drawn. This is discussed below in respect of the geographic dimension of the market;
 - 56.4 incorrectly focus on the supply side of the market and whether mines within the Hay Point catchment are able to use other coal terminals, and fail to have due regard to the demand side of the market. They fail to consider whether DBCT is a substitute for mines which use other terminals. As a result, the User Group erroneously exclude from the market existing users (within the Hay Point catchment) of port handling services at other terminals. This is discussed below in respect of the User Group's failure to identify customers in the market;
 - 56.5 erroneously exclude other terminals used by mines in the Hay Point catchment from the market. This is discussed below in respect of the geographic dimension of the market and in the section regarding the User Group's failure to identify customers in the market; and
 - 56.6 erroneously exclude HPCT from the market on the basis that it is 'single user'. In asserting that the coal handling services at HPCT are not in the market for the DBCT service, they focus on whether HPCT is a substitute for non-BHP mines and fail to take into account the fact that DBCT is a substitute for mines that are permitted to use HPCT. This is discussed below in the section concerning HPCT.
- 57 As explained in the section on total foreseeable demand in the market below, the User Group's errors in defining the market have the consequence that the User Group's determination of foreseeable demand is undertaken on a fundamentally flawed basis and must be rejected by the QCA. Significantly, flowing from the User Group and PwC's flawed approach to market definition, they ignore demand from mines proximate to DBCT which use other terminals when determining foreseeable demand. This approach fails to account for total foreseeable demand in the market in which the DBCT service is supplied, contrary to section 76(2)(b) of the QCA Act.

⁵² HoustonKemp Review on (b), page 4

Preliminary

58 DBCTM points out that contrary to the User Group Submission, the words 'are able to be substituted for' in the definition of market in section 71(2) of the QCA Act do not suggest a 'more explicit practical inquiry' than the words 'are substitutable for' in section 4E of the CCA, rather these words have the same meaning.⁵³ Further, the restrictive approach to section 71(2) suggested by the User Group ignores the word 'includes' in section 71(2) of the QCA Act and therefore fails to recognise that the definition does not preclude other means of defining the market than by reference to goods or services and other goods or services that are able to be substituted for, or are otherwise competitive with, those goods or services.⁵⁴

Previous market definitions adopted by QCA and ACCC

59 The User Group seeks to support its proposed definition of the market by reference to the preliminary view on market definition expressed in the ACCC's Statement of Issues of 25 October 2015 on the Brookfield consortium's proposed acquisition of Asciano Limited.⁵⁵ In doing so, the User Group mischaracterises the ACCC's positions and conclusions. DBCTM observes that the view expressed by the ACCC in the Statement of Issues was merely a preliminary view based on the ACCC's initial discussions with coal producers. The reasons as to why other coal terminals were not considered to be close substitutes for DBCT extracted in the User Group Submission⁵⁶ were expressly stated as being provided by coal producers. They were not the ACCC's conclusions. In the Statement of Issues, the ACCC invites comment on the extent to which the supply of coal handling services at Abbot Point and Gladstone are close substitutes for DBCT.⁵⁷ Contrary to the suggestion in the User Group Submission, the ACCC had therefore not made any 'findings' as to market definition in that matter.

60 As discussed in the DBCTM Submission and also the User Group Submission, market definition is purposive.⁵⁸ In the case of criterion (b), market definition is directed to assessing whether DBCT is a natural monopoly. In the case of the ACCC's assessment of the Asciano acquisition, market definition was directed to assessing whether the acquisition would or was likely to substantially lessen competition in a market under section 50 of the CCA. This is a different assessment to that under criterion (b) with the consequence that it would be an error to simply take a definition of a market from a merger assessment matter and deploy it as the market definition in a criterion (b) assessment. As explained below, the question raised by criterion (b) is not whether other terminals will be an effective constraint on DBCT absent regulation of DBCT but rather whether DBCT is a natural monopoly. To apply criterion (b) it is necessary to arrive at an estimate of total foreseeable demand in the market and then determine whether it is least cost for DBCT to service that demand alone. In order to estimate total foreseeable demand in the market, the pertinent question is whether mines that are customers of other terminals (HPCT, AAPT and RGTC) perceive DBCT to be a close substitute (rather than whether mines that use DBCT perceive other terminals to be a substitute for DBCT). As explained below, this is something the User Group Submission and PwC Report fail to address and is a serious flaw in their approach to criterion (b).

61 The User Group also contends that its proposed market definition is supported by the findings of the QCA in the Final Decision in relation to the DBCT 2015 draft access undertaking.⁵⁹ In doing so, the User Group mischaracterises the QCA's decision. DBCTM observes that:

⁵³ User Group Submission, page 13

⁵⁴ See, for example, page 31 of the User Group Submission, which states '.. where section 71(2) of the QCA Act requires that the market must include the Service and other services which are "able to be substituted for, or are otherwise competitive with", the Services..'

⁵⁵ User Group Submission, page 16

⁵⁶ User Group Submission, page 16; ACCC's Statement of Issues on the Brookfield consortium's proposed acquisition of Asciano Limited, 25 October 2015 at [88]

⁵⁷ ACCC's Statement of Issues on the Brookfield consortium's proposed acquisition of Asciano Limited, 25 October 2015, page 14

⁵⁸ DBCTM Submission at [100]; User Group Submission, page 31

⁵⁹ User Group Submission, page 17

- 61.1 the QCA's consideration of competition with other ports in that decision was in a different context to the criterion (b) assessment, being an assessment of the appropriate asset beta for the rate of return and any asset stranding risk in determining depreciation. The QCA was not seeking to estimate foreseeable demand in the market in which the DBCT service was supplied, or determine whether it was least cost for DBCT to service that demand. The QCA expressly stated that it did 'not make any findings as to whether DBCT continues to satisfy the criterion in section 76(2)'.⁶⁰
- 61.2 as evident from the extract from the QCA's decision in the User Group Submission, the QCA expressly confined its discussion of competition with other ports to 'the course of the next regulatory period' – that is, to June 2021;
- 61.3 the QCA accepted that DBCT may compete with other East Coast terminals such as AAPT for a future expansion and there may be circumstances where it is more cost-effective for other terminals to expand before DBCT.⁶¹

Approach to market definition

- 62 HoustonKemp explains that the PwC approach to market definition, which is relied on by the User Group, contains significant shortcomings and is not capable of being used reliably to define the market within which the DBCT service is provided.⁶²
- 63 PwC's approach to market definition does not apply the conventional framework developed for that purpose. The focus of PwC's analysis is limited to the degree of substitutability between DBCT and other coal terminals without first having established the boundaries of the market and identified the terminals that provide services in the market, or customers that comprise the demand side of the market.
- 64 PwC's approach to market definition:⁶³
- 64.1 focuses on supporting its implicit assumption (drawn from its definition of the service) that DBCT is the only terminal that provides services in the relevant market;
- 64.2 is narrowly concerned with the characteristics of potential supplies; and
- 64.3 does not use any framework to identify the customers that are in the relevant market.
- 65 In the criterion (b) assessment a market is defined for the purpose of estimating total foreseeable demand. Without an understanding of the customers that are in the relevant market, PwC's approach to defining the market is not capable of estimating total foreseeable demand in the market.
- 66 In the HoustonKemp Report on (b), HoustonKemp assesses the boundaries of the market by reference to a conventional framework in which the area of close competition between firms is analysed by reference to the different dimensions of the market. This framework facilitates the identification of customers in the market and the estimation of total foreseeable demand in the market.
- 67 HoustonKemp concludes that once properly considered within a conventional, competition economics framework for market definition, there is no aspect of PwC's analysis that causes HoustonKemp to revise its conclusions with respect to the appropriate boundaries of the market.⁶⁴
- 68 In addition, DBCTM observes that the User Group and PwC's approach to market definition seeks to deliberately identify factors that limit the degree of substitutability between DBCT and the other terminals. They do not acknowledge that users value a variety of services from the CQCN terminals. They seek to

⁶⁰ QCA, Final Decision, DBCT Management's 2015 draft access undertaking, November 2016, pages 133 to 134

⁶¹ QCA, Final Decision, DBCT Management's 2015 draft access undertaking, November 2016, page 132

⁶² HoustonKemp Review on (b), page 5

⁶³ HoustonKemp Review on (b), page 5

⁶⁴ HoustonKemp Review on (b), page 5

identify certain aspects of DBCT's operations that demonstrate that the DBCT service is superior to that of other terminals and fail to acknowledge where other terminals could be considered to provide better services than those at DBCT. For example, DBCTM considers the following services at other CQCN terminals are superior to those that DBCT provides:

- 68.1 blending services at HPCT, due to greater stockpile space;
 - 68.2 blending services at RGTCT and WICET because of the dozer reclaim arrangement;
 - 68.3 dedicated stockpiling (rather than cargo assembly) services at HPCT, RGTCT, WICET and AAPT
- 69 In addition, there is superior below-rail operational flexibility in the Newlands/GAPE system (AAPT) relative to the Goonyella system (DBCT and HPCT).
- 70 The User Group and PwC's approach is incompatible with a genuine market definition process and is an inappropriate framework to rely on in determining the boundaries of the market for the criterion (b) analysis.
- 71 The User Group and PwC's incorrect approach to market definition is discussed further in the following sections on the product dimension of the market, time dimension of the market and geographic dimension of the market.

Product dimension of the market

- 72 In the HoustonKemp Report on (b), HoustonKemp assessed the product dimension of the market as the coal handling service. Following its review of the submissions on criterion (b), HoustonKemp has not identified any reason to adopt a narrower approach to this definition of the market.⁶⁵
- 73 HoustonKemp explains that none of the following factors identified by PwC and the User Group provide a sufficient reason to distinguish the coal handling service at one terminal from another to a sufficient extent that they may be supplied in different markets:⁶⁶
- 73.1 HPCT being unavailable for miners other than BMA and BMC, with this arrangement argued by BHP to be efficient;
 - 73.2 physical difficulties with miners using their existing rail spur to send coal to other terminals which may give rise to increased costs;
 - 73.3 co-shipping opportunities offered by DBCT, which other terminals cannot match; and
 - 73.4 stockpile trading offered at DBCT which is not offered at other terminals.

Substitution between DBCT and HPCT

- 74 PwC claims that the coal handling service provided by HPCT is not a close substitute for the DBCT service because of the 'asymmetric' nature of the substitution.⁶⁷ HoustonKemp states that:⁶⁸

The reasoning disclosed above by PwC makes clear that it approaches market definition on the basis that services supplied by HPCT are only in the relevant market if they represent a viable option for 'all' customers in that market. This is not consistent with any generally accepted framework for market definition.

Consistent with our observations at section 3.1, it is entirely possible that there may be a significant number of customers in the relevant market for which the DBCT service is the only viable coal

⁶⁵ HoustonKemp Review on (b), page 7

⁶⁶ HoustonKemp Review on (b), page 7

⁶⁷ PwC Report, page 18

⁶⁸ HoustonKemp Review on (b), pages 8

handling service. However, this observation does not establish that other coal handling services (and mines that use them) should be excluded from the relevant market.

- 75 HoustonKemp observes that the coal handling service supplied by HPCT:⁶⁹
- 75.1 is supplied at the same location as DBCT at the Port of Hay Point – such that that the costs and constraints associated with the transport of coal to these terminals are likely to be identical; and
 - 75.2 is used by BMA and BMC mines to export up to 55Mtpa of coal, using essentially the same service characteristics as those adopted at DBCT.
- 76 HoustonKemp concludes that:⁷⁰
- Put another way, a significant volume of coal is exported through HPCT by miners who could otherwise seek to export through DBCT at similar overall cost. Furthermore, the majority of mines that are presumed to regularly export coal from HPCT have exported substantial volumes of coal through DBCT in the past, are currently exporting through DBCT, and are expected to continue to do so in the future. The substitution possibilities available to these mines represent a substantial proportion of the potential demand for the DBCT service and so cannot be overlooked in considering the boundaries of the product dimension of the market
- 77 DBCTM explains in further detail below why the consideration of whether the DBCT service satisfies criterion (b) must be taken on the basis that total foreseeable demand in the market includes all demand from mines that use the HPCT service, and further HPCT should not be excluded from the market on the basis it is not open access.

Mine site rail infrastructure

- 78 HoustonKemp acknowledges that, for some miners, existing rail infrastructure at a mine site may reduce the substitutability of the DBCT service and other coal handling services.⁷¹ However, such an observation is not determinative for defining the product dimension of the market because:
- 78.1 the extent of this effect for these miners is limited to the costs associated with upgrading the rail infrastructure or the higher transport costs associated with overcoming these issues using rail access and haulage services; and
 - 78.2 even if these costs were very high so that switching terminals is not a viable option for these miners, it does not follow that they are not in the relevant market – rather, the relevant question is the extent of mines that do have a readily available choice of coal terminal.

Co-shipping opportunities and stockpile trading

- 79 PwC refers to co-shipping opportunities and stockpile trading as examples of factors that differentiate the DBCT service and other coal handling services, making them less substitutable.⁷² HoustonKemp explains that the simple existence of higher quality services does not provide a sufficient basis to conclude that there is a materially higher willingness to pay for the DBCT service and so it cannot be substituted for other services.⁷³ HoustonKemp concludes that rather than narrowing market, these opportunities in fact indicate a broader market.

⁶⁹ HoustonKemp Review on (b), page 8

⁷⁰ HoustonKemp Review on (b), page 8

⁷¹ HoustonKemp Review on (b), page 10

⁷² PwC Report, page 17; HoustonKemp Review on (b), page 10

⁷³ HoustonKemp Review on (b), pages 10 to 11

- 80 Co-shipping opportunities (for metallurgical coal in particular) have emerged at DBCT because the initial source of demand for the DBCT service came from the Goonyella metallurgical coal producers. In other words, it is metallurgical coal producers themselves that have promoted the development of co-shipping options at DBCT. The emergence of these services is a function of the initial customer demand that arose at DBCT, and not the other way around.
- 81 In this context, if CQCN metallurgical coal producers had initially preferred to go to AAPT or RGTCT, then more co-shipping arrangements would have emerged at those terminals. Therefore, while CQCN metallurgical coal producers might currently prefer DBCT for the services in question, DBCTM notes that this is only because of the way in which the demand for services at DBCT evolved over time.
- 82 HoustonKemp observes that the availability of co-shipping opportunities is not an intrinsic property of the DBCT service.⁷⁴ Rather, it is an advantage conferred on miners who use DBCT as a result of the mix of miners that use the terminal. It would equally be available at other terminals should those miners use alternative coal handling services.
- 83 Nonetheless, setting aside this observation and accepting co-shipping opportunities and stockpile trading as features of the DBCT service (as opposed to features of DBCT's customer mix), HoustonKemp concludes they can best be described as features that differentiate the quality of the coal handling service at DBCT as being greater than that provided at other terminals. The existence of a higher quality service does not provide a sufficient basis to conclude that there is a materially higher willingness to pay for the DBCT service and so it cannot be substituted with other services.
- 84 HoustonKemp observes that, contrary to narrowing the market, the existence of stockpile trading and co-shipping opportunities at DBCT make the boundaries of the market broader than they would be if those opportunities did not exist. HoustonKemp states:⁷⁵

Since these factors make DBCT preferable to a wider range of mines, their effect will be to expand the area from which its potential customers may be drawn, across all dimensions of the market. Such expansion of the reach of mines for which DBCT is an attractive alternative must draw demand from potential customers away from other terminals that – although in the same market – are said not to offer those services.

- 85 This conclusion underlines the distinction between the process of establishing the boundaries of a market definition and the analysis of substitutability conducted by PwC.⁷⁶ Properly considered, the factors that PwC cites as suggesting a narrower market in fact indicate a broader market.

The time dimension of the market

- 86 The User Group and PwC point to capacity constraints at terminals and on rail systems and take or pay contracts as constraints to substitutability between terminals. This analysis focuses on the constraints to substitutability between terminals over a short term horizon – the period within which mines are bound by existing infrastructure constraints.
- 87 However, capacity constraints at terminals or on rail systems and take or pay contracts are not relevant to the assessment of the market within which the DBCT service is supplied.⁷⁷ HoustonKemp explains that:⁷⁸

The appropriate time dimension of the market is the period over which the market operates – that is, the period over which transactions are normally conducted. A normal transaction for a coal

⁷⁴ HoustonKemp Review on (b), page 11

⁷⁵ HoustonKemp Review on (b), page 11

⁷⁶ HoustonKemp Review on (b), page 11

⁷⁷ In any event, contrary to the User Group's assertions, there is available below rail capacity for a DBCT user in the Goonyella system to switch its throughput to AAPT or RGTCT/WICET. Refer to Appendix 5 - Rail Capacity Analysis

⁷⁸ HoustonKemp, Review on (b), page 15

handling service is a long term contract, and the time dimension of the market should be consistent with this practice.

...

It follows that the effects of long term contracts and capacity constraints on the ability and incentive of mines to switch providers of coal handling services in the short term would not be expected to affect market definition. Rather, the boundaries of the market must be determined over a long timeframe in which new contracts may be entered, potentially underwriting expansions.

- 88 Close competition between suppliers of coal handling services occurs over a time period consistent with these long term contracts – over the long term, in which terminal and rail capacity may change in order to meet demands from customers and users may switch terminals.⁷⁹
- 89 In addition, as noted previously, the purpose of defining the market in the criterion (b) assessment is to determine whether a facility can meet total foreseeable demand in the market at least cost. If the market is defined by reference to contractual arrangements, this would incorrectly constrain the identification of market demand with the likely result that estimated demand is confined to demand served by the facility, contrary to the text of section 76(2)b of the QCA Act, and contrary to the Productivity Commission's recommendation.⁸⁰ HoustonKemp also explains why it is appropriate to estimate the geographic area of the market without regard to contractual constraints in the HoustonKemp Report on (b).⁸¹

Geographic dimension of the market

- 90 A fundamental dimension of a market in Australian competition and regulatory law is the geographic extent of the relevant market. DBCTM and HoustonKemp have applied the orthodox approach to determining this dimension, whereas the User Group and PwC have not sought to address this fundamental dimension. Accordingly, the QCA would be in error if it gave any weight to the submissions of the User Group and observations of PwC on market definition.

User Group and PwC fail to properly identify the geographic dimension of the market

- 91 HoustonKemp explains that the geographic scope of the market is the most consequential dimension of the market definition process for the assessment of criterion (b).⁸² HoustonKemp identifies the boundaries of the geographic dimension of the market by focusing on the region from which potential customers of the DBCT service are (or are likely to be) drawn.⁸³
- 92 HoustonKemp applies this approach:
- 92.1 at the current time, by reference to the current and recent customers of the DBCT service; and
- 92.2 over the period for which the service would be declared, by reference to the customers who would incur the lowest terminal and rail charges to use coal handling services at Hay Point as compared to other available options.⁸⁴
- 93 This is a conventional approach to identifying the geographic scope of the market.⁸⁵ Significantly, this process for identifying the geographic scope of the market is consistent with the geographic scope of the

⁷⁹ This is further discussed in the HoustonKemp Review on (b), pages 14 to 16

⁸⁰ DBCTM Submission at [96] to [97]

⁸¹ HoustonKemp Report on (b), pages 26 to 27

⁸² HoustonKemp Report on (b), page 17

⁸³ HoustonKemp Report on (b), pages 23 to 35

⁸⁴ HoustonKemp Report on (b), page 27; HoustonKemp Review on (b), page 11

⁸⁵ HoustonKemp Report on (b), page 18, pages 23 to 35; HoustonKemp Review on (b), page 11

'Hay Point Catchment' identified by Castalia for the User Group explained further below, in which 'the Port of Hay Point via either DBCT or the Hay Point Loader for BMA mines, is the lowest cost logistics chain'.⁸⁶

- 94 In contrast PwC does not form a view about the region from which potential customers of the DBCT service would be drawn. This is a fundamental error in the PwC approach. Instead, PwC suggests that the opportunities for customers of DBCT to export coal from terminals in other geographic areas are limited because higher charges would be incurred by miners located in the Goonyella system to export coal from terminals in other systems.⁸⁷
- 95 This observation does not, by itself, establish which mines are in or out of the relevant market.⁸⁸ Further, higher charges required to access other terminals are explicitly accounted for in a conventional approach to geographic market definition that examines the location of existing and potential customers, and considers the costs involved in switching between more or less distant suppliers.
- 96 In addition, while PwC's observation appears to be directed at excluding other terminals from the market in which the DBCT service is supplied, it in fact supports the view that there are a number of mines which do not currently use DBCT, but would prefer to use DBCT and can reasonably be said to represent foreseeable demand for the DBCT service.⁸⁹
- 97 The User Group appears to dismiss examples of users switching between terminals on the basis that it is 'marginal switching'.⁹⁰ The Federal Court cases to which the User Group refers in support of this contention are not relevant since they are not concerned with defining the market for the purpose of a criterion (b) analysis, but rather concern assessing whether other products/suppliers will restrain the defendant's power. As discussed below in describing how the User Group's approach fails to properly identify customers in the market, the question raised by criterion (b) is not whether the other coal terminals will provide an effective constraint on DBCT absent regulation of DBCT. Rather, to apply criterion (b) it is necessary to arrive at an estimate of foreseeable demand in the market and then determine whether it is least cost for DBCT to service that demand alone. The cases referred to by the User Group do not assist in defining the geographic scope of the market and identifying customers in that market for the purpose of determining total foreseeable demand.
- 98 The User Group and PwC's approach to market definition suggests that they consider that services provided by other terminals are only in the relevant market if they represent a viable option for all customers in the market. As set out above, HoustonKemp explains that this is not consistent with any generally accepted framework for market definition.⁹¹ The relevant market may include a significant number of customers for which the DBCT service is the only viable coal handling service. However, this does not mean that the other coal handling services (and mines that use them) should be excluded from the relevant market.
- 99 In any event, the material referred to in the User Group Submission is not a case of marginal switching, but rather demonstrates that there a number of mines in the Hay Point catchment which use terminals other than DBCT – namely, HPCT, AAPT and RGTCT.
- 99.1 At least 13Mtpa of coal from Goonyella system mines is contracted for capacity at AAPT.⁹² This is approximately 15% of DBCT's nameplate capacity of 85Mtpa – hardly marginal;⁹³ and

⁸⁶ Castalia, Dalrymple Bay Coal Terminal: Economic Analysis of Declaration Criteria, Report to DBCT Users Group, May 2018 (**Castalia Report**), page 7

⁸⁷ PwC Report, pages 16 to 18; HoustonKemp Review on (b), pages 11 to 13.

⁸⁸ HoustonKemp Review on (b), pages 12

⁸⁹ HoustonKemp Review on (b), pages 12 to 14

⁹⁰ User Group Submission, page 21

⁹¹ HoustonKemp Review on (b), page 8

⁹² DBCTM Submission at [132]

⁹³ DBCTM Submission at [132]

- 99.2 While DBCTM does not have coal tonnage figures for Goonyella system mines contracting at the Port of Gladstone's coal terminals, the information it does have shows they are not marginal amounts. The DBCTM Submission refers to examples of Jellinbah's Lake Vermont mine (LVM), Glencore's Oaky Creek mine, Anglo American's German Creek mine, some BMA mines and the now-shut Gregory and Norwich Park mines exporting coal through RGTCT.⁹⁴ The articles and news alerts referenced in the DBCTM Submission reveal that Jellinbah's Lake Vermont mine has an agreement for 4Mtpa at RGTCT⁹⁵ and Anglo American has an agreement with Pacific National to send throughput of 10.9Mtpa from its German Creek mine to either Dalrymple Bay or Gladstone.⁹⁶
- 100 The DBCTM Submission and HoustonKemp Report on (b) show that the suppliers of coal handling services in the market currently include (and during the declaration period will continue to include) HPCT, AAPT and RGTCT before any SSNIP is applied.⁹⁷
- 101 In considering market definition, the User Group also seeks to dismiss Kestrel's use of DBCT.⁹⁸ DBCTM observes that Rio Tinto has publicly referred to Kestrel mine's use of terminals other than those at the Port of Gladstone. In a submission to the ACCC on applications for authorisations of collective bargaining arrangements in respect of below rail infrastructure operated by QR Network, Rio Tinto has stated:⁹⁹

Kestrel Mine is located 40 km north east of Emerald and supplies up to 4.2 mtpa of coking and thermal coal for export. The Kestrel Mine extracts coal from the Bowen Basin which is then transported to the Port of Gladstone for shipping.

The mine is currently constructing the US\$1.1 billion Kestrel Mine extension, a project to access the mine's existing resources more efficiently. The extension, due for completion in 2012, will extend the life of the mine by 20 years and increase mine capacity to 6-7 mtpa, some or all of which will be redirected to other terminals. (underline emphasis added)

Castalia Report supports geographic extent of Hay Point catchment

- 102 The Castalia Report supports an approach to market definition by which the geographic dimension of the market in which the DBCT service is supplied incorporates all mines within the 'Hay Point catchment'. This is consistent with the DBCTM Submission and HoustonKemp Report on (b). Castalia defines the coal tenements market as 'the market for the supply and acquisition of rights to explore for or develop resources of coking coal, thermal coal or both in the Hay Point catchment' (emphasis added). Castalia states that:¹⁰⁰
- The "Hay Point catchment" is the area—generally in proximity to the Goonyella rail corridor—where efficient prices for coal loading result in the lowest logistics chain costs being via export utilising a coal terminal in the Port of Hay Point. That is Hay Point is the least cost option rather than Abbott [sic] Point or Gladstone.
- 103 To establish the boundaries of the Hay Point catchment, Castalia models the total cost of the mine to ship logistics chain for mines in the Bowen area using current prices of the various components of the chain.¹⁰¹

⁹⁴ DBCTM Submission at [136]

⁹⁵ Aurizon [QR National expands tonnages with Jellinbah](#) 6 July 2012

⁹⁶ The Australian [Asciano poaches key QR coal contract](#). June 16, 2010

⁹⁷ HoustonKemp Report on (b), page 35; DBCTM Submission at [128] and [129]

⁹⁸ User Group Submission, page 20

⁹⁹ [Consent to amendment to Applications for Authorisation A91275 and A91278 to include Rio Tinto Coal Australia Pty Limited](#), page 2

¹⁰⁰ Castalia Report, page 7

¹⁰¹ Castalia Report, page 7

104 In Figure 3.1 of its report, Castalia shows the approximate area where exporting coal through the Port of Hay Point via either DBCT or HPCT (for BMA or BMC mines) is the lowest logistics chain.¹⁰² Castalia states:¹⁰³

Of the approximately 30 mines in the catchment, more than two thirds use coal terminals at the Port of Hay Point. This is particularly evident at the boundaries of the Goonyella rail network with the Blackwater and Newlands systems. History also plays a part, prior to the GAPE project in 2011, there was no access by mines on the Newlands rail network to Hay Point so mines that now have a lower cost path to DBCT still use Abbot Point because of physical and long term contractual constraints. Similarly, there are mines that use Abbot Point which are within the 'Hay Point catchment' as historically they could not contract capacity on the Goonyella system and at DBCT due to capacity constraints and an unwillingness on the part of infrastructure providers to invest in expansions. However, the historical anomalies at the margin are not determinative as to the prospects of material levels of substitution going forward, particularly not in respect of development tenements in the current context of there being surplus capacity available at DBCT.

105 This paragraph reveals that Castalia is of the view that the geographic scope of the tenements market encompasses mines on the Newlands rail network that now have a lower cost path to DBCT but still use Abbot Point, and mines that use Abbot Point that are within the 'Hay Point catchment'.¹⁰⁴ It follows that the geographic scope of the market in which the DBCT service is supplied must encompass those mines, and foreseeable demand for those mines must be included in demand in that market for the purpose of the criterion (b) assessment. DBCTM observes in this regard that logically mines that are within the geographic scope of that market were previously tenements and tenements within that scope have the potential to become mines.¹⁰⁵

106 This is supported by the following statement in the Castalia Report:¹⁰⁶

Figure 3.1 shows that DBCT is the logical facility to serve mines on Goonyella Rail Network and, depending on assumptions and outlook on logistics chain costs, some parts of the north west Blackwater Rail Network. This is consistent with our geographic market definition shown in Section 3.1.2.

107 Further, Castalia's inclusion of HPCT and BHP affiliated mines in the geographic scope of the tenements market supports the position that demand from BHP affiliated mines forms part of total foreseeable demand in the market in which the DBCT service is supplied.

108 The Castalia Report also supports the position that the market in which the DBCT service is supplied encompasses both existing users and potential uses of the DBCT service, and that in circumstances where production at a mine is decreasing, the mine's owner would likely be planning for that decline by exploring and developing other tenements that can utilise the terminal capacity. The Castalia Report states:¹⁰⁷

¹⁰² Castalia Report, pages 7 to 8

¹⁰³ Castalia Report, pages 8 to 9

¹⁰⁴ To the extent Castalia is suggesting in that paragraph that the miners within the Hay Point catchment that use AAPT do so because DBCTM was unwilling to invest in an expansion of DBCT, that is incorrect. As explained in the DBCTM Submission (at [140] to [143]), Middlemount and Lake Vermont chose to go to AAPT because that expansion aligned with the mines' commissioning plans which meant they would not have to delay their mine development processes to wait for DBCT to expand. DBCTM provides further evidence to refute the User Groups' allegations in Appendix 6.

¹⁰⁵ In its response to submissions on criterion (a), HoustonKemp explains that Castalia is incorrect in its view that the geographic market for tenements is limited to the Hay Point catchment. Castalia's approach to assessing the geographic scope of the market is appropriate for coal handling services. However, investors in tenements have a wider range of alternative options for investment in tenements in Central Queensland and potentially beyond with the result that the geographic scope of the markets for tenements is broader than that for the market in which the DBCT is supplied.

¹⁰⁶ Castalia Report, page 14

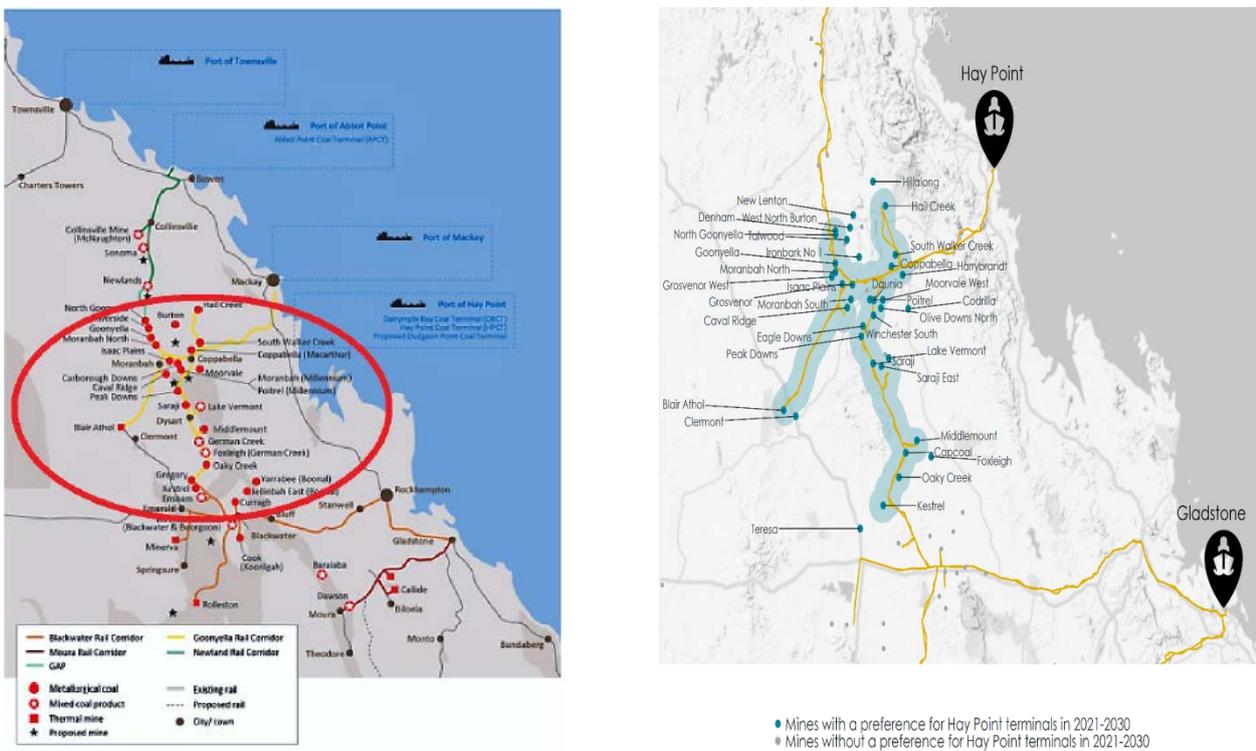
¹⁰⁷ Castalia Report, page 17

Existing users of DBCT—by definition—own production mines. Nevertheless, both existing users and potential future users of the DBCT service are clearly in the same market for coal tenements.

Corporate entities own coal resources in different stages of the lifecycle. For example, some production mines may be reaching a point where production may be declining as coal reserves are exhausted. To cite obvious examples, Rio Tinto contracted capacity for its Blair Athol mine, which was ultimately then used for its Clermont mine as Blair Athol's mine life wound down and Clermont's production ramped up. Owners of such production mines would likely be planning for such decline by exploring and developing other tenements that can over time utilise the contracted loader (and rail) capacity.

- 109 The following figure shows the similarity between the geographic scope of the Hay Point catchment determined by Castalia¹⁰⁸ and the geographic scope of the Hay Point catchment determined by HoustonKemp.¹⁰⁹

Figure 1: Geographic scope of Hay Point catchment Castalia (on left) and HoustonKemp (on right)



RMI Report supports geographic extent of Hay Point catchment

- 110 The Resource Management International (RMI) Report provided to the QCA in connection with the DBCT 2015 draft access undertaking process (RMI Report) supports DBCTM's market definition, rather than that of the User Group.
- 111 The User Group submits that its definition of the market is consistent with the 'Hay Point catchment' identified in the RMI Report.¹¹⁰ However, in that report, RMI states that:¹¹¹

¹⁰⁸ Castalia Report, page 8

¹⁰⁹ HoustonKemp Report on (b), page 31

¹¹⁰ User Group Submission, page 17; RMI, *DBCT 2015 DAU Review of the Economic Life of DBCT Assets*, Final Report, December 2015, p13

¹¹¹ RMI, *DBCT 2015 DAU Review of the Economic Life of DBCT Assets*, Final Report, December 2015, page 10

The DBCT and HPCT catchment area is essentially defined by the Goonyella Rail Network (GRN) system, which is the shortest rail link to a coal export terminal for Bowen Basin operations from North Goonyella and Hail Creek in the north, Blair Athol in the west and Oaky Creek in the south.

- 112 It is evident from that statement that RMI considers DBCT and HPCT to have the same catchment area. This is probative evidence that establishes that foreseeable demand from mines that utilise HPCT forms part of foreseeable demand in the market in which the DBCT service is supplied,¹¹² and also that the HPCT service is provided in that market.
- 113 Defining the geographic scope of the market in which the DBCT service is provided by reference to the DBCT and HPCT catchment area is practically the same approach applied in the DBCTM Submission.
- 114 RMI also recognises that the interconnection of the rail systems means that Goonyella mines could link to RGTCT, WICET and AAPT and that DBCT can provide a coal handling option for mines and projects to the north and south of the traditional DBCT catchment area. RMI states that:¹¹³

The Goonyella Rail System is connected to the Blackwater System in the south, and now the Goonyella-Abbot Point System in the north. The Blackwater Rail System therefore provides a potential rail link option to the RG Tanner and WICET coal export terminals near Gladstone, particularly for mines and projects at the southern end of the DBCT catchment area. Similarly, recent completion of the 69km rail connection to the Newlands Rail Network (GAP project) in 2011/2012 provides a potential rail link option to the Abbot Point coal terminal in the north, particularly for mines and projects at the northern end of the DBCT catchment area. Also, conceivably the DBCT provides a coal delivery option for mines and projects to the north and south of the traditional DBCT catchment area.

- 115 Accordingly, the RMI Report unambiguously supports DBCTM's approach to market definition and not that of the User Group, being a restrictive view of the market which excludes all terminals except for DBCT and fails to include demand from all mines within the Hay Point catchment in determining total foreseeable demand.

User Group's approach fails to properly identify customers in the market

- 116 In considering market definition the User Group and PwC focus on whether mines within the Hay Point catchment are able to use other coal terminals (the supply side of the market), rather than having regard to the demand side of the market. They fail to consider whether DBCT is a substitute for mines within the Hay Point catchment which use other coal terminals. This approach has the result that they fail to properly identify customers in the market and as a consequence to account for total foreseeable demand in the market in which the DBCT service is supplied, contrary to section 76(2)(b) of the QCA Act.
- 117 In considering the issue of market definition, the User Group and PwC focus on whether other terminals provide a substitute service to DBCT. The evidence of substitution between terminals referred to in the DBCTM Submission demonstrates that they do.¹¹⁴ In any event, where there are already a number of coal terminals in existence, the question of whether other coal terminals provide a substitute to the DBCT service is not determinative of the level of foreseeable demand for coal handling services in the market in which the DBCT service is supplied.
- 118 To correctly apply criterion (b) it is necessary to arrive at an estimate of foreseeable demand in the market and then determine whether it is least cost for DBCT to serve that demand alone. In this context, it is a

¹¹² DBCTM Submission at [150] to [167]

¹¹³ RMI, *DBCT 2015 DAU Review of the Economic Life of DBCT Assets*, Final Report, December 2015, page 11

¹¹⁴ The DBCTM Submission refers to market evidence which demonstrates that there are multiple existing facilities that are close substitutes for the DBCT service and which are together serving current demand in the market in which DBCT operates: DBCTM Submission at [126] to [143]

fundamental step in the correct process to identify the customers who are in the market. HoustonKemp observes that defining the scope of the market in which the DBCT service is supplied is fundamental to estimating total foreseeable demand in that market.¹¹⁵ It requires an understanding of the customers that are in the market and will be expected to be in the market over the period for which the service would be declared.

- 119 Accordingly, the relevant question is whether mines that are customers of other terminals (HPCT, AAPT and RGTCT) perceive DBCT to be a close substitute. Where that is the case, the foreseeable demand from those mines must be included in the total foreseeable demand in the market in which the DBCT service is supplied.
- 120 The market evidence set out in the DBCTM Submission demonstrates that mines within the Hay Point catchment which use terminals other than DBCT must consider DBCT to be a substitute to the terminal they are currently using as, in fact, many of those mines already use DBCT, in addition to other terminals.¹¹⁶ Further, HoustonKemp's analysis of the geographic dimension of the market demonstrates that mines within the Hay Point catchment would prefer to use a Hay Point Terminal having regard to rail and coal terminal charges.¹¹⁷
- 121 It is illogical and irrational to define the geographic extent of a market by reference to the disparate geographic locations of mines that use DBCT but ignoring mines adjacent to, or in between those mines which use DBCT. A market must be contiguous. Accordingly, the approach of the User Group and PwC must be rejected.
- 122 HoustonKemp explains in the HoustonKemp Report on (b) that it is not appropriate to define the starting point for the geographic market by reference to the disparate locations of mines that use DBCT with the result that mines located adjacent to, or in between, those locations that use other terminals are excluded from the market.¹¹⁸ Under this approach, the scope of the market would be a series of small circles drawn at the location of mines that use or have recently used DBCT. In respect of this approach HoustonKemp states:¹¹⁹

To the best of our knowledge, there are no examples of the geographic dimension of a market being defined in this way. Further, such an approach could not be a reasonable basis for approaching geographic market definition, since it would exclude mines that are located adjacent to or in between mines that currently use DBCT and so can reasonably be expected to be potential customers of DBCT. Such mines can safely be presumed to regard DBCT as closely substitutable for whichever coal handling services they are using, and so must fall within the market. Put another way, this approach would explicitly disregard geography in its assessment of the geographic dimension of the market.

- 123 As explained in the section on total foreseeable market demand below, the approach of the User Group and PwC to market definition means that they fail to properly identify customers in the market with the consequence that they do not account for total foreseeable demand in the market in which the DBCT service is supplied. Significantly, flowing from the User Group and PwC's flawed approach to market definition, they ignore demand from mines proximate to DBCT which use other terminals in determining foreseeable demand. This approach fails to account for total foreseeable demand in the market in which the DBCT service is supplied, contrary to section 76(2)(b) of the QCA Act.

¹¹⁵ HoustonKemp Review on (b), page 6

¹¹⁶ The DBCTM Submission refers to market evidence which demonstrates that there are multiple existing facilities that are close substitutes for the DBCT service and which are together serving current demand in the market in which DBCT operates: DBCTM Submission at [126] to [143]

¹¹⁷ HoustonKemp Report on (b), page 27

¹¹⁸ HoustonKemp Report on (b), pages 32 to 34

¹¹⁹ HoustonKemp Report on (b), page 33

HPCT

124 In asserting that the coal handling services at HPCT are not in the market for the DBCT service, the User Group focuses on the supply side of the market and whether HPCT is a substitute for non-BMA/BMC mines. The User Group and PwC ignore the demand side of the market and the fact that DBCT is a substitute for mines that are permitted use HPCT. This focus on whether non-BMA/BMC mines can use HPCT in defining the market is also suggested in the legal advice on market definition in Appendix A of the Staff Issues Paper, which raises the issue of 'whether the handling of coal at DBCT and HPCT are services that are provided in the same market'.¹²⁰ In discussing that issue, the advice appears to focus on whether HPCT would be willing to supply coal handling services to mines other than BMA in the future.¹²¹

DBCT is a substitute for BMA and BMC mines

125 The emphasis on whether HPCT is a substitute for non-BMA/BMC mines does not give sufficient regard to the fact that DBCT is a substitute for mines that are permitted to use HPCT, being BMA and BMC mines. As explained in the DBCTM Submission,¹²² demand for coal handling services from mines that use HPCT must be part of total foreseeable market demand. A miner who would prefer to use the HPCT service is logically also a potential customer for DBCT. The terminals are immediately adjacent in their location at the Port of Hay Point. Although HPCT currently only provides coal handling services to BMA or BMC mines, many of the mines that currently use HPCT also use the DBCT service.

126 Significantly, the User Group acknowledges that 'coal loading services at DBCT may be substitutable (from the perspective of BMA / BMC) for the coal loading services at the HPCT which are currently used by BMA'.¹²³ Nonetheless, the User Group and PwC's approach to market definition has the illogical consequence that foreseeable demand from mines that are able to use HPCT is excluded from total foreseeable demand in the market in which the DBCT service is supplied.

127 As explained in the DBCTM Submission, the unequivocal market evidence is that BMA and BMC mines already use DBCT and therefore show considerable willingness to substitute tonnage between HPCT and DBCT.¹²⁴ DBCTM notes that:

127.1 BMC's South Walker Creek and Poitrel mines are currently contracted [REDACTED] at DBCT. In addition, BMC has recently taken [REDACTED] capacity [REDACTED].

127.2 BMA's Peak Downs, Saraji and Caval Ridge mines and Goonyella/Riverside/Broadmeadow complex of mines have also utilised DBCT recently.¹²⁵ BMA had an assignment [REDACTED] to ship through DBCT.

127.3 BMA is currently in the process [REDACTED] to take [REDACTED] further [REDACTED] DBCT capacity [REDACTED].

128 The illogicality of the User Group and PwC's approach can also be illustrated by Sojitz Corporation's recent acquisition of Gregory Crinum coking coal mine from BMA.¹²⁶ [REDACTED] The User Group and PwC's approach of excluding BMA/BMC mines from the calculation of total foreseeable demand, would have meant that prior

¹²⁰ QCA, Staff Issues Paper, Declaration reviews: applying the access criteria, April 2018, page 30

¹²¹ Note that as explained in the DBCTM Submission at [157], BMA currently provides third party access to HPCT's services to BMC (owned 80:20 by BHP and Mitsui and Co respectively), in addition to providing access to itself.

¹²² DBCTM Submission at [150]

¹²³ User Group Submission, page 31

¹²⁴ DBCTM Submission at [156]

¹²⁵ DBCTM Submission at [150]

¹²⁶ See <https://www.sojitz.com/en/news/2018/05/20180530.php>; and <https://www.bhp.com/media-and-insights/news-releases/2018/05/bma-to-sell-gregory-crinum-mine>

to this transaction, Gregory Crinum's production would not have formed part of demand, however, immediately after the transaction, it does.

- 129 Even if one were to conclude that HPCT is not a substitute for DBCT's non-BMA/BMC's customers, this does not affect the conclusion that DBCT is in fact a close substitute to HPCT for BMA and BMC. Given that for BMA and BMC mines DBCT is a close substitute to HPCT, their entire coal volumes must logically be in the same market as the market in which the DBCT service is supplied.¹²⁷

HPCT should not be excluded from the supply side of the market

- 130 DBCTM observes that whether or not HPCT is a substitute for non-BMA/BMC mines is not a key issue in assessing whether the DBCT service satisfies criterion (b). As explained below, DBCT fails criterion (b) where demand from BMA and BMC mines is included in total foreseeable market demand. Further, HPCT must be considered to provide coal handling services in the same market as DBCT, at least for BMA and BMC, and taken into account in the least cost assessment.
- 131 Nonetheless, while it is not critical to establishing the DBCT service fails criterion (b), to fully address the User Group submissions on HPCT, DBCTM submits that it is also the case that HPCT should not be excluded from the supply side of the market in the criterion (b) assessment on the basis that it is not currently open access.
- 132 Notwithstanding HPCT is not open access, HPCT is a close supply side substitute for the services provided by DBCT, and is presently an actual substitute for BMA and BMC mines. HPCT provides the same coal handling service as DBCT and, subject to terms of access, there is no reason why miners would not utilise HPCT if BMA chose to (or was required to) permit them to access HPCT.
- 133 There are currently transactions – between BMA as service provider and BMC as user – for coal handling services provided at HPCT. Consistent with these transactions, some¹²⁸ users switch between DBCT and HPCT and so there is competition between DBCT and HPCT, i.e.:
- 133.1 BMA already allows access to coal handling services at HPCT to a third party, namely BMC.
- 133.2 HPCT is utilised by miners who also utilise DBCT, RGCT and AAPT - those miners clearly treat DBCT and HPCT as substitutes and competitive alternatives.
- 133.3 DBCT competes with HPCT to provide coal handling services to BMA and BMC.
- 134 Further, there is the potential for future transactions for coal handling services at HPCT between BMA and other miners (or for BMA to acquire other existing mines and/or tenements), resulting in increased competition between DBCT and HPCT.
- 135 Contrary to the User Group Submission, HPCT is not a 'single-user' facility.¹²⁹ HPCT is not only used by BMA, but is also used by BMC. Further, currently and historically, HPCT has been used by more than one user. HPCT was developed by the Central Queensland Coal Associates Joint Venture (**CQCA joint venture**) which now comprises the same joint venture parties as BMA (i.e. BHP and Mitsubishi). The *Central Queensland Coal Associates Agreement Act 1969* (Qld) details the parties to the CQCA joint venture and the relative ownership levels of each party. The initial parties to that agreement were Utah Development Company and Mitsubishi. Over time there were numerous changes to the CQCA joint venture parties and their level of interest in the Joint Venture.¹³⁰ Prior to October 2000, the CQCA joint ventures' parties were essentially,

¹²⁷ DBCTM Submission at [157]

¹²⁸ As discussed earlier in the submission, in assessing the potential for either demand or supply side substitution in the context of market definition, it is never a requirement that all users have the potential to switch between one supplier and another for service providers to be regarded as in the same market.

¹²⁹ User Group Submission at [29], [30], [31] and [32]

¹³⁰ State Development and Other Legislation Amendment Bill 2001, Explanatory Notes, page 7

- BHP, Mitsubishi and QCT Resources Ltd (a company in which Santos had a significant interest). In addition to its interest in the CQCA joint venture, QCT Resources had an interest in the Gregory joint venture mines and wholly owned the South Blackwater mine.¹³¹ In October 2000, Santos accepted a stock market takeover offer from BHP Mitsubishi from QCT Resources Ltd.¹³² On March 2001, BHP and Mitsubishi announced an agreement to move to equal ownership of their interests in the CQCA joint venture.¹³³
- 136 It can be seen from this description that currently and historically more than one user has been able to use HPCT. Note that BMC which is currently permitted by BMA to use HPCT is owned 80:20 by BHP and Mitsui and Co. Mitsui is not a party to the CQCA joint venture.
- 137 It would be artificial, unreasonable and illogical to exclude HPCT from the criterion (b) assessment on the basis that it does not currently provide coal handling services to third parties other than BMC. Although HPCT currently operates under a different regime to DBCT, BMA's commercial decision to do so provides no basis for it to be excluded from the market.
- 138 Criterion (b) is an objective test of whether it is least cost for a facility to meet foreseeable demand. Commercial decisions as to who is provided access to an alternative facility are irrelevant to that assessment and therefore must be disregarded. If HPCT were an open access facility, it is a certainty that the DBCT service would fail criterion (b). If HPCT were to then cease being open access, DBCT should continue to fail criterion (b).
- 139 There is nothing preventing BMA from permitting third parties in addition to BMC from accessing HPCT. The operating regime could change at any time - BMA could choose to allow access to users other than itself and BMC.
- 140 The only reason some users do not have the option to export coal through HPCT is because BMA has discriminated against mines that are not operated by BMA or BMC. If BMA or BMC was to purchase a mine currently owned by an existing user of DBCT, that mine would be able to access to HPCT. For example, Saraji East was previously owned by New Hope, however, it has since been purchased by BMA. Accordingly, it now has the potential to export coal through HPCT.¹³⁴ BHP also bid to purchase Anglo American's Moranbah North and Grosvenor mines in 2016 which would have meant that those mines could utilise HPCT.¹³⁵
- 141 A significant rationale for declaration is for it to be applied to non-open access facilities. It would not be logical to exclude non-open access facilities from the market given the role criterion (b) plays in the assessment of whether to declare such facilities.
- 142 The User Group is incorrect in its submission that it would 'run completely counter to the regime's very purpose for services from such a single-user dedicated facility, which are not substitutable for users of Service, to be included in the "market" (as defined) for that Service'.¹³⁶ The User Group appears to make this submission by reference to the need for a purposive approach to market definition. DBCTM agrees that market definition is purposive. However, unlike the User Group which focuses on the object of Part 5 of the QCA Act in making this argument, as the User Group recognises earlier in its submission, in taking a purposive approach to market definition for criterion (b), market definition should be directed to assessing whether DBCT is a natural monopoly – that is, whether it can serve total foreseeable demand in the market at least cost.¹³⁷ The presence of HPCT adjacent to DBCT demonstrates that DBCT cannot serve market demand at least cost.

¹³¹ Santos Annual Report 1998, page 8

¹³² Santos Announcement, Santos to Accept Revised Metcoal Offer, 16 October 2000

¹³³ State Development and Other Legislation Amendment Bill 2001, Explanatory Notes, page 7

¹³⁴ DBCTM Submission at [134]; BMA, Saraji East Mining Lease Project, Initial Advice Statement, 10 February 2017, Final, pages 20 to 21

¹³⁵ AFR, Anglo American keeps Australian coal amid backflip, 22 February 2017

¹³⁶ User Group Submission, page 32

¹³⁷ User Group Submission, page 14; DBCTM Submission at [100]

- 143 In any event, declaring an open access facility where there is an immediately adjacent facility that is selective about who uses its services is contrary to the object of Part 5 of the QCA Act. A facility that allows anyone access (that can secure rail access to transport coal to it) should not be found to satisfy criterion (b) in circumstances where there is an immediately adjacent facility that is selective about who uses its services. Such an outcome discourages open access facilities and would not be an outcome that promotes 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 market. Accordingly, an outcome such as that would be contrary to the object of Part 5 of the QCA Act (section 69E of the QCA Act).
- 144 Third party access to DBCT will be provided in the absence of declaration of DBCT - including access by BMA, BMC and other miners. It would be perverse to find that DBCT satisfies criterion (b) and for DBCT to be subject to access regulation under the QCA Act in circumstances where it is an open access facility (and will remain open access in the absence of declaration) when there is an immediately adjacent facility that is not presently open access and is not subject to access regulation under the QCA Act.
- 145 Excluding HPCT from the market on the basis it is not open access is also contrary to the market based approach to criterion (b) recommended by the Productivity Commission and reflected in the text of section 76(2)(b) of the QCA Act.
- 146 The Productivity Commission was also keen to ensure that criterion (b), in combination with the other criteria, helped to promote effective facilities-based competition and avoid the regulation of facilities that were subject to competition or expected to be subject to competition.¹³⁸
- 147 DBCT does not give rise to an enduring lack of effective competition in markets for infrastructure services where access is required to compete effectively in dependent markets.¹³⁹ Coal handling services at HPCT are a competitive alternative to DBCT's services, at least for BMA and BMC, who use both HPCT and DBCT, and potentially for others.

2.8 Total foreseeable demand in the market

- 148 Arising from their definition of the market, there are fundamental errors with the User Group and PwC's approach to determining total foreseeable demand in the market. These errors mean that the User Group and PwC significantly understate total foreseeable demand in the market. These errors in turn affect their least cost assessment with the result that their entire analysis of criterion (b) must be rejected by the QCA.
- 149 Having defined the market in which the DBCT service is supplied on an incorrect basis, the User Group and PwC make the following errors in determining total foreseeable demand in the market:
- 149.1 they confine their analysis of total foreseeable demand in the market to an assessment of potential throughput at DBCT and therefore fail to assess total foreseeable demand in the market in which the DBCT service is supplied;
 - 149.2 while it is unclear what mines are included in their demand analysis, it appears that the User Group and PwC fail to include mines that are located proximate to DBCT but use other terminals;
 - 149.3 they fail to recognise that foreseeable demand from mines that are able to use HPCT must form part of total foreseeable demand in the market in which the DBCT service is supplied.
- 150 In addition to these errors, even on a DBCT throughput basis, the User Group's estimates of total foreseeable demand are not realistic and should not be relied on by the QCA.

¹³⁸ *Productivity Commission Inquiry Report, National Access Regime*, No. 66, 25 October 2013, page 155 and 161

¹³⁹ *Productivity Commission Inquiry Report, National Access Regime*, No. 66, 25 October 2013, page 154

- 151 The AME mine production forecasts utilised in the HoustonKemp Report on (b) and DBCTM Submission to estimate total foreseeable demand in the market remain the most credible and realistic forecasts of demand.
- 152 In estimating foreseeable demand, the User Group has regard to the following:
- 152.1 a Wood Mackenzie February 2018 forecast of DBCT throughput;
 - 152.2 an 'adjusted' Wood Mackenzie forecast of DBCT throughput;
 - 152.3 an email from DBCTM to a User Group member in February 2018;
 - 152.4 User Group projections;
 - 152.5 projections in previous QCA processes; and
 - 152.6 DBCT contracted capacity profile.
- 153 Each of these has the flaws identified in paragraph 149 above. Further, for the reasons described below, the estimates of total foreseeable demand are not realistic or of probative value. Accordingly, the User Group's estimates of total foreseeable demand must be rejected by the QCA.

Incorrect basis for demand forecast

- 154 As mentioned in the section on market definition above, the incorrect manner in which the User Group and PwC define the market results in a flawed approach to estimating foreseeable demand in that market.
- 155 As a result of the User Group and PwC's approach to market definition, they fail to identify total demand in the market in which the DBCT service is supplied. The User Group and PwC do not attempt to estimate total foreseeable demand in the market, but instead estimate the coal handling volumes that are expected to be served at DBCT. This constrains total foreseeable demand to be no more than the capacity of DBCT and means that the User Group and PwC ignore demand from mines proximate to DBCT which use other terminals.
- 156 This approach is contrary to the Productivity Commission's recommendation in respect of criterion (b) and the text of section 76(2)(b) of the QCA Act, which requires an assessment of total demand in the market in which the DBCT service is supplied. This is a fundamental error in approach on the part of the User Group and PwC, with the result that their analysis of criterion (b) must be rejected by the QCA.
- 157 PwC's approach to market definition does not define a market by reference to its boundaries.¹⁴⁰ This raises challenges for estimating total foreseeable demand in the market, since it focuses on the supply side of the market and fails to identify the customers that form the demand side of the market.
- 158 PwC and the User Group define the market by reference to one supplier, DBCT (being the only common-user coal handling facility at the port of Hay Point) rather than by reference to customers in the market.¹⁴¹ Since this market does not contain information that would identify customers in the market, it follows that it is not possible to estimate total foreseeable demand in the market.
- 159 By contrast, HoustonKemp describe the market as the 'market for coal handling services for mines that are proximate to the Port of Hay Point'.¹⁴² This description of the market facilitates the identification of customers in the market, thus enabling the identification of foreseeable demand in the market. HoustonKemp explains that when an appropriate approach to market definition is adopted, estimating total foreseeable demand in the market is a relatively simple task of summing the expected demand from each

¹⁴⁰ HoustonKemp Review on (b), page 17

¹⁴¹ HoustonKemp Review on (b), page 17

¹⁴² HoustonKemp Report on (b), page 26

of the customers identified as being in the market.¹⁴³ As explained above, the Castalia Report also supports an approach to market definition by which the geographic dimension of the market in which the DBCT service supplied incorporates all mines within the 'Hay Port catchment'. As a consequence demand from all of those mines would be included in total foreseeable market demand.

160 For the avoidance of doubt, contractual or other arrangements mines have to export coal through other terminals are not relevant to determining the level of total foreseeable demand for coal handling services in the market in which the DBCT service is supplied.

161 Criterion (b) is an assessment of whether a facility is a natural monopoly from a societal perspective in that it involves a hypothetical or theoretical assessment of whether one facility can meet total foreseeable demand in the market. The determination of total foreseeable demand in the market demand should not be constrained by whether mines actually use (or will use) the DBCT service – it is a determination of market demand and must not be confined to demand served by the facility. Market demand includes demand within the geographic scope of the market in which the DBCT service is supplied that is serviced by other facilities. This means that total foreseeable demand should be estimated as the total requirement for coal handling services arising for production (or expected production) of coal at locations that are within the geographic dimension of the market.¹⁴⁴

162 The User Group's apparent position that demand contracted to other terminals does not form part of total foreseeable demand in the market¹⁴⁵ is incorrect and shows a misunderstanding of the purpose and nature of the criterion (b) assessment. However, the existence of contracts with other terminals does demonstrate that there are already a number of terminals currently serving demand in the market and suggests that DBCT is not a natural monopoly.

163 The User Group and PwC do not attempt to estimate total foreseeable demand in the market, but instead estimate the coal handling volumes that are expected to be supplied at DBCT by reference to existing contract cover at DBCT, forecasts of contracts and throughput at DBCT and the DBCT access queue. HoustonKemp explains that:¹⁴⁶

.. there is a strong conceptual difference between estimates of the expected output of one supplier in a market and estimates of the expected demand of customers in a market. This distinction is of fundamental significance, even if there is only a single supplier in the market. Specifically, the approach applied by PwC assumes that that demand in the market is limited to the volumes that are served at DBCT, rather than assessing whether demand in the market could potentially exceed this.

164 Estimating total foreseeable demand by reference to the volumes served (or expected to be served) at DBCT constrains total foreseeable demand to be no more than the capacity of DBCT.¹⁴⁷ HoustonKemp explains in the HoustonKemp Report on (b) that any approach that limits foreseeable demand in the market to that served by the facility of interest will typically find that the facility satisfies criterion (b), irrespective of the degree of substitution between any two facilities.¹⁴⁸ The Productivity Commission also recognised this in recommending a market based approach to criterion (b). The Productivity Commission said:¹⁴⁹

... by only considering the demand for the facility's own service — rather than total demand in the market in which the service is supplied — the natural monopoly test could be satisfied for any

¹⁴³ HoustonKemp Review on (b), page 18

¹⁴⁴ HoustonKemp Report on (b), page 19

¹⁴⁵ For example, User Group Submission, page 60 where the User Group excludes demand from LVM and MCM prior to the expiration of their contracts with AAPT

¹⁴⁶ HoustonKemp Review on (b), page 18

¹⁴⁷ HoustonKemp Review on (b), page 18

¹⁴⁸ HoustonKemp Report on (b), page 34. See also HoustonKemp Review on (b), page 18

¹⁴⁹ Productivity Commission Inquiry Report, National Access Regime, No. 66, 25 October 2013, page 155; DBCTM Submission at [97]

location-specific facility with its output defined sufficiently narrowly, with enough spare (or expandable) capacity to accommodate a third party.

- 165 To ignore demand from mines proximate to DBCT which use other terminals in determining foreseeable demand means that only current and estimated future throughput at DBCT is considered in the criterion (b) analysis. That is, the analysis fails to account for total demand in the market in which the DBCT service is supplied. This approach advanced by the User Group is contrary to the Productivity Commission's recommendation in respect of criterion (b) and the text of section 76(2)(b) of the QCA Act.

Foreseeable demand from mines that use HPCT must be included in market demand

- 166 In estimating total foreseeable demand in the market, the User Group and PwC fail to recognise that foreseeable demand from mines that are able to use HPCT must form part of foreseeable demand in the market in which the DBCT service is supplied. As noted above, given that for BMA and BMC mines DBCT is a close substitute to HPCT, their entire coal volumes must logically be in the same market as the market in which the DBCT service is supplied.¹⁵⁰
- 167 DBCTM observes that HoustonKemp undertook its analysis of whether criterion (b) was satisfied on the basis of its view that total foreseeable market demand includes demand from mines that use the HPCT service. However, all of the scenarios considered in HoustonKemp's analysis were undertaken on the assumption that mines which are not operated by BMA or BMC are unable to utilise HPCT.¹⁵¹ Further, HoustonKemp also assessed whether the DBCT service would satisfy criterion (b) where foreseeable demand from BMA and BMC mines is excluded from total foreseeable market demand (for illustrative purposes). In each case HoustonKemp found that the DBCT does not satisfy criterion (b).¹⁵²
- 168 The reasoning above and in the DBCTM Submission and HoustonKemp Report on (b) establishes that any assessment of whether the DBCT service satisfies criterion (b) must be undertaken on the basis that the entire coal volumes of BMA and BMC form part of the total foreseeable demand in the market in which the DBCT service is supplied.
- 169 On any view of foreseeable demand, the DBCT service fails criterion (b) where foreseeable market demand includes BMA and BMC volumes. On that basis:
- 169.1 HoustonKemp estimates maximum total foreseeable demand in the market over a 10 year declaration period to be approximately 217Mtpa;¹⁵³
- 169.2 AME estimates maximum total foreseeable demand in the market over a 10 year declaration period to be approximately 213Mtpa;¹⁵⁴
- 169.3 The User Group's lowest estimate of maximum total foreseeable demand in the market would be 131Mtpa. This figure is derived having regard to:
- 169.3.1 the Wood Mackenzie February 2018 forecast of demand on page 59 of the User Group Submission which suggests a maximum DBCT throughput of 69Mtpa in 2024 and 2025. The User Group appear to recognise that the Wood Mackenzie February 2018 forecast of demand is too low and unlikely compared to the Wood Mackenzie adjusted forecast of demand and User Group's own projections. Accordingly, even on the User Group's own submission this figure should be higher over the declaration period;

¹⁵⁰ DBCTM Submission at [157]

¹⁵¹ HoustonKemp Report on (b), page 70

¹⁵² DBCTM Submission at [230]

¹⁵³ HoustonKemp Report on (b), page 36; DBCTM Submission at [202] and [212]

¹⁵⁴ Addendum to DBCT Submission, 18 June 2018

- 169.3.2 the 49Mtpa annualised rate of throughput at HPCT for FY2018 to March 2018 referred to on page 30 of the User Group Submission. DBCTM notes that the User Group do not provide a forecast of throughput at HPCT over the declaration period and accordingly, the foreseeable demand figure may be higher; and
- 169.3.3 accordingly, on a throughput basis, forecast demand would total 118Mtpa. Converted to a demand for coal handling capacity basis using the conservative assumption that demand for throughput is 90% of demand for contract capacity,¹⁵⁵ this figure becomes 131Mtpa. As explained in the DBCTM Submission, when assessing whether DBCT can meet total foreseeable demand in the market, demand for contract capacity is the appropriate measure because we are assessing whether demand will exceed DBCT's capacity. DBCT can only contract to its capacity and, as discussed above, in practice, demand for throughput is less than contracted capacity.¹⁵⁶
- 170 As explained in the DBCT Submission, the reasonably possible capacity of DBCT over the declaration period is no greater than 102Mtpa.¹⁵⁷ Since even on the User Group's lowest estimate of demand, peak total foreseeable market demand over the declaration period is greater than 102Mtpa, DBCT cannot meet the total foreseeable demand in the market over the declaration period. Accordingly, the DBCT service does not satisfy criterion (b).¹⁵⁸

Demand estimates

- 171 In addition to the erroneous basis on which the User Group has estimated total foreseeable demand in the market, DBCTM observes that even on a DBCT throughput basis, the User Group's estimates of total foreseeable demand are not realistic and should not be relied upon by the QCA.
- 172 The AME mine production forecasts utilised in the HoustonKemp Report on (b) and DBCTM Submission to estimate total foreseeable market demand remain the most credible and realistic forecasts of demand.
- 173 DBCTM explains below why the following User Group forecasts of demand do not constitute probative evidence and should not be relied on by the QCA. The User Group Submission relies upon:
- 173.1 a Wood Mackenzie February 2018 forecast of DBCT throughput, which has been discredited by Wood Mackenzie as not being representative of the original data supplied;
- 173.2 an 'adjusted' Wood Mackenzie forecast of DBCT throughput, which fails to disclose the precise adjustments made to the Wood Mackenzie data. Further, contrary to the User Group's assertion, this forecast does not represent an 'aggressive or upper bound demand outlook'. In fact, Wood Mackenzie's June 2018 forecast has the same maximum projected demand figure for DBCT throughput as the User Group's adjusted forecast;¹⁵⁹
- 173.3 the supposed DBCTM 'projection of demand', which was not a projection of demand, but rather a chart showing a snapshot of the expected profile of DBCT's contracts as at a particular date; and
- 173.4 User Group projections of demand which are not independent and likely to be biased.

¹⁵⁵ DBCTM Submission at [209]

¹⁵⁶ DBCTM Submission at [219].

¹⁵⁷ DBCTM Submission at [191] to [200] and [220] and Appendix 18

¹⁵⁸ DBCTM Submission at [72] and [190]. Michael O'Bryan QC also recognises in his legal opinion for the QRC on the CQCN declaration review (page 13) that it is only if the facility for the service can meet the total foreseeable demand in the market in which the service is supplied that one proceeds to make a comparison the costs of meeting the total foreseeable demand by using the facility and by using any 2 or more facilities.

¹⁵⁹ Were the maximum projected DBCT throughput figure in the June 2018 Wood Mackenzie forecast is rounded up from 83.6Mtpa to 84Mtpa.

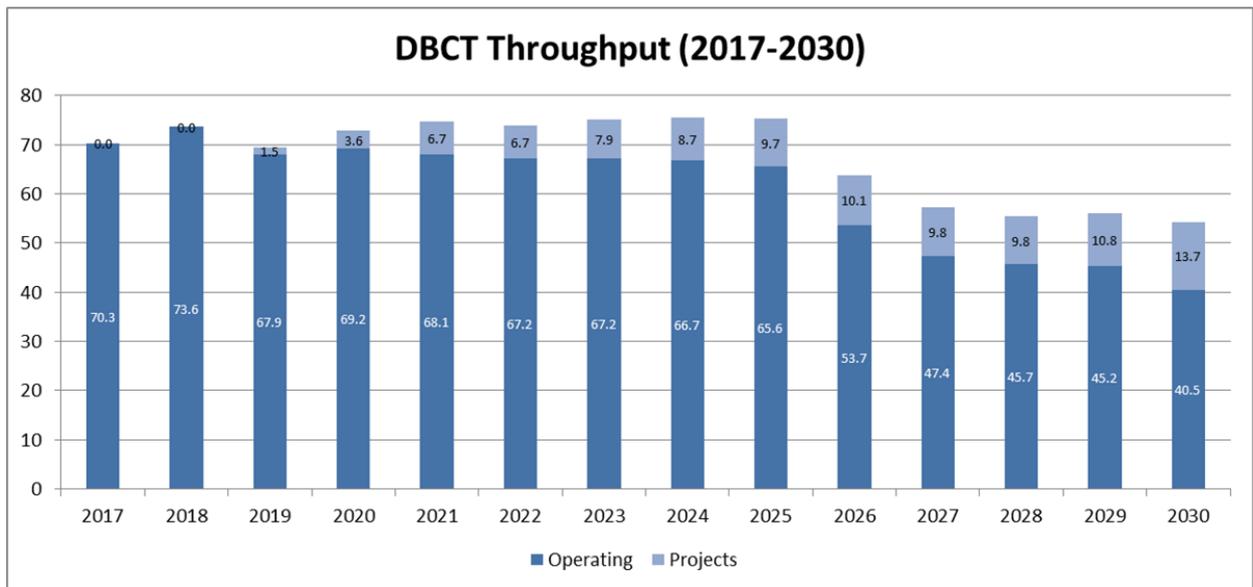
174 Significantly, as explained below:

- 174.1 HoustonKemp concludes using Wood Mackenzie production forecasts where total foreseeable market demand is estimated using a conventional approach to market definition demand exceeds the existing capacity of DBCT over the period for which the DBCT service would be declared; and
- 174.2 DBCTM demonstrates, using the geographic scope of the market in the Castalia Report and Wood Mackenzie production forecasts, that total foreseeable market demand exceeds the existing capacity of DBCT over the period for which the DBCT service would be declared.

February 2018 forecast of DBCT throughput

- 175 The User Group refers to a Wood Mackenzie February 2018 forecast of DBCT throughput (**Wood Mackenzie February forecast**) which it represents as a 'credible' forecast.¹⁶⁰
- 176 DBCTM asked Wood Mackenzie to provide it with a forecast of DBCT throughput as at February 2018. Wood Mackenzie provided the following forecast:

Figure 2: Wood Mackenzie February 2018 DBCT throughput forecast



- 177 This forecast differs from that in the User Group Submission. For example, the Wood Mackenzie February forecast in the User Group has a maximum throughput figure of 69Mtpa in 2024 and 2025. The above Wood Mackenzie forecast has a maximum throughput figure of 75.4Mtpa in 2024.
- 178 Wood Mackenzie has informed DBCTM that the chart in the User Group Submission does not reflect Wood Mackenzie's base case forecast for DBCT throughput as of February 2018. This is because the User Group manipulated the Wood Mackenzie data by moving some of the forecast throughput from DBCT to HPCT. This is explained in the letter from Wood Mackenzie at Appendix 7 to this submission in response. Accordingly, while the User Group Submission and PwC Report represent this forecast as a Wood Mackenzie forecast, in fact it is not. The User Group has manipulated the base Wood Mackenzie forecast without stating so in its submission or describing how it determined the DBCT throughput forecast on page 59 of the submission. Accordingly, that forecast must be rejected by the QCA.

¹⁶⁰ User Group Submission, page 59

- 179 DBCTM further observes that the fact that the User Group decided to move to HPCT some production forecast by Wood Mackenzie to go through DBCT supports the position that HPCT and DBCT are substitutes.
- 180 The User Group asserts that a 15 year declaration would be appropriate as a starting point for criterion (b).¹⁶¹ However, the Wood Mackenzie forecasts presented in the User Group Submission and referred to in the PwC Report are for 10 years from 2020. Accordingly, the User Group has not sought to obtain demand forecasts for the 15 year declaration period it asserts criterion (b) should be assessed over.

Adjusted Wood Mackenzie forecast of DBCT throughput

- 181 The User Group also presents an adjusted Wood Mackenzie forecast of DBCT throughput.¹⁶²
- 182 The totality of the adjustments made to this forecast from the Wood Mackenzie February forecast are not set out in the User Group Submission. However, the adjustments that are described suggest that further adjustments should be made for the forecast to be credible. For example, the User Group notes that the forecast has been adjusted to include "APCT capacity from Hay Point catchment users (such as Lake Vermont and Middlemount) diverting to DBCT upon contract expiry dates".¹⁶³ This statement recognises that forecast volumes from Hay Point catchment that use terminals other than DBCT should be included in the demand forecast. The forecast of total foreseeable market demand should include all such volumes, regardless of contracts (and their duration or expiry).
- 183 As explained above, Criterion (b) involves an assessment of whether one facility can meet total foreseeable demand in the market in which the service is supplied.¹⁶⁴ It is not an assessment of whether the facility can meet demand only for its service, but rather market demand. Market demand can include demand that is serviced by other facilities. The fact that some volumes in the market for coal handling services for mines that are proximate to the Port of Hay Point are contracted to be served by another terminal, does not mean those volumes should be excluded from market demand. Rather, it demonstrates that terminal is a substitute to DBCT and also suggests that it is not least cost for DBCT to serve that demand.
- 184 The User Group refer to this forecast as being an 'aggressive or upper bound demand outlook'. Wood Mackenzie updates the data used for its long term production forecasts on a half yearly basis – with the last update being December 2017 and the most recent update being the end of June 2018. DBCTM asked Wood Mackenzie for an updated forecast of DBCT throughput using data as at the end of June 2018. This forecast is shown in the following figure.

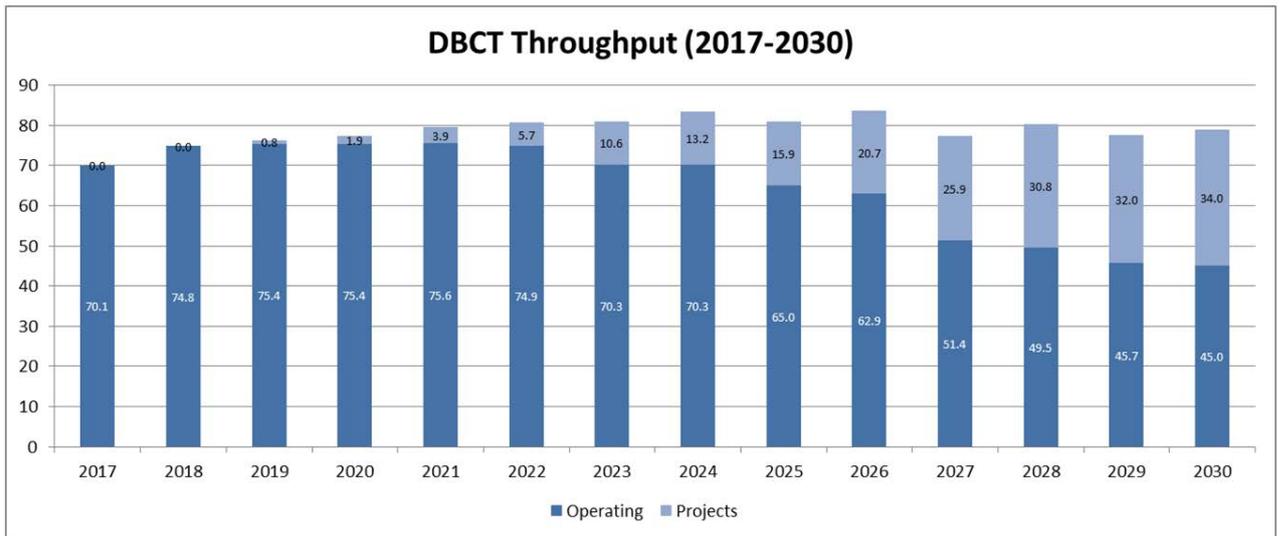
¹⁶¹ User Group Submission, page 58

¹⁶² User Group Submission, pages 59 to 60

¹⁶³ User Group Submission, pages 59 to 60

¹⁶⁴ DBCTM Submission at [95] to [97]

Figure 3: Wood Mackenzie June 2018 DBCT throughput forecast



185 The figure demonstrates that the User Group's forecast cannot be said to be an aggressive or upper bound demand outlook. For example, the User Group's forecast has a maximum projected demand figure of 84Mtpa in 2025, with the lowest figure being 66Mtpa in 2019. The current Wood Mackenzie forecast of DBCT throughput has a maximum projected demand figure of 83.6Mtpa in 2026, with the lowest figure being 70.1Mtpa in 2017.

DBCTM projection

186 The User Group refer to a DBCTM 'projection of demand' that was made available to a member of the User Group in February 2018.¹⁶⁵ This was not a projection of demand, but rather a chart showing a snapshot of the expected profile of DBCT's contracts as at 21 February 2018 based on advice DBCTM had received as to contract renewals and a small sample of active access seekers who were in contact with DBCTM at the time regarding capacity requirements.

187 The User Group relabelled as “DBCTM’s own projections [of demand]” what they have since acknowledged was “provided in a different context, namely providing a DBCT User information about the anticipated contracted capacity profile to assist in making decisions about capacity renewals.”¹⁶⁶

188 DBCTM categorically rejects this misapplication of the chart. DBCTM’s actual view of total foreseeable demand in the market is reflected in the DBCTM Submission, having regard to HoustonKemp's analysis and based on AME data.¹⁶⁷ DBCTM further notes that, notwithstanding the inapplicability of the chart in estimating demand, should it be reproduced on the same basis as of July 2018 it would reflect the figures per below.

189 The chart aggregates three sources of information to derive an indicative forecast contract profile:

- 189.1 Current contracted capacity;
- 189.2 DBCT User advice on likely renewals; and
- 189.3 Advice from Access Seekers who are actively communicating with DBCTM at the time regarding future expected capacity requirements.

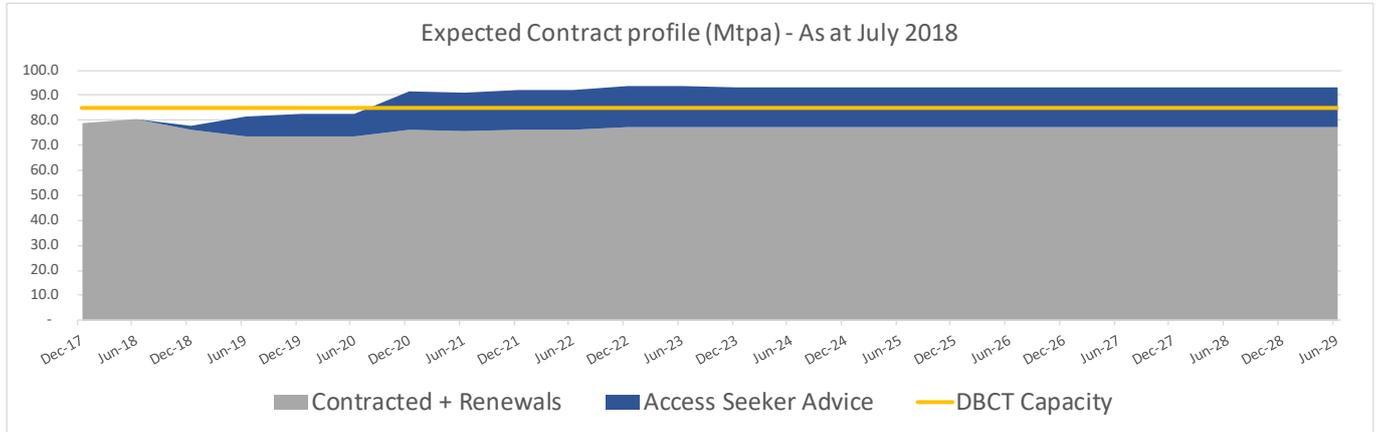
¹⁶⁵ User Group Submission, pages 60 to 61

¹⁶⁶ The User Group sent a clarification e-mail to the QCA noting this on 4 July 2018

¹⁶⁷ DBCTM Submission at [201] to [219]; Addendum to DBCT Submission, 18 June 2018

190 DBCTM notes that on 23 February (two days subsequent to providing the chart to the User) it released 4.2Mtpa to the access queue. In response, DBCTM received notices from interested parties totalling 13.17Mtpa (by 11 April) informing DBCTM that they were ready to enter into negotiations to progress to an access agreement. As such, if the chart were to have been produced on 12 April it would have gone up to ~90Mtpa. The chart below is as of July 2018, and shows over 16Mtpa in confirmed interest from Access Seekers¹⁶⁸.

Figure 4: Expected contract profile DBCT - as at July 2018



191 DBCTM notes that both the chart above and the chart from the User Group Submission only include information from current Access Holders and Access Seekers. The chart does not include any allowances for potential future access seekers¹⁶⁹ and there are no allowances for mines that use AAPT that may return to DBCT at the end of their contracts.

192 The User Group claimed that the chart or “demand projection” is notable for two reasons:

192.1 firstly it shows that over the next 7 or so years until July 2025, DBCTM has a clear view that demand is well below the existing capacity of DBCT; and

192.2 even in the later years, DBCTM expectations that the demand remains below the existing capacity of DBCT.¹⁷⁰

193 By the same (incorrect) logic, the chart as produced today using exactly the same method but with updated data, would produce the opposite ‘notable’ characteristics. Namely, it shows the ‘demand projection’ as exceeding the terminal’s capacity by 2020.

194 PwC relies on this chart (again, mischaracterised as “DBCTM’s forecast of future demand”) in developing its notional future demand profile for the purpose of the least cost analysis in the PwC Report.¹⁷¹

195 In conclusion, the User Group Submission’s chart is not DBCTM’s projection of demand, is irrelevant for the purposes of assessing total foreseeable demand in the market, and should be attributed no weight by the QCA.

User Group projections

196 No reliance can be placed on the User Group projection of demand for DBCT. The User Group does not disclose that projection or the basis for the projection. It is not an independent forecast of demand and is likely to be biased. The DBCT User Group is arguing for DBCT to remain regulated and therefore can be expected to produce a forecast that achieves this end.

¹⁶⁸ Refer to Figure 7- DBCTM Access Requests

¹⁶⁹ User Group Submission, page 8 – refers to Whitehaven Coal as a potential future access seeker

¹⁷⁰ User Group Submission, page 61

¹⁷¹ PwC Report, page 25

- 197 Further, the User Group acknowledges that the User Group demand projections may understate demand due to the DBCT User Group not having full visibility of all potential new projects which may create demand.
- 198 Accordingly, the User Group's submissions by reference to their own projections should be given no weight by the QCA.
- 199 In addition, the User Group projection of demand for DBCT has the same flaws as the other forecasts referred to in paragraph 149 above – in particular, the projection is confined to DBCT and does not represent foreseeable demand in the market in which the DBCT service is provided.

DBCT contracted capacity profile

- 200 DBCTM agrees that the contracted capacity profile of existing DBCT users does not provide an accurate estimate of future demand.¹⁷² This approach has the flaws identified in paragraph 149 above in that it is not an estimate of demand in the market. It also fails to take into account future users of the DBCT service over the declaration period.
- 201 While access contracts are evidence of foreseeable demand for DBCT, the identification of foreseeable demand is not limited to volumes contracted under existing access contracts with DBCT because it does not represent foreseeable demand over the declaration period or market demand.
- 202 Regarding the relevance of access contracts to the criterion (b) analysis, DBCTM agrees with the opinion of Michael O'Bryan QC of 30 May which is Attachment 3 to the QRC Submission on the CQCN declaration review that:¹⁷³
- 202.1 access contracts for the service have limited relevance to the criterion (b) assessment;
 - 202.2 the only relevance of such contracts is to provide information as to foreseeable demand in the market for the service as the contracts are evidence of such demand;
 - 202.3 the identification of total foreseeable demand is not limited by reference only to volumes contracted under existing contracts, since those volumes may not exhaustively comprehend the total foreseeable demand over the declaration period; and
 - 202.4 the assessment of the total foreseeable demand must be undertaken regardless of the extent of information that is available from relevant access contracts, and must include all potential sources of demand for the service.

Failure to account for throughput being less than contracted capacity

- 203 In its discussion of foreseeable demand and whether that demand exceeds the capacity of DBCT, the User Group fails to account for throughput being less than terminal capacity.
- 204 As explained in the DBCTM Submission, when assessing whether DBCT can meet total foreseeable demand in the market, demand for contract capacity is the appropriate measure because we are assessing whether demand will exceed DBCT's capacity.¹⁷⁴ DBCT can only contract to its capacity and in practice demand for contracted capacity is greater than throughput.
- 205 HoustonKemp explains in the HoustonKemp Report on (b) that in practice, demand for coal terminal capacity is realised as take-or-pay contracts rather than volume of coal handled.¹⁷⁵ Under these

¹⁷² User Group Submission, page 63

¹⁷³ Michael O'Bryan QC Opinion, Attachment 3, QRC Submission - CQCN QCA Declaration Review Staff Issues Paper, 30 May 2018 at [74] to [77]

¹⁷⁴ DBCTM Submission at [207] to [210] and [221]

¹⁷⁵ See further explanation of this assumption on page 37 of the HoustonKemp Report on (b)

arrangements, it is normal for contracted capacity to exceed the volumes of coal handled by a significant margin, even in a long run equilibrium. For example:

- 205.1 despite having contracts of approximately 80Mtpa, during 2017 DBCT served volumes of 65.0Mt – representing unserved contracted volumes of 19 per cent; and
- 205.2 despite having contracts estimated at 72Mtpa, RGTCT served only 59.8Mt of coal in 2016-17, representing unserved contracted volumes of 17 per cent.
- 206 HoustonKemp explains that the apparent excess levels of contracted capacity and the empirical observations underpinning its utilisation is consistent with rational decision-making by miners because it provides an option value for future expansions of mining capacity.¹⁷⁶ This reflects DBCTM's experience that users look to preserve options to increase throughput through incremental greenfield or brownfield expansions of production (inter alia). Castalia's submission that mine geology means that "it is manifestly inefficient to achieve a constant coal product output"¹⁷⁷ provides another reason why 'over contracting' occurs.
- 207 Over the long term, HoustonKemp assumes that demand for contract capacity is derived from the demand for coal throughput, with demand for throughput being 90% of the demand for contract capacity.¹⁷⁸ This is equivalent to assuming that, on average, 10% of contracted capacity is not used.
- 208 DBCTM notes, despite its failure to take it into account in its analysis of foreseeable demand, the User Group has indirectly acknowledged this concept of 'contractual congestion', by asserting that "HPCT is currently operating at or near full capacity – at ~49 mtpa" compared to a current nameplate capacity of 55Mtpa.¹⁷⁹

AME production forecasts are most realistic and credible

- 209 The Wood Mackenzie February 2018 forecast of DBCT throughput presented in the User Group Submission increases to a maximum of 69Mtpa over 2024 to 2025 before sharply falling away to 43Mtpa.¹⁸⁰ A forecast that throughput at DBCT will be approximately half of capacity as soon as 2030 is not credible and reflects the approach used for long term forecasting by Wood Mackenzie.
- 210 Wood Mackenzie's forecasting methodology is confined to estimating only 'marketable reserves' and disregards measured and indicated resources that are exclusive of reserves under the JORC code. RMI noted this issue with Wood Mackenzie's forecasting methodology for its weighted average mine life analysis in its report for the QCA on the DBCT 2015 DAU. RMI observed that 'the use of reserve tonnages only, significantly underestimates the likely supply of coal to port, as it disregards Measured and Indicated coal resources that are exclusive of reserves'.¹⁸¹ In its draft decision, the QCA summarised RMI's view as follows:¹⁸²

Exclusion of measured and indicated resources— the estimate uses only 'marketable reserves' and appears to disregard measured and indicated resources under the JORC code, which may legitimately be used for mine-planning purposes.

The expenditure for mining and processing feasibility investigations that support estimation of 'marketable reserves' is typically delayed by mine management until it is required. Therefore, reserve estimates will not represent the tonnage of economically extractable coal over a longer time period.

¹⁷⁶ HoustonKemp Report on (b), page 37

¹⁷⁷ Castalia Report, page 20

¹⁷⁸ HoustonKemp Report on (b), page 37

¹⁷⁹ User Group Submission, page 30

¹⁸⁰ User Group Submission, page 59

¹⁸¹ RMI, *DBCT 2015 DAU Review of the Economic Life of DBCT Assets*, Final Report, December 2015, page 18

¹⁸² QCA Draft Decision, *DBCT Management's 2015 draft access undertaking*, April 2016, page 118

- 211 This same issue is evident in Wood Mackenzie's long term production forecasts referred to in the User Group Submission, PwC Report and this submission. As a result of this issue, Wood Mackenzie's long term forecasts tend to show a drop in mine production, which is inconsistent with reality.
- 212 The AME production forecasts are also more consistent with the positive outlook for coal production, market announcements as to new project announcements (including from Users) and recent market activities than those presented by the User Group and PwC.
- 213 On 19 June 2018, the Minerals Council of Australia (MCA), which counts numerous members of the User Group among its members¹⁸³, published a report from Commodity Insights titled "Market Demand Study : Australian Export Thermal Coal".¹⁸⁴ In a media release announcing the report, the MCA referred to Commodity Insights as "expert industry analysts". In summary, the report took an extremely positive view of future demand for Australian thermal coal, concluding that "Asian thermal coal import demand is expected to grow over 400Mt over the period, from 740Mt in 2017 to 1147Mt in 2030."
- 214 The User Group's forecasts are not supported by forecasts from the Office of the Chief Economist (OCE) or budgets developed by the Queensland Treasury or the Federal Treasury.
- 214.1 The OCE expects Australia to expand its coking coal production over the next 25 years, primarily targeting rapidly growing steel producers like India.¹⁸⁵ The OCE also forecasts Australian metallurgical coal exports to increase by a CAGR of 3.5% to 2023, which will come *'on the back of firm prices, as Australian producers attempt to keep up with rising demand in India and ASEAN. Both have few metallurgical coal resources of their own'*.¹⁸⁶
- 214.2 The Queensland 2018-2019 budget shows coal exports increasing by 14% by 2021-2022¹⁸⁷
- 215 These organisations inform the Australian government and also inform investors in the sector. The User Group has chosen not to take account of the views of these better informed organisations in their submission. The strongly positive long-term outlook for Australian metallurgical and thermal coal is supported by global factors including both transformational infrastructure developments and incremental renewal programs, including for example:
- 215.1 The United States US\$4.5 trillion infrastructure upgrade, beginning with the US\$1.5 trillion Trump infrastructure plan;¹⁸⁸
- 215.2 China's US\$1.5 trillion Belt & Road Initiative, with BHP on record as expecting an additional 150 Mtpa of steel production;¹⁸⁹
- 215.3 India's economic transformation¹⁹⁰ expected to produce another 60 Mtpa of steel just to meet its own demands;
- 215.4 Saudi Arabia's US\$500 billion NEOM mega-city development;¹⁹¹
- 215.5 Global investment of US\$1 trillion in renewable energy infrastructure developments¹⁹² in transition to a low-carbon economy.

¹⁸³ <http://www.minerals.org.au/member-companies>

¹⁸⁴ MCA Commodity Insights Report - [Market Demand Study : Australian Export Thermal Coal](#)

¹⁸⁵ Office of the Chief Economist [Resources and Energy Quarterly - December 2017](#)

¹⁸⁶ Office of the Chief Economist [Resources and Energy Quarterly - March 2018](#)

¹⁸⁷ Page 183, <https://budget.qld.gov.au/files/BP2-2018-19.pdf>

¹⁸⁸ Business Insider 12-Feb-18 [America's infrastructure is falling apart — here's a look at how bad things have gotten](#)

¹⁸⁹ Brisbane Times 26 Sep-17 [BHP tips surge in steel demand on China's 'belt and road' plan](#)

¹⁹⁰ AFR 04-Jul-18 [Indian superpower fuelled by Aussie coal](#)

¹⁹¹ CNBC 10-May-18 [Saudi's \\$500 billion mega-city NEOM is attracting 'overwhelming' interest from investors](#)

¹⁹² AFR 03-Nov-17 [Macquarie Group sees big dollars in renewable energy investment](#)

- 216 The User Group's views are not supported by their own activities in the sector. Specifically the User Group Submission consulted with only one of the potential access seekers to DBCT, and did not note any link between the sale of tenements and the intentions of those parties buying the tenements. The Users have dismissed any coal tenement transactions as part of normal activity in that market, instead of an indication of increasing demand for the DBCT service. The majority of the purchasing parties have made public statements to the effect that the acquisitions are for the purpose of developing new mines or expanding existing operations, including for example:
- 216.1 Peabody recently sold the Burton mine to New Hope. New Hope expects to recommence operations for the Burton-Lenton project at 2 Mtpa¹⁹³
 - 216.2 Peabody recently sold the Olive Downs-Willunga tenement to new entrant Pembroke Resources. Pembroke intends to develop this resource to produce 20Mtpa¹⁹⁴
 - 216.3 Peabody recently sold the Wotonga South tenement to existing DBCT User Stanmore Coal. Stanmore will include this coal in its Isaac Plains South project that is being developed south of the Isaac Plains Complex¹⁹⁵
 - 216.4 BMA recently sold the closed Gregory-Crinum mine to Sojitz. Sojitz intends to recommence operations at 3 Mtpa¹⁹⁶
 - 216.5 Aquila sold 50% of the Eagle Downs project to new entrant South32. South32 intends to accelerate the development of the coal mine to produce 4.5 Mtpa¹⁹⁷
 - 216.6 Rio Tinto sold its share of the Kestrel mine to new entrant EMR-Adaro. The sale price of US\$2.25 billion implied a long term coking coal price of US\$170¹⁹⁸. EMR-Adaro intends to continue operations to "...get the returns from non-price related improvements, such as production ramp-up, cost optimisation and so on".
 - 216.7 Rio Tinto sold its 75% holding in the Winchester South tenement to Whitehaven Coal. Whitehaven Coal subsequently acquired the remaining 25% from Scentre Group noting that: *"...the Winchester South project is a significant strategic acquisition for the company which offers an opportunity to develop and operate a high-quality, large scale coking coal mine in one of the world's premier coking coal basins."* Coal production is expected in the range of 7.5 to 15 Mtpa¹⁹⁹
- 217 The following market announcements with regard to brownfield expansions and new project developments, by certain DBCT Users, further contradicts the views in the User Group Submission:
- 217.1 Anglo American Met Coal communicated plans to aggressively increase their Australian operations.²⁰⁰ Anglo announced plans to add another 25% production capacity to its Grosvenor and Moranbah mines and extend the life of its Capcoal operation by bringing the Aquila longwall out of care and maintenance
 - 217.2 BHP announced that their Caval Ridge Southern Circuit project will add 2Mtpa to exports²⁰¹, and further growth opportunities include: expanding Blackwater mine by 4Mtpa, further potential expansion of Caval Ridge of 5.7Mtpa and underground mines at Goonyella and Wards Well which could produce an extra combined 15Mtpa.²⁰²

¹⁹³ Courier Mail 8-Dec-17 [New Hope seeks board approval for Burton-Lenton project](#)

¹⁹⁴ Pembroke Resources May 2018 [EA application for Olive Downs Project](#)

¹⁹⁵ Australian Mining 12-Jun-18 [Stanmore to acquire Wotonga South from Peabody Energy](#)

¹⁹⁶ The Australian 30 May 2018 [Japan's Sojitz to reopen Gregory-Crinum coal mine, bought from BHP](#)

¹⁹⁷ AFR 29-May-18 [South32 close to coking coal deal at Eagle Downs](#)

¹⁹⁸ AFR 12-Jun-18 [Queensland joins the coking coal price upgrade party](#)

¹⁹⁹ Whitehaven Coal 22-Mar-18 [Whitehaven to acquire Winchester South Project from Rio Tinto](#)

²⁰⁰ The Australian 18 June 2018 [Anglo plans aggressive metallurgical coal mine expansion](#)

²⁰¹ AFR 25-Oct-17 [Whitehaven, Stanmore chase coal acquisitions](#)

²⁰² The Australian 11 December 2017 [BHP mulls lifting output of coking coal as prices remain red hot](#)

217.3 Peabody announced plans for a new longwall at North Goonyella. Peabody CEO Glenn Kellow said during the company's Q4'17 earnings call in February 2018:

“We will be evaluating opportunities to particularly upgrade our metallurgical coal platform including the development of the new longwall investment at North Goonyella”
 “In addition, we continue to work on extending the life of the Moorvale mine. These actions are expected to underwrite double-digit met volumes for the foreseeable future.”²⁰³

Estimating total foreseeable market demand using Wood Mackenzie production forecasts

- 218 As described earlier in this submission, the incorrect manner in which the User Group and PwC define the market results in a flawed approach to estimating total foreseeable demand in that market. This has the result that the User Group and PwC significantly understate total foreseeable demand in the market.
- 219 DBCTM maintains that the AME production forecasts are the most realistic and credible available forecasts. Nonetheless, to show that the difference in data supplier is not determinative, given the User Group and PwC rely on Wood Mackenzie production forecasts in estimating demand, HoustonKemp and DBCTM both estimate foreseeable demand using a market demand approach and Wood Mackenzie production forecasts.
- 220 HoustonKemp concludes, using production forecasts developed by Wood Mackenzie, that where total foreseeable market demand is estimated using a conventional approach to market definition total foreseeable demand in the market substantially exceeds the existing capacity of DBCT and exceeds the capacity of DBCT with all expansion options implemented.²⁰⁴ Given that total foreseeable market demand exceeds the reasonably possible maximum capacity of the DBCT service over the declaration period, criterion (b) is not satisfied.
- 221 In addition, HoustonKemp's analysis using Wood Mackenzie data shows that even if total foreseeable demand in the market is calculated so as to exclude volumes supplied at HPCT equal to the capacity of that terminal (i.e. 55Mpta) (an approach which HoustonKemp considers inappropriate for the reasons explained in HoustonKemp's two reports) total foreseeable demand in the market significantly exceeds the existing capacity of DBCT.
- 222 DBCTM also demonstrates using the geographic scope of the market in the Castalia Report and Wood Mackenzie February 2018 production forecasts that total foreseeable market demand exceeds the existing capacity of DBCT over the period for which the DBCT service would be declared.²⁰⁵
- 223 This analysis demonstrates that it is not least cost for total foreseeable demand to be served by DBCT alone, given that:
- 223.1 HoustonKemp explains that:²⁰⁶
- 223.1.1 a critical question in the assessment of criterion (b) for the DBCT service is whether total foreseeable demand in the market can be served within the existing capacity of the terminal or whether it exceeds the existing capacity of the terminal;
 - 223.1.2 the capital costs of the existing capacity at DBCT are sunk and many of the operating costs are likely to be fixed, if total foreseeable demand in the market can be met within the existing capacity of DBCT, the costs that may be avoided by meeting foreseeable demand elsewhere will be relatively low;
 - 223.1.3 conversely, if total foreseeable demand in the market exceeds the existing capacity of DBCT, then the incremental costs of meeting foreseeable demand above this capacity will be relatively high since they will reflect the capital costs of a capacity expansion;

²⁰³ IHS Markit 8 Feb-18 [Inside Coal - Big year in Australia leads to big year for Peabody Energy](#)

²⁰⁴ HoustonKemp Review on (b), pages 20 to 23

²⁰⁵ Appendix 4 - DBCTM Market Demand Analysis

²⁰⁶ HoustonKemp Review on (b), page 20

- 223.2 even where demand for HPCT is inappropriately excluded from the market, an expansion of DBCT would be required for DBCT to serve total foreseeable demand alone;
- 223.3 as explained below, HoustonKemp demonstrates that the incremental costs of serving foreseeable demand using capacity expansions at DBCT are considerably higher than the incremental costs of serving foreseeable demand using existing capacity at other terminals;²⁰⁷ and
- 223.4 PwC accepts that other terminals have capacity.²⁰⁸

Conclusion

- 224 For the reasons described above, the forecast of demand in the market presented in the User Group Submission and PwC Report is flawed and cannot be relied on by the QCA as a credible demand forecast.
- 225 The User Group is incorrect in its assertion that peak foreseeable demand is below the existing capacity of DBCT. The User Group reach this conclusion on the basis of an analysis that necessarily confines any demand estimate to the capacity of the terminal and fails to account for total foreseeable demand in the market.
- 226 The AME production forecasts utilised in the HoustonKemp Report on (b) and DBCTM Submission to estimate total foreseeable market demand remain the most credible and realistic forecasts of demand.
- 227 In any event, the analysis above demonstrates that even on the basis of Wood Mackenzie production forecasts, applying a conventional approach to market definition has the result that total foreseeable market demand exceeds the current and reasonably possible maximum capacity of DBCT in the declaration period. Accordingly, criterion (b) is not satisfied.

2.9 Meeting total foreseeable demand in the market at least cost

- 228 The User Group and PwC's flawed approach to defining the market and estimating foreseeable demand means that their least cost assessment does not properly assess whether DBCT can serve total foreseeable demand in the market at least cost. This is because:
- 228.1 they fail to recognise that there already a number of terminals in addition to DBCT serving demand in the market in which DBCT operates;
- 228.2 they significantly understate total foreseeable market demand with the result that:
- 228.2.1 the User Group's least cost assessment is undertaken on the incorrect premise that DBCT can meet total foreseeable demand in the market over the declaration period without expansion;²⁰⁹ and
- 228.2.2 PwC conducts its least analysis on the basis of an extremely low 'notional' maximum demand estimate of 95Mtpa, which does not represent total foreseeable market demand.²¹⁰
- 229 As discussed below, the User Group and PwC make additional errors in assessing whether it is least cost for DBCT to meet total foreseeable demand in the market alone. In particular, in estimating costs associated with meeting foreseeable demand using existing capacity at DBCT or at alternative coal terminals, PwC's estimates of those costs:

²⁰⁷ HoustonKemp Review on (b), section 5.2.1

²⁰⁸ PwC Report, pages 13 to 14

²⁰⁹ User Group Submission, page 67

²¹⁰ User Group Submission, page 67; PwC Report, page 33

- 229.1 are based on charges, which reflect average private costs rather than incremental social costs and therefore represent an incorrect basis for assessing the cost of meeting total foreseeable demand in the market; and
- 229.2 appear to fail to account for rail charges to DBCT on a like-for-like basis.
- 230 Accordingly, the QCA must wholly reject the criterion (b) assessment of the User Group and PwC.
- 231 The HoustonKemp Report on (b) remains the most appropriate assessment of whether it is least cost for DBCT to meet total foreseeable demand in the market alone. That report comprehensively demonstrates that it is not least cost for DBCT to meet total foreseeable demand alone – rather it is least cost for total foreseeable demand in the market to be met by a combination of coal terminals, including DBCT, HPCT, AAPT and RGTCT.

PwC approach fundamentally flawed

- 232 The PwC least cost assessment relied on by the User Group is fundamentally flawed in its approach to estimating costs associated with meeting total foreseeable demand using existing capacity at DBCT or at alternative coal terminals. PwC's estimates of these costs:
- 232.1 are based on charges, which reflect average private costs rather than incremental social costs and therefore represent an incorrect basis for assessing the cost of meeting total foreseeable demand in the market; and
- 232.2 appear to fail to account for rail charges to DBCT on a like-for-like basis.
- 233 In addition, PwC's assessment of the costs of meeting total foreseeable demand using available capacity at existing terminals is based on data sourced from users rather than an independent body. PwC finds a much greater difference between the charges associated with exporting coal through DBCT as compared to exporting coal at other locations compared to HoustonKemp's calculations based on data sourced from Wood Mackenzie and AME.
- 234 The rail and port charges provided by individual users of the User Group relied on by PwC²¹¹ have not been made available to the QCA or DBCTM so that the veracity of that information can be tested. The rail and port charge data provided by the User Group to PwC is not sourced from an independent body and given that the User Group wants DBCT to remain regulated (as shown in the User Group Submission), it is likely to be biased. Accordingly, the QCA should give that information no weight and instead accept the rail and port charge data used by DBCTM and HoustonKemp which has been sourced from independent industry analysts Wood Mackenzie and AME and has been disclosed.
- 235 HoustonKemp demonstrates, using incremental costs based on AME (terminal charges) and Wood Mackenzie (rail charges), that the costs of using available capacity at existing terminals is very low compared to any of the expansion scenarios costed by PwC.²¹²

PwC does not measure incremental costs

- 236 Significantly, the least cost assessment in the User Group Submission and the PwC Report is undertaken on an incorrect basis. The User Group and PwC do not assess the incremental cost to society of meeting total foreseeable demand by use of DBCT alone compared with foreseeable demand being met by DBCT and one or more alternative facilities. Instead the PwC's assessment of the costs of meeting foreseeable demand

²¹¹ PwC Report, pages 28 and 33

²¹² HoustonKemp Review on (b), page 34

using available capacity at existing terminals is based on charges, which reflect average costs rather than incremental costs.²¹³

- 237 The effect of this incorrect use of average costs is that PwC significantly overstates the relative cost of meeting foreseeable demand using available capacity at existing terminals.²¹⁴ HoustonKemp shows that when PwC's comparison is reframed to use incremental costs, its analytical framework confirms that meeting total foreseeable demand in excess of DBCT's current capacity will be achieved at least cost using available capacity at existing terminals other than DBCT, including AAPT and RGTCT.
- 238 HoustonKemp explains that there are important deficiencies with PwC's approach to estimating the costs associated with meeting foreseeable demand using existing capacity, whether at DBCT or at alternative coal terminals.²¹⁵ In particular, PwC's estimates of these costs:
- 238.1 represent an incorrect basis for assessing the cost of meeting total foreseeable demand in the market because they reflect average costs rather than incremental costs; and
 - 238.2 reflect an 'apples and oranges' comparison because they appear to include only the terminal cost in respect of DBCT, but both the terminal and rail costs for other terminals
- 239 In the HoustonKemp Report on (b), HoustonKemp observes that having regard to incremental costs in the least cost assessment is appropriate because:²¹⁶
- 239.1 the sunk costs of existing rail and terminal infrastructure have already been incurred and will not be incurred again over the period for which the service would be declared; and
 - 239.2 even if the sunk costs of existing rail and terminal infrastructure were to be taken into account in an assessment of least cost, these costs would be captured under all scenarios in which total foreseeable demand in the market is met and are therefore not relevant to determining whether the facility for the service can meet that demand at least cost.
- 240 This approach is also consistent with the Tribunal's approach in its 2010 Pilbara rail decision.²¹⁷
- 241 Costs that are not incremental will be incurred regardless of whether they are used to meet demand or not.²¹⁸ This means that they cannot be avoided if foreseeable demand is met elsewhere. PwC's framework for assessing least cost does not take this into account.
- 242 As noted above, the costs associated with the construction of existing coal terminals are sunk.²¹⁹ These costs were incurred in the past and can now not be avoided, regardless of whether the terminal is used or not prospectively. Similarly, many of the costs associated with the operation of existing coal terminals are fixed and do not change based on the utilisation of the terminal.
- 243 Most of the costs cited by PwC as being relevant to the use of existing capacity at terminals are not incremental costs and would be incurred whether or not this capacity is used to meet foreseeable demand.²²⁰ PwC should therefore either:
- 243.1 ignore these non-incremental costs from its assessment of the cost of meeting foreseeable demand using existing capacity; or

²¹³ DBCTM explains the appropriate costs for the least cost analysis in the DBCTM Submission at [168] to [188]

²¹⁴ HoustonKemp Review on (b), page 29

²¹⁵ HoustonKemp Review on (b), page 31

²¹⁶ HoustonKemp Report on (b), page 21; DBCTM Submission at [182]

²¹⁷ DBCTM Submission at [171] to [173]; In the matter of Fortescue Metals Group Limited [2010] ACompT 2 at [850], [851] and [906]

²¹⁸ HoustonKemp Review on (b), page 31

²¹⁹ HoustonKemp Review on (b), page 31

²²⁰ HoustonKemp Review on (b), page 32

243.2 factor these non-incremental costs into its assessment of the cost of meeting foreseeable demand from all alternatives, including alternatives using existing capacity and those using expanded or new capacity.

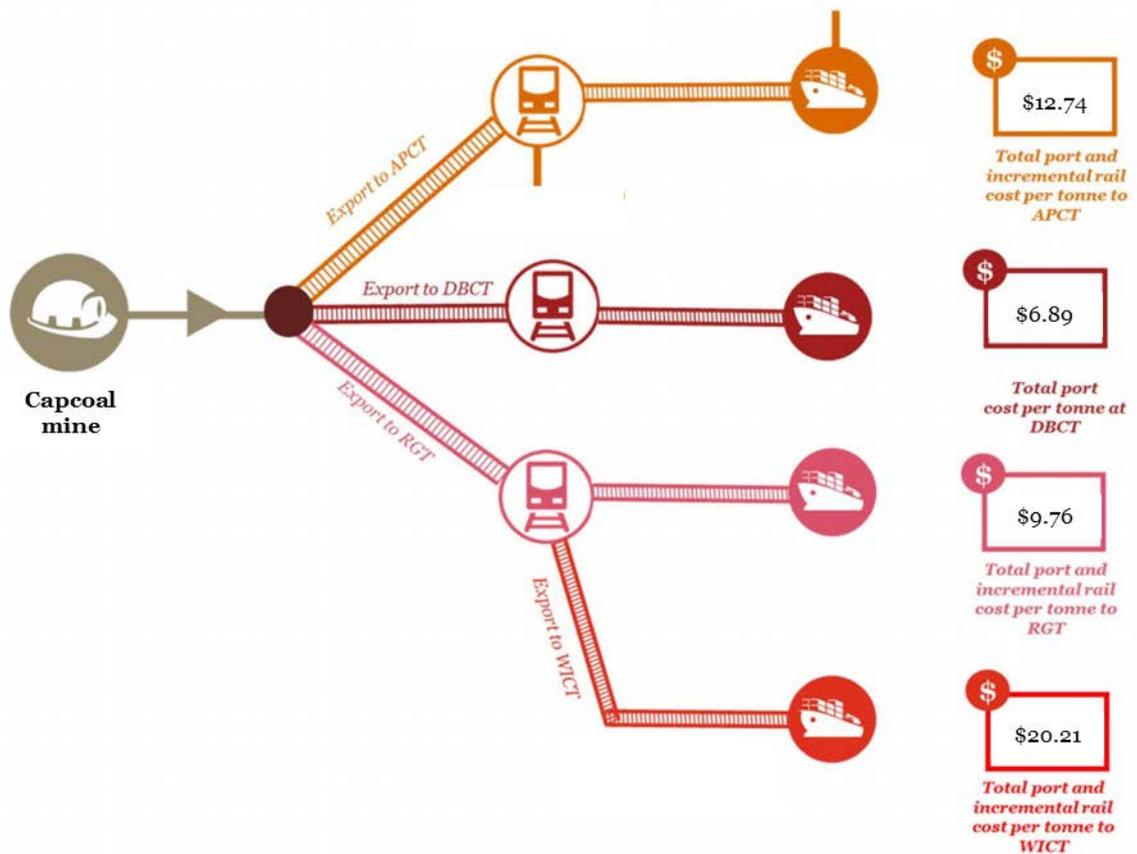
244 The effect of these options is the same. HoustonKemp demonstrates their effect by reference to the example of alternative charges for Capcoal mine to export coal through DBCT and alternative coal terminals.²²¹ HoustonKemp shows that the incremental costs of using available capacity at existing terminals are:

244.1 much lower than the charges associated with using available capacity at existing terminals and

244.2 much lower than any of the DBCT expansion scenarios costed by PwC.

245 Figure 5.1 in the HoustonKemp Report shows HoustonKemp's calculation of the alternative charges for Capcoal mine to export coal through DBCT and alternative coal terminals. It demonstrates that the charges associated with using the DBCT service are lower than the charges associated with other terminals, which is consistent with Capcoal being located within the relevant market in which the DBCT service is supplied.

Figure 5: Alternative cost pathways for Capcoal mine using charges

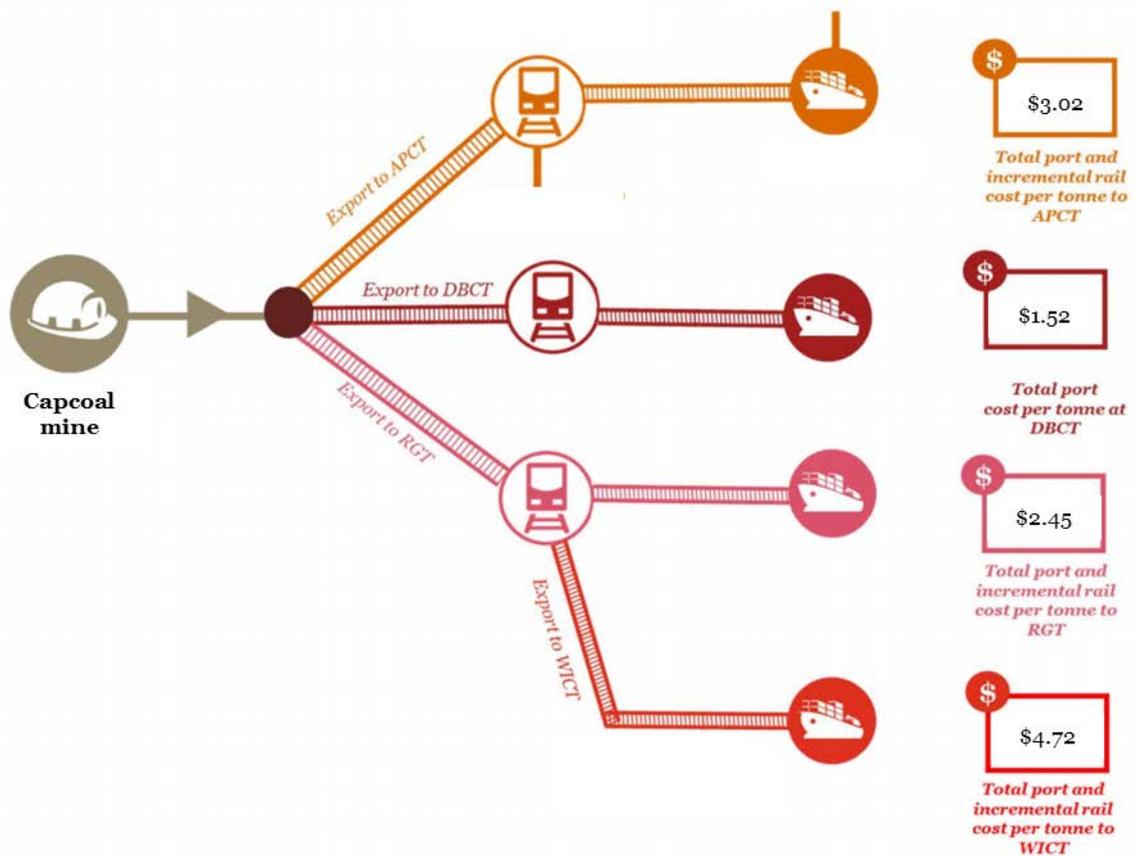


246 Figure 5.2 in the HoustonKemp Report shows the following alternative cost pathways for Capcoal mine using incremental costs.²²²

²²¹ HoustonKemp Review on (b), pages 32 to 34

²²² HoustonKemp Review on (b), page 34

Figure 6: Alternative cost pathways for Capcoal mine using incremental costs



247 These can be compared to the cost per tonne under the expansion scenarios considered in the PwC Report of.²²³

247.1 \$8.02 per tonne, using expanded capacity at DBCT with the Zone 4 and 8X expansions;

247.2 \$28.46 per tonne, using new capacity at Dudgeon Point (stage 1); and

247.3 \$32.47 per tonne, using expanded capacity at DBCT with the Zone 4, 8X and 9X expansions.

248 Accordingly, using Capcoal mine as an example, given total foreseeable demand exceeds the existing capacity of DBCT (as explained above), using available capacity at RGTCT, AAPT and WICET are all lower cost means of meeting foreseeable demand than expanding DBCT.²²⁴

PwC's comparison not on a like-for-like basis

249 PwC's comparison of charges for exporting coal from DBCT as against alternative coal terminals may not be on a like-for-like basis.²²⁵ PwC compares the 'total port cost per tonne at DBCT' as against the 'total port and incremental rail cost per tonne' to other terminals but does not explain the calculation of the 'incremental rail cost'. Putting aside the issue of PwC's use of average costs, the comparison would be appropriately specified if the 'total port and incremental rail cost per tonne' were calculated as the alternative terminal charge plus the rail charges to the alternative terminal, less the rail charges to DBCT. However, it appears that PwC may have adopted estimates of the 'total port and incremental rail cost per

²²³ PwC Report, page 34

²²⁴ HoustonKemp Review on (b), page 34

²²⁵ HoustonKemp Review on (b), page 34

tonne' without deducting the rail charges to DBCT, on the assumption that those rail charges will be incurred in any case due to take-or-pay transport arrangements.

250 HoustonKemp explains that this is not a reasonable basis for assessing the costs of meeting foreseeable demand.²²⁶ Existing contractual relationships do not affect costs to society and are not relevant to the assessment of least cost. This approach to assessing least cost overestimates the relative cost of meeting foreseeable demand using available capacity at other terminals.

Costs where surplus capacity exists

251 As noted above, the User Group's flawed approach to estimating total foreseeable demand in the market has the result that the User Group's least cost assessment is undertaken on the incorrect premise that DBCT can meet total foreseeable demand in the market over the declaration period without expansion.

252 In addition, the User Group is incorrect in its assertion that DBCT currently has existing surplus capacity such that all present demand can be met by the existing terminal.²²⁷ DBCT does not have sufficient capacity to meet responses to capacity released this year. DBCT's current contracted capacity is 76.30Mtpa. During the first half of 2018, DBCTM released 4.2Mtpa and 3.45Mtpa respectively of long term, renewable access (totalling 7.65Mtpa) to the access queue. In response, DBCTM has received responses from interested parties totalling 13.67Mtpa (by 5 July 2018) informing DBCTM that they are ready to enter into negotiations to progress an access agreement. Further, a new Access Seeker has joined the DBCT Access Queue and has requested a commencement date for long term capacity within the 2018-19 financial year. This Access Agreement would ramp up [REDACTED] within two years. The following table shows the makeup of the 16.67Mtpa of access requests above current contracted capacity that exists at DBCT as at 9 July 2018.

Figure 7: DBCTM Access Requests

Customer	Mine	Tonnage
[REDACTED]	[REDACTED]	1.60
[REDACTED]	[REDACTED]	2.00
[REDACTED]	[REDACTED]	0.90
[REDACTED]	[REDACTED]	1.00
[REDACTED]	[REDACTED]	1.50
[REDACTED]	[REDACTED]	1.20
[REDACTED]	[REDACTED]	2.65
[REDACTED]	[REDACTED]	2.82
[REDACTED]	[REDACTED]	3.00
Total		16.67

253 DBCTM also notes that while the User Group asserts that there will be no need for an expansion at DBCT to serve total foreseeable demand, the Queensland Resources Council (QRC) (which consists of the same users as the User Group) does not agree. Its submission on the CQCN declaration review states that:²²⁸

253.1 given capacity and demand requirements, the CQCN is unlikely to be able to meet total foreseeable demand in the market over the declaration period without expansion; and

²²⁶ HoustonKemp Review on (b), page 35

²²⁷ User Group Submission, page 67

²²⁸ QRC submission - CCN, QCA Declaration Review, Staff Issues Paper, 30 May 2018, pages 12 to 13

- 253.2 having regard to a report by Calibre (**Calibre Report**), the expansion would include a decrease in headway on the Goonyella system and development of a fourth loop at DBCT.²²⁹
- 254 This expansion work is consistent with the Goonyella system infrastructure requirements noted in the Aurizon Network Development Plan for a trigger volume of 14Mtpa due to a 4Mtpa and 10Mtpa expansion of North Goonyella and Blair Athol branch lines respectively, which corresponds with the Zone 4 and 8X expansions at DBCT.²³⁰ The Calibre Report is of the view that these upgrades are required to satisfy foreseeable demand for tonnage over the relevant period.²³¹ It states that increased capacity of the Goonyella network will need to be undertaken in conjunction with port capacity upgrades at DBCT and HPCT.²³²

Alternative facilities for least cost assessment

- 255 In its least cost assessment, PwC considers the costs of developing a greenfield facility such as Dudgeon Point. In the case of DBCT, it is not necessary to have regard to facilities that are yet-to-be constructed for the least cost assessment. This is because as described in the DBCTM Submission on criterion (b) there are four alternative terminals to DBCT that supply coal handling services for coal exports, which must be considered in the QCA's assessment of criterion (b). Those terminals are:
- 255.1 HPCT, which is also located at the Port of Hay Point near Mackay;
 - 255.2 AAPT, which is located at the port of Abbot Point near Bowen;
 - 255.3 RGTCT, which is located at the port of Gladstone near Gladstone; and
 - 255.4 WICET, which is located at the port of Gladstone near Gladstone.
- 256 The User Group suggests that where there is no other terminal operating in the market, it is not appropriate to consider the costs of meeting demand from other terminals. DBCTM and HoustonKemp find that there are other terminals servicing the market in which the DBCT service is provided.²³³ Even if this were not the case, contrary to the User Group's suggestion it is appropriate to consider the costs of meeting foreseeable demand from terminals that do not currently provide services in the market. HoustonKemp observes that this is particularly important when demand is forecast to be increasing over time, potentially driving expansions of terminal capacity.²³⁴ Since terminal expansions may be very costly, it is likely that the prospect of these costs may make it less costly to serve demand that exceeds capacity using available capacity at other terminals. An assessment of the least cost means by which to serve total foreseeable demand can objectively be made by reference to the option of any facility whether inside or outside the market.²³⁵

Expansions at alternative facilities

- 257 Expansions at alternative facilities are also relevant for an assessment of how total foreseeable demand in the market is met at least cost.²³⁶ This was one of the questions raised in the Staff Issues Paper.²³⁷
- 258 In raising this issue, the Staff Issues Paper notes that section 76(3) of the QCA Act is explicit about having regard to expansion at the facility for the service and is silent about considering expansion at competing facilities. Section 76(3) of the QCA Act concerns the facility for the service and not alternative facilities

²²⁹ Calibre Report, page 23

²³⁰ Aurizon Network Development Plan for 2016-17, pages 41 and 44

²³¹ Calibre Report, page 23

²³² Calibre, Independent Expert Report, Central Queensland Coal Network Regulation, page 22

²³³ HoustonKemp Report on (b), page 35; DBCTM Submission at [128]

²³⁴ HoustonKemp Review on (b), page 30

²³⁵ HoustonKemp Review on (b), page 30

²³⁶ DBCTM Submission at [175] and [237]; HoustonKemp Report on (b), page 22 and pages 38 to 45

²³⁷ QCA, Staff Issues Paper, Declaration reviews: applying the access criteria, April 2018, question 22 on page 15

because its purpose is to clarify that a facility that is at capacity can still be declared if it is reasonably possible for the facility to be expanded and the matters in section 76(2) are otherwise satisfied.²³⁸ This section reflects section 44CA(2)(a) of the CCA.²³⁹ The Explanatory Memorandum, Competition and Consumer Amendment (Competition Policy Review) Bill 2017, states at [12.30]:

Paragraph 44CA(2)(a) contemplates that a facility, which is at capacity, can be declared if it is reasonably possible for it to be extended or expanded. However, it is not necessary for the Council and the Minister to have regard to a facility at capacity as if it had expanded capacity, if it is not reasonably possible for that facility to be expanded or extended.

- 259 Consistent with the position that expansions at alternative facilities should be considered in the criterion (b) analysis, in applying a natural monopoly approach to criterion (b) in the Pilbara rail decision, the Tribunal considered whether there was a facility already in existence which if expanded or extended could satisfy third party demand.²⁴⁰
- 260 Total foreseeable demand is met is least cost when there is no opportunity to serve all or any part of that demand by another means at lower cost. Assessing how total foreseeable demand can be met at least cost therefore requires an understanding of the costs associated with all potential means by which foreseeable demand may be met. This includes potential expansions of alternative facilities.
- 261 The least cost assessment in criterion (b) involves comparison of whether it is least cost for:
- 261.1 DBCTM to meet total foreseeable demand itself (with or without expansions); or
- 261.2 DBCTM and one or more facilities (with or without expansions) to meet total foreseeable demand.
- 262 In that assessment, the incremental costs to society (or resource costs) that may be incurred in the coal supply network to meet foreseeable demand in the market include any costs of expanding DBCTM and alternative terminals to service total foreseeable demand.
- 263 As explained in the DBCTM Submission and the HoustonKemp Report on (b), HoustonKemp's model compares the costs of meeting total foreseeable demand using a combination of existing capacity at DBCT, expanded capacity at DBCT, existing capacity at other coal terminals and expanded capacity at other coal terminals.²⁴¹
- 264 HoustonKemp explains in its report that:²⁴²
- 264.1 if foreseeable demand in the market can be met at least cost by DBCT (or by expanded capacity at DBCT) then criterion (b) is satisfied; whereas
- 264.2 if foreseeable demand in the market can be met at least cost by a combination of DBCT and available or expanded capacity at one or more other coal terminals then criterion (b) is not satisfied.

²³⁸ DBCTM Submission at [74]

²³⁹ As noted in the DBCTM Submission at [69], the Explanatory Notes to the *Queensland Competition Authority Amendment Bill 2018* states that the changes to the access criteria in the QCA Act are 'intended to reflect changes being made at a national level to the access principles in the COAG *Competition Principles Agreement 1995* (the CPA access principles) and the National Access Regime established under Part IIIA of the CCA (page 1).

²⁴⁰ *In the matter of Fortescue Metals Group Limited* [2010] ACompT 2 at [942]

²⁴¹ DBCTM Submission at [175] and [234] and HoustonKemp Report on (b), page iv, sections 3 and 6

²⁴² HoustonKemp Report on (b) page 38. The results of HoustonKemp's least cost analysis are explained in sections 6 and 7 of the HoustonKemp report on (b). See also DBCTM Submission at [175] to [188] and [229] to [253].

Administrative and compliance costs

- 265 DBCTM and HoustonKemp did not take into account administration and compliance costs of regulation in the least cost assessment, rather DBCTM had regard to those costs in its submission on criterion (d).²⁴³ Nonetheless, DBCTM observes that the User Group's submission on this issue is incorrect in the following respects:²⁴⁴
- 265.1 the administration and compliance costs arising from declaration are not compensated through the corporate overhead allowances in the approved reference tariffs;
 - 265.2 in circumstances where administrative and compliance costs are taken into account in the criterion (b) assessment, it does not matter for the least cost assessment whether administration and compliance costs of regulation are a cost to DBCTM or users, since the key issue is whether the cost is an avoidable cost to society; and
 - 265.3 there is no basis for the contention that administration and compliance costs of regulation are less than costs which would be incurred where instead of being regulated the terms of access were the subject of contractual mechanisms. In this regard, DBCTM observes that there are significant costs incurred as a result of regulation, for example the costs of preparing DAAUs and all stakeholders incur significant costs in preparing submissions in regulatory resets.²⁴⁵

Coordination and opportunity costs

- 266 The User Group suggests that coordination and opportunity costs arising from DBCT being multiuser may increase because 'some structures that come with regulation (such as Terminal Regulations), which provide consistent rules to minimise coordination and opportunity costs, may not continue following declaration ceasing'.²⁴⁶ This will not be the case as each of these structures will continue to exist as demonstrated by the Access Framework to apply in the absence of declaration.

Conclusion on least cost

- 267 The least cost assessment by PwC relied on by the User Group should be rejected by the QCA.
- 268 It suffers from the flaws in defining the market and estimating foreseeable demand in the market described in detail above, and is undertaken on an incorrect basis using confidential input data that cannot be verified by the QCA or DBCTM.
- 269 It is based on average private costs rather than on incremental social costs.
- 270 The HoustonKemp Report on (b) remains the most appropriate assessment of whether it is least cost for DBCT to meet total foreseeable demand in the market demand. That report comprehensively demonstrates that it is not least cost for DBCT to meet total foreseeable demand alone – rather it is least cost for total foreseeable demand in the market to be met by a combination of coal terminals, including DBCT, HPCT, AAPT and RGTCT.

2.10 Response to QCA Staff questions on criterion (b)

- 271 The QCA Staff has asked the following questions arising from DBCTM's initial submissions on criterion (b):²⁴⁷

²⁴³ DBCTM Submission at [485] to [489]. DBCTM observes that section 76(5)(c) of the QCA Act provides that in considering whether criterion (d) is satisfied, the QCA and the Minister must have regard to the administrative and compliance costs that would be incurred by the provider of the service if the service were declared.

²⁴⁴ User Group Submission, page 68

²⁴⁵ DBCTM Submission at [485] to [489]

²⁴⁶ User Group Submission, page 69

²⁴⁷ QCA Staff Questions, Submissions on Initial Submissions

In describing the relevant market in which DBCT operates, DBCTM's submission said:

Over the period for which the service would be declared, HoustonKemp identifies this area as the region within which mines would prefer to use coal handling services provided at the Port of Hay Point. It describes this as the region from which future customers of DBCT may be drawn by reference to economic considerations. HoustonKemp identifies those mines that would prefer to use coal handling services provided at the Port of Hay Point as compared with coal handling services provided at other locations, assuming there were no constraints from existing supply contracts. HoustonKemp describe this as 'the market for coal handling services for mines that are proximate to the Port of Hay Point'.

HoustonKemp considers that the expected production from a mine is in this market if:

- it is physically feasible for that mine to use coal handling services at the Port of Hay Point; and
 - it is financially preferable for that mine to use coal handling services at the Port of Hay Point, given:
 - the coal handling options available to that mine; and
 - the rail and port charges involved with exercising each of these options.
- [paragraphs 119 and 120 of DBCTM's submission]

Questions

Staff invite submissions on the following matters:

(3) If mines in the market described by DBCTM would 'prefer to use' DBCT, why have some mines in the market described by DBCTM contracted for capacity at other terminals? Would this suggest that there are other factors that would affect their ability to use the coal handling service at DBCT?

(4) Staff note that for mines to use DBCT to meet their coal handling requirements, they must utilise the Goonyella system. To what extent, if any, is the capacity of Aurizon Network's Goonyella system, or other Aurizon Network systems, relevant to the QCA's considerations?

In considering the above matters, please provide information on whether it is physically feasible for the Goonyella system to accommodate the transport requirements of mines in the market described by DBCTM, such that those mines would prefer to use DBCT for all of their coal handling requirements.

- 272 Both of the QCA's questions raise the issue of whether capacity constraints, whether at a terminal or on rail systems that facilitate access to the terminal are relevant to the determination of geographic scope of the market and foreseeable demand. Accordingly, rather than addressing those questions separately, DBCTM provides the following response to both questions.
- 273 The capacity of the coal terminals and rail networks to accommodate foreseeable demand is not relevant to the determination of the market in which the DBCT service is supplied or of total foreseeable demand in the market, because:
- 273.1 the time dimension of the market is consistent with the formation of long term contracts, which underpin new investment in capacity in both terminal and rail capacity; and
 - 273.2 demand is determined by customers' preferences, which are not affected by factors that constrain the ability of suppliers to satisfy those preferences.

The time dimension of the market allows for long term contracts and changes in capacity

- 274 DBCTM explains in its discussion of the User Group's approach to market definition that capacity limitations at coal terminals or on rail systems are not relevant to the assessment of the market within which the DBCT

service is supplied.²⁴⁸ This is because the time dimension of the market reflects typical transactions, which are long term contracts that are capable of supporting investment in new capacity.

- 275 As noted previously, this aspect of market definition is clarified in HoustonKemp's criterion (b) report of July 2018:²⁴⁹

The appropriate time dimension of the market is the period over which the market operates – that is, the period over which transactions are normally conducted. A normal transaction for a coal handling service is a long term contract, and the time dimension of the market should be consistent with this practice.

...

It follows that the effects of long term contracts and capacity constraints on the ability and incentive of mines to switch providers of coal handling services in the short term would not be expected to affect market definition. Rather, the boundaries of the market must be determined over a long timeframe in which new contracts may be entered, potentially underwriting expansions.

- 276 Close competition between suppliers of coal handling services occurs over a time period consistent with these long term contracts – over the long term, in which terminal and rail capacity may change in order to meet demands from customers.

Demand and supply are independent concepts

- 277 Demand and supply are independent concepts and should not be conflated. Determination of total foreseeable demand in the market is not to be constrained by whether DBCT can service that demand alone - either having regard to DBCT's capacity or that of the Goonyella system. That is a question for the next stages of the analysis, which are concerned with whether DBCT has the capacity to meet total foreseeable demand in the market, and if so, whether it can do so at least cost.

- 278 HoustonKemp observes that a mine would prefer to use coal handling services provided at the Port of Hay Point, absent contractual constraints, when its total below rail, above rail and coal terminal charges associated with using these services are expected to be lower than those associated with any other option available to it.²⁵⁰

- 279 The determination of total foreseeable market demand should not be constrained by whether mines actually use the DBCT service and the rail network leading to DBCT. It is a determination of market demand and not merely demand for the DBCT service. HoustonKemp states that:²⁵¹

... the total foreseeable demand of interest is that 'in the market', rather than the foreseeable demand 'for the service'. This means that total foreseeable demand should be estimated as the total requirement for coal handling services arising for production (or expected production) of coal at locations that are within the geographic dimension of the market. Whether these volumes are being served, or will ultimately be served, by DBCT is not relevant to the calculation of foreseeable demand.

- 280 Estimating total foreseeable market demand by reference to the capacity of the rail network or DBCT would constrain total foreseeable demand to be no more than that capacity. This approach truncates total foreseeable demand in the market to be no more than DBCT's ability to supply coal handling services and in so doing, conflates the concepts of demand and supply.

²⁴⁸ HoustonKemp, Review on (b), pages 14 to 16

²⁴⁹ HoustonKemp, Review on (b), page 15

²⁵⁰ DBCTM Submission at [121]

²⁵¹ HoustonKemp Report on (b), page 19

- 281 If a potential customer would prefer to use DBCT because it involves the lowest combination of rail transport and coal terminal charges, but is unable to do so (for example because the terminal or the railway has insufficient capacity available) then that customer can be regarded as falling within the geographic dimension of the market served by DBCT. To exclude such a customer from the market would involve the artificial excising of particular customers from within a geographic envelope that clearly fell within the market served by DBCT. As noted above, HoustonKemp explains that is not appropriate to define the starting point for the geographic market by reference to the disparate locations of mines that use DBCT with the result that mines located adjacent to, or in between, those locations that use other terminals are excluded from the market.²⁵²
- 282 Further, the alternative facility serving that customer can also be regarded as being a supplier in the same geographic dimension of the market as DBCT, since it is a close available substitute to DBCT. Not to adopt this approach would involve the artificial excising of suppliers that were clearly serving customers within the same geographic envelope of customers served by DBCT.
- 283 An approach that constrains foreseeable demand to the capacity of the facility or the rail network servicing that facility will lead to an incorrect finding on whether the facility is a natural monopoly and is not an appropriate basis for the criterion (b) assessment. HoustonKemp explains that any approach that limits foreseeable demand in the market to that served by the facility of interest will typically find that the facility satisfies criterion (b), irrespective of the degree of substitution between any two facilities.²⁵³ The Productivity Commission also recognised this in recommending a market based approach to criterion (b) as it observed that by only considering demand for the facility's own service, rather than total demand in the market in which the service is supplied, the natural monopoly test could be satisfied for any location-specific facility with its output defined sufficiently narrowly, with enough spare (or expandable) capacity to accommodate a third party.²⁵⁴ An approach which constrains foreseeable demand to the capacity of the rail network servicing the facility would have a similar result.

Reasons why miners use other terminals

- 284 There may be a variety of reasons as to why some mines in the market described by DBCTM have contracted for capacity at other terminals including, for example, a lack of available capacity at DBCT. However, this does not mean that their forecast production should be excluded in estimating foreseeable demand for DBCT. Rather, the fact that customers proximate to DBCT are using an alternative terminal to DBCT demonstrates that the alternative facility is a substitute for DBCT and those alternative facilities supply coal handling services in the same market as DBCT.²⁵⁵ This is the case where the reason for the customer's use of an alternative facility is for reasons other than price, for example because DBCT, or rail, capacity was not available at the time. Some examples of mines proximate to DBCT using alternative terminals are set out in the following box.

²⁵² HoustonKemp Report on (b), pages 32 to 34

²⁵³ HoustonKemp Report on (b), page 34. See also HoustonKemp Review on (b), page 19

²⁵⁴ Productivity Commission Inquiry Report, National Access Regime, No. 66, 25 October 2013, page 155; DBCTM Submission at [97]

²⁵⁵ DBCTM Submission at [126] to [143]; HoustonKemp Report on (b), page 35

Examples of mines proximate to DBCT using terminals other than DBCT

As explained in the DBCTM Submission, geographically Middlemount Coal Mine (**MCM**) and LVM are located closer to DBCT than AAPT and the costs that would be incurred for these mines to use DBCT are lower than they are for using AAPT, however, those mines use AAPT to export their coal.²⁵⁶ At the time MCM and LVM were choosing where to export their coal, they decided to contract with AAPT since DBCT was capacity constrained and any expansion at DBCT was unlikely to be completed within sufficient time to meet their commercial needs. The fact that MCM and LVM would have preferred to use DBCT but that those tonnages were instead serviced by AAPT demonstrates that AAPT is a substitute facility and is a supplier in the same market as that for DBCT.

The User Group has claimed that LVM, MCM and BMC were 'effectively forced' to secure AAPT capacity due to DBCTM refusing to expand DBCT, in order to preference the development of the unregulated (stand-alone) Dudgeon Point Coal Terminal (**DPCT**) facility.²⁵⁷ This claim is false.

Appendix 6 provides the timeline of DBCTM's interactions with Jellinbah Resources (and other users generally). DBCTM explains the interactions that it had with Jellinbah Resources (LVM owner) from November 2008 to July 2011 about DBCT spare capacity and potential expansion capacity. Appendix 6 shows that DBCTM raised the stand-alone DPCT option for consideration with users only *after* Jellinbah Resources signed an access agreement with AAPT.

From November 2008 to June 2011, the only DPCT option that DBCTM discussed with LVM and other users/access seekers was the Dudgeon Point stockpile that would be physically connected with DBCT (and would form of the regulated DBCT). It was only in July 2011 that a stand-alone DPCT option was raised by DBCTM with users and access seekers. Accordingly, the DBCT User Group's claim (described above) is inaccurate and misleading.

Another reason that miners located proximate to Hay Point choose to use terminals other than DBCT is to optimise their mine portfolio. As noted in the DBCTM Submission, BHP takes a 'whole of CQCN' view in optimising the BHP Group's mine portfolio.²⁵⁸ BMA has a functional group, the BMA Coal Chain, which manages BMA's and BMC's transport logistics business operations, throughout the CQCN.²⁵⁹ The coal chain managed by BMACC comprises all mines, ports and railways within the BMA and BMC asset portfolio, including multi-user export coal terminal contractual entitlements at RGTCT, DBCT and AAPT. BMACC integrates its coal chain logistics planning to optimally match coal production, railing and shipping resources with customer demand within the constraints of the CQCN. It manages bi-directional coal movements across the CQCN between the different ports, dependent on blending and market requirements and operates within a 'virtual' integrated supply chain to match coal logistics to its coal production and shipping and customer demand profiles.²⁶⁰

Reference to 'physically feasible' in HoustonKemp analysis

285 Finally, DBCTM observes that it appears that the QCA's questions may arise in part from the reference to 'physically feasible' in the HoustonKemp analysis of market definition (referred to in the quote from the DBCTM Submission in the QCA's questions above). The reference to 'physically feasible' in the HoustonKemp analysis is not a reference to the capacity of the rail system to accommodate demand, but

²⁵⁶ DBCTM Submission at [140] to [143]

²⁵⁷ User Group Submission, page 33

²⁵⁸ DBCTM Submission at [163]; For example, BHP, [Coal: The path to improve returns](#), 21 June 2016 - at page 20 BHP states 'Capacity at four Queensland ports with matched rail flexibility allows us to optimise the supply chain'

²⁵⁹ BMA submission to QCA on [QR Network System Rules - Northern Bowen Basin System Rules](#), page 1

²⁶⁰ BMA submission to QCA on [QR Network System Rules - Northern Bowen Basin System Rules](#), pages 1 to 2

rather whether it is physically feasible for a mine to utilise the coal handling services at a terminal.²⁶¹ One way that physical feasibility is realised is if a mine is connected to Aurizon Network's CQCN.

286 HoustonKemp notes that the most common constraints taken into account in the assumptions it was provided as to whether it is physically feasible for a mine to utilise the terminal are the loading loop direction, the rail interchange direction or a requirement for a new loading loop.²⁶² This assumption is best understood as a conservative basis for taking into account the higher (but unknown) costs that would overcome these issues. In its report attached to this submission, HoustonKemp clarifies that:²⁶³

...for some miners, existing rail infrastructure at a mine site may reduce the substitutability of the DBCT service and other coal handling services. However, such an observation is not determinative for defining the product dimension of the market, because:

- the extent of this effect for these miners is limited to either the costs associated with upgrading the rail infrastructure or the higher transport costs associated with overcoming these issues using more complex rail access and haulage services; and
- even if these costs were very high so that switching terminals is not a viable option for these miners, for the reasons we discuss at section 3.1 above it does not follow that other terminals do not supply coal handling services in the relevant market – rather, the relevant question is the extent to which mines do have a readily available choice of coal terminal.

Conclusion on QCA's questions

287 In conclusion, the capacity of the coal terminals and rail networks to accommodate foreseeable demand is not relevant to the determination of the market in which the DBCT service is supplied or of total foreseeable demand in the market. It is, however, relevant to the assessment of whether DBCT can meet that demand and whether it is least cost for DBCT to meet that demand alone.²⁶⁴

2.11 Conclusion on criterion (b)

288 The flawed approach to criterion (b) in User Group Submission and PwC Report fails to demonstrate that criterion (b) is satisfied in the case of the DBCT service. Accordingly, there is no basis for a conclusion that criterion (b) is satisfied.

289 The User Group Submission and PwC Report do not affect the conclusions in the DBCTM Submission and HoustonKemp Report that criterion (b) is not satisfied. As such, there is no reasonable basis on which the QCA can recommend that the DBCT service be declared.

²⁶¹ HoustonKemp Report on (b), pages 70 and 71

²⁶² HoustonKemp Report on (b), footnote 68

²⁶³ HoustonKemp, Report on (b) submissions, page 10

²⁶⁴ Houston Kemp Report on (b), pages 20 to 22. HoustonKemp explains how it has regard to rail capacity and rail expansion costs in the HoustonKemp Report on (b), pages 67 to 69. Note that there is a typographical error in the second paragraph on page 69. The reference to the costs of expanding the capacity of a particular 'coal terminal' in central Queensland should instead refer to 'railway'. In addition, DBCTM observes that as explained in Appendix 5 to this submission, contrary to User Group and PwC observations there is spare rail capacity on the Newlands/GAPE and Blackwater systems.

3 Criterion (a)

3.1 Summary

- 290 Submissions made by other parties on the application of criterion (a) to the DBCT service do not establish that criterion (a) is satisfied in respect of the DBCT service. They also do not affect the conclusions in the DBCTM Submission or HoustonKemp Report on (a) that criterion (a) is not satisfied and therefore the QCA cannot recommend that the DBCT service be declared.
- 291 The User Group Submission, relying on the Castalia Report, is the primary submission made on criterion (a), with the Peabody Submission and Pacific National Submission essentially adopting the position in the User Group Submission.
- 292 The User Group Submission asserts that declaration would promote a material increase in competition in three dependent markets: the 'Hay Point catchment coal tenements market', the 'DBCT secondary capacity trading market' and the 'central Queensland rail haulage market'.
- 293 The issues raised in the User Group Submission are flawed and misplaced because (inter alia):
- 293.1 The User Group adopts an incorrect interpretation of criterion (a) that focuses on whether competition would be 'distorted' if declaration does not continue, and fails to address the required assessment of whether declaration would *promote a material increase in competition* in a market.
 - 293.2 The submission is based on an incorrect assumption that there will be no framework in place to provide certainty of access and efficient pricing. As set out in the DBCTM Submission, DBCTM will continue to provide open access to terminal services on substantively the same terms as it does under the current access undertaking. Access in the future without declaration will be available through:
 - 293.2.1 existing evergreen user agreements, which will continue to apply and under which contracted tonnage makes up almost all of the current capacity of DBCTM (and will continue to do so without declaration); and
 - 293.2.2 the binding and enforceable Access Framework.
 - 293.3 The Access Framework addresses all concerns raised by the User Group regarding protections that it asserts would be 'lost' if the DBCT service is not declared. For example, the Access Framework submitted by DBCTM²⁶⁵ includes:
 - 293.3.1 Certainty of long-term access through a Standard Access Agreement that includes provision for access seekers to be provided a contractual right for long-term access (with evergreen renewal options exercisable by the user);
 - 293.3.2 A process for seeking access that is clear, transparent and efficient, including requirements for DBCTM to negotiate in good faith and make all reasonable efforts to try to satisfy the reasonable requirements of the access seeker;
 - 293.3.3 Recourse to binding expert determination or arbitration in the event of an access dispute;
 - 293.3.4 Efficient market-based pricing provisions, with a ceiling price to ensure that the TIC is constrained such that the use of DBCT remains the same with or without declaration;

²⁶⁵ Including the drafting submitted by DBCTM to the QCA on 29 June 2018 to give effect to the pricing framework set out in the DBCTM Submission

- 293.3.5 Requirements for DBCTM to undertake terminal capacity expansions;
 - 293.3.6 A transparent queuing process;
 - 293.3.7 Non-discrimination provisions, including that DBCTM will not engage in conduct for the purposes of preventing or hindering an access holder's or access seeker's access, or unfairly differentiate between access seekers, access holders or rail operators;
 - 293.3.8 Ring-fencing arrangements that include restrictions on DBCTM and its related bodies corporate owning or operating a Supply Chain Business in any market that is related to or uses DBCT;
 - 293.3.9 Provision for the Operator to be the user-owned Dalrymple Bay Coal Terminal Pty Limited for the term of the Framework; and
 - 293.3.10 Certainty that the Access Framework will remain in place for at least ten years, with any amendments to the Framework significantly constrained by the provisions of the Deed Poll and other constraints on DBCTM.
- 293.4 The User Group's contentions regarding the tenements market are based on an overly narrow geographic market definition, are not supported by fact and are based on an incomplete and inaccurate view of the future without declaration. The flaws in logic include a failure to acknowledge:
- 293.4.1 the implications of existing capacity at DBCT being nearly fully contracted under evergreen access agreements that will continue to apply if the service is not declared; and
 - 293.4.2 the fact that - both with and without declaration - an expansion would be needed to accommodate any material new tonnage (in which case access charges would most likely be differentiated between existing and new capacity under the expansion pricing principles in both the current access undertaking and the Access Framework).
- 293.5 The User Group's contentions regarding the secondary capacity trading market are based on incorrect assumptions that DBCTM will continue to operate a secondary trading business, that DBCTM will not be constrained in the future without declaration in its operation of such a business, and that DBCTM would have an ability or incentive to refuse to consent to capacity assignments for anti-competitive reasons. As detailed in the DBCTM Submission and this submission, none of these assumptions are accurate.
- 293.6 The User Group's contentions regarding the coal haulage market are similarly based on incorrect assumptions and are not supported by any evidence or probative material. The Castalia Report relied on by the User Group does not address the coal haulage market. Further, the provisions of the Access Framework mean that the User Group's assertions about the impact of declaration on competition in the market compared to the future without declaration cannot be accepted.
- 293.7 The User Group does not make any cogent submission that declaration would promote a material increase in competition in the coal export markets (the primary dependent markets) or impact throughput at DBCT. Given declaration would not promote a material increase in competition in the coal export markets, legal precedent clearly establishes that there cannot be any flow-on effects in any related markets. If the User Group had a credible case that declaration would promote a material increase in competition in the coal export markets or other dependent markets, it is expected that this would be raised in the initial submission and that DBCTM would be provided a meaningful and proper opportunity to respond.

- 294 The table in Figure 8 below summarises at a high level why there will be no difference in competition in any dependent market with and without declaration, and therefore why the assertions of the User Group that declaration would promote a material increase in competition in a dependent market must be rejected.
- 295 DBCTM also engaged HoustonKemp to review the Castalia Report and the User Group submissions on the coal haulage market. As set out in its report, HoustonKemp, *Review of the economic issues raised in relation to criterion (a) (HoustonKemp Review on (a))* at Appendix 1, HoustonKemp's expert opinion that criterion (a) is not satisfied remains unchanged.

296 The following table (Figure 8) highlights key factors that support DBCTM's submission that there will be no material difference in the future scenarios with and without declaration, such that there will not be any difference in competition in any dependent market. If there is no difference in competition in the factual and counterfactual, it logically follows that declaration would not promote a material increase in competition in any market and therefore criterion (a) is not satisfied.

Figure 8: Comparison of future with and without declaration

Future with declaration	Future without declaration	Difference
Tenements market		
<ul style="list-style-type: none"> • Demand for tenements based on many factors (including coal price, reserve quality, costs of production, etc), with access charges forming only a small part of costs • Access to DBCT available on reasonable terms through access undertaking • DBCT reaches capacity, such that: <ul style="list-style-type: none"> - an expansion is required and expansion pricing principles result in differentiated pricing under access undertaking - new entrants unlikely to be able to access existing capacity due to evergreen existing user agreements • Coal export markets and derivative tenements market effectively competitive 	<ul style="list-style-type: none"> • Demand for tenements based on variety of factors (including coal price, reserve quality, costs of production, etc), with access charges forming only a small part of costs • Access to DBCT available on reasonable terms through Access Framework • DBCT reaches capacity, such that: <ul style="list-style-type: none"> - an expansion is required and expansion pricing principles result in differentiated pricing under Access Framework - new entrants unlikely to be able to access existing capacity due to evergreen existing user agreements • Coal export markets and derivative tenements market effectively competitive 	No material difference in future scenarios
Secondary capacity trading		
<ul style="list-style-type: none"> • DBCTM cannot own / operate a related Supply Chain Business • DBCTM not a participant in secondary capacity trading • Assignments of secondary capacity by users permitted • DBCTM ability to refuse to consent to assignment limited by contract 	<ul style="list-style-type: none"> • DBCTM cannot own / operate a related Supply Chain Business • DBCTM not a participant in secondary capacity trading • Assignments of secondary capacity by users permitted • DBCTM ability to refuse to consent to assignment limited by contract 	No material difference in future scenarios
Coal haulage market		
<ul style="list-style-type: none"> • Demand for coal haulage services based on the volume of coal transported for export • DBCTM cannot own or operate a related supply chain business (due to ring-fencing provisions in undertaking) • DBCTM required to: <ul style="list-style-type: none"> - consult on System Master Planning and supply chain efficiency - undertake expansions and accommodate capacity 	<ul style="list-style-type: none"> • Access Framework and Ceiling TIC ensure no difference in coal transported or demand • DBCTM cannot own or operate a related supply chain business (due to ring-fencing provisions in Access Framework) • DBCTM required to: <ul style="list-style-type: none"> - consult on System Master Planning and supply chain efficiency - undertake expansions and accommodate capacity 	No material difference in future scenarios
Coal export markets and other related markets		
<ul style="list-style-type: none"> • Coal export markets effectively competitive, with: <ul style="list-style-type: none"> - a large number of participants - prices determined by international spot prices - coal terminal access charges forming only a small part of costs 	<ul style="list-style-type: none"> • Coal export markets effectively competitive, with: <ul style="list-style-type: none"> - a large number of participants - prices determined by international spot prices - coal terminal access charges forming only a small part of costs - ceiling TIC ensuring no difference in volumes of coal produced or exported • No change in volumes means no flow-on effects to other related markets 	No material difference in future scenarios

3.2 Interpretation of criterion (a)

- 297 Criterion (a) requires that access (or increased access) to the service, on reasonable terms and conditions, as a result of a declaration of the service would promote a material increase in competition in at least one market, other than the market for the service.
- 298 Contrary to the assertion in the User Group Submission, the test under criterion (a) is not whether 'continuation of declaration' would give rise to a significant, finite probability of an enhanced environment for competition.²⁶⁶ As noted in the DBCTM Submission, if the QCA were to view its obligation under section 87A of the QCA Act as an assessment of whether declaration should continue, the adoption of such an approach would involve error.²⁶⁷ The correct application of criterion (a) is also not whether 'the absence of declaration will have some effect on competition' or whether competition would be 'distorted' if declaration did not continue, as suggested in the Castalia Report.²⁶⁸
- 299 DBCTM acknowledges that typically in declaration matters the assessment involves a counterfactual analysis relating to a service that is not declared at the time that the analysis is undertaken, rather than a service that is declared. However, this does not change the analysis required under criterion (a) - being whether declaration would promote a material increase in competition in a dependent market.²⁶⁹
- 300 This counterfactual analysis can be undertaken by:
- 300.1 First, assessing whether there is a material difference between access in:
- 300.1.1 the future without declaration, with access available through the binding and enforceable Access Framework and existing evergreen user agreements for almost all current terminal capacity
- compared to
- 300.1.2 the future with declaration, with access available through an access undertaking and existing user agreements.
- This step does not involve a detailed analysis of the precise terms and conditions of access or likely result of access negotiations/arbitrations, but rather whether there is a material difference in the availability of third party access to the service and the quantity of access that is likely to be sought and obtained taking the terms of access in the future with and without declaration as a whole.
- 300.2 Second:
- 300.2.1 If there is no material difference, access as a result of declaration could not promote a material increase in competition in a market.
- 300.2.2 If there is a material difference, assessing whether there would be any consequential difference between the state of competition in a dependent market with or without declaration.

²⁶⁶ User Group Submission, Page 4

²⁶⁷ DBCTM Submission at [20]

²⁶⁸ As suggested, for example, at pages 4 and 5 of the Castalia Report. See HoustonKemp Review on (a) at section 2.1.2

²⁶⁹ This is consistent with the approach taken by the NCC in its decisions relating to the revocation of gas pipeline coverage. For example, in its recommendation to revoke coverage for the Dawson Valley Pipeline in 2014, the NCC approached criterion (a) based on whether access would promote a material increase in competition in a market, not whether the revocation of coverage would have some effect on competition.

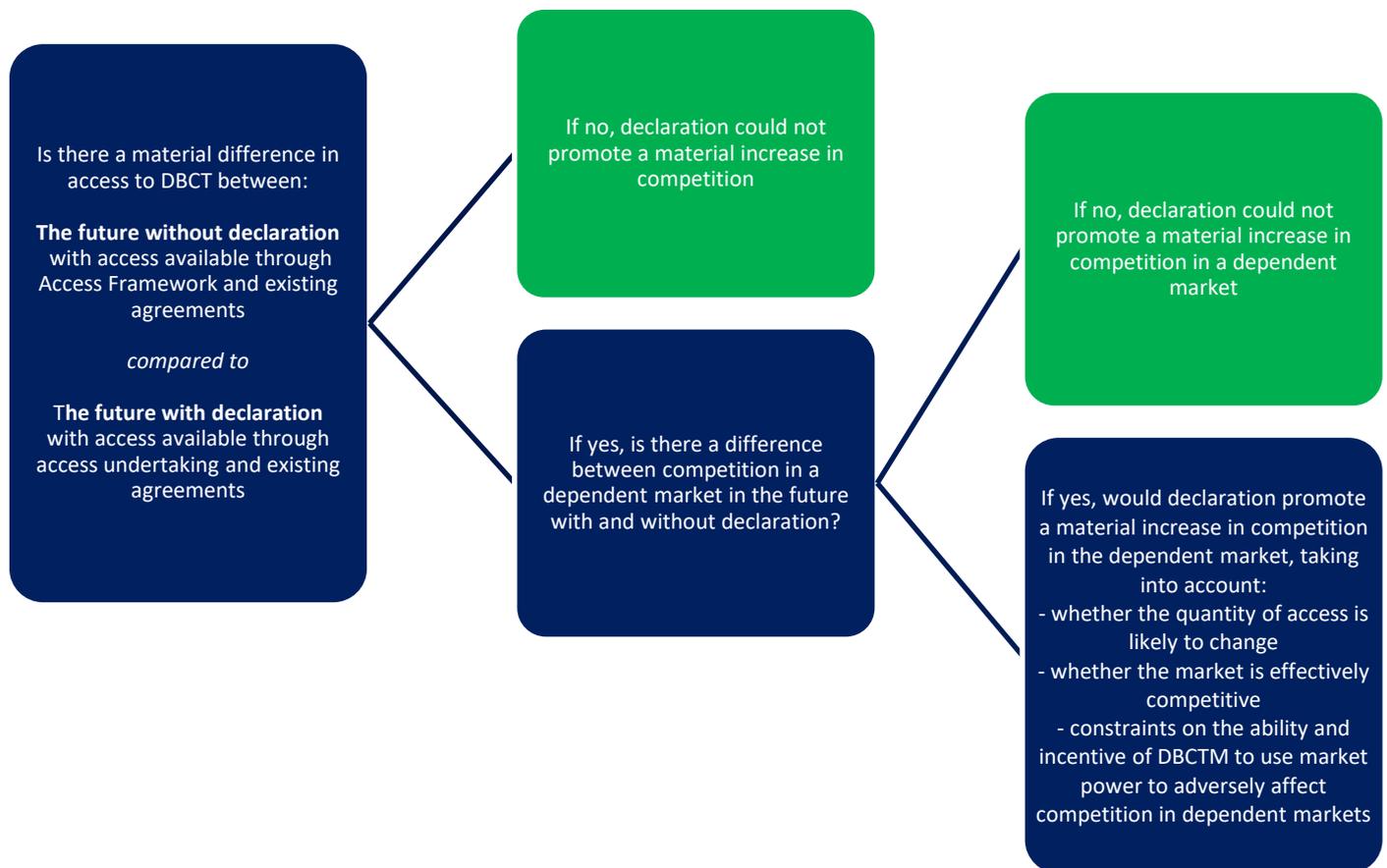
300.3 Third:

300.3.1 If there is no difference between the state of competition in the relevant market with or without declaration, access as a result of declaration could not promote a material increase in competition in that market.

300.3.2 If there is a difference, assessing whether declaration would promote a material increase in competition in the dependent market, taking into account factors such as whether the quantity of access is likely to change, whether the market is effectively competitive (and would be with or without declaration) and the constraints on the ability and incentive of the service provider to adversely affect competition in that market.

301 The following diagram summarises the key steps involved in assessing whether declaration would promote a material increase in competition in a dependent market .

Figure 9: Key steps to assess whether declaration would promote a material increase in competition



Requirement for promotion of a material increase in competition sets high threshold

302 The User Group Submission attempts to ignore or downplay the requirement under criterion (a) that declaration would *promote a material increase in competition* in a market. As set out in the DBCTM Submission²⁷⁰, applying an interpretation of criterion (a) that only considers whether declaration would create the conditions or environment for improving competition would involve error. Adopting such an interpretation (based on the *Re Sydney Airports* decision) would involve a rejection of the express intention

²⁷⁰ DBCTM Submission at [283] to [287]

of Parliament to increase the threshold by requiring that declaration would promote a 'material increase' in competition and a failure to consider the meaning of 'material increase'.

- 303 As noted in the DBCTM Submission²⁷¹, the explanatory material and second reading speech relating to the amendments to the *Trade Practices Act* stated that the amendment to criterion (a) to require a 'material increase' was:
- 303.1 in response to the Productivity Commission's 2001 report, which 'identified that the current declaration criteria do not sufficiently address the situation where, irrespective of the significance of the infrastructure, a declaration would result in only marginal increases in competition'; and
- 303.2 to 'ensure access declarations are only sought where increases in competition are not trivial'.²⁷²
- 304 In describing 'material' as meaning 'non-trivial' or not trivial, it is important to bear in mind the ordinary and natural meaning of such terms and the word material. As set out in the DBCTM Submission²⁷³, the relevant definition of 'material' in the Macquarie Online Dictionary is 'of substantial import or much consequence'. In addition:
- 304.1 'Trivial' is defined in the Macquarie Online Dictionary as 'of little importance; trifling; insignificant'. The meaning of 'not trivial' (and therefore 'material') is the converse of trivial, namely 'of importance' or 'significant'.
- 304.2 The Macquarie Online Dictionary similarly defines 'nontrivial' as 'significant and problematic'.
- 305 This means that it is not only necessary to show that declaration would promote competition in a market other than the market for the service, but also that declaration would promote an increase in competition that is material or significant. The cases relied on and quoted by the User Group and its solicitors²⁷⁴ (*Virgin Blue Airlines Pty Ltd* [2005] ACompT 5 and *Sydney International Airport* [2000] ACompT 1) both occurred before the legislation was amended to require a material increase and accordingly, as set out in the DBCTM Submission, must be approached with caution.
- 306 The significance of the addition of the words 'material increase' has been recognised by the Tribunal. For example, in the *Port of Newcastle* case, the Tribunal observed that the equivalent change to the *Trade Practices Act* to introduce the requirement for a material increase 'may require a more robust, rather than merely technical measure',²⁷⁵ and:²⁷⁶

Having regard to the 2006 Amending Act, it is necessary to consider whether access would promote a material increase in competition in at least one dependent market. As noted above, the threshold of materiality will require a non-trivial increase in competition. While the counterfactual character of the exercise to be undertaken may not have changed, the **qualitative assessment involved has plainly changed.** [Emphasis added]

²⁷¹ DBCTM Submission at [285]

²⁷² Trade Practices Amendment (National Access Regime) Bill 2005 - [Explanatory Memorandum](#); Second reading speech - Trade Practices Amendment (National Access Regime) Bill 2005. Similarly, the Explanatory Notes to the *Motor Accident Insurance and Other Legislation Amendment Bill 2010* (Qld), which introduced the phrase 'material increase in' to criterion (a) in the QCA Act, noted that '[t]his will prevent the declaration of services where only a trivial increase in competition is expected to result': *Motor Accident Insurance and Other Legislation Amendment Bill 2010* - [Explanatory Notes](#) at page 16. See also *Application by Glencore Coal Pty Ltd* [2016] ACompT 6 at [85].

²⁷³ DBCTM Submission at [286]

²⁷⁴ User Group Submission, page 74 and Allens Advice

²⁷⁵ *Application by Glencore Coal Pty Ltd* [2016] ACompT 6 at [86]

²⁷⁶ *Application by Glencore Coal Pty Ltd* [2016] ACompT 6 at [106]

307 Further, in relation to the *Sydney Airport Tribunal* decision that the promotion of competition involves a consideration of whether the conditions or environment for improving competition are enhanced, the Tribunal observed:²⁷⁷

It is of course now necessary to apply the qualitative test of a material increase in competition, following the 2006 Amending Act.

308 The subsequent Federal Court decision does not alter this, as the Full Court's consideration of the change to the materiality threshold was focused on whether this changed the 'with and without access' test. The paragraph from the Federal Court decision quoted at page 10 of the Allens letter regarding the conditions or environment for improving competition in a dependent market, when read in context, is clearly directed at considering the nature of the 'with and without access' test and not the requirement that access or declaration would promote a material increase in competition. The Court expressly noted in the judgment that '[t]here must be not only a promotion of competition, but a promotion of a material increase in competition'.²⁷⁸

309 DBCTM therefore reiterates the submissions made in the DBCTM Submission of the importance of the materiality threshold to the QCA's consideration of criterion (a).

User Group 'alternative interpretation' of criterion (a) must be rejected

310 The User Group asserts that the 'with and without declaration approach' is not settled law and indicates that the QCA must also consider the 'alternative interpretation' that the criterion requires a comparison between the likely state of the market '*without [sic] or without 'access' (meaning a right or ability to use the service)*'.²⁷⁹ Such an interpretation is clearly nonsensical in circumstances where the legislature has expressly and intentionally amended the legislation so that the alternative interpretation can no longer be applied.

311 The *Queensland Competition Authority Amendment Bill 2018* amended the QCA Act to include 'on reasonable terms and conditions, as a result of a declaration of the service' in criterion (a). Criterion (a) cannot therefore be read so as to exclude those words. Such an interpretation would also be directly contrary to the legislative intention.

312 For example, the Explanatory Note to the *Queensland Competition Authority Amendment Bill 2018 (the Bill)* makes it clear that the legislative amendments change the declaration criteria, stating:²⁸⁰

Following a series of judicial decisions concerning the interpretation of the declaration criteria under the National Access Regime, the Federal Government commissioned high level reviews into the National Access Regime including the application of the declaration criteria ... to determine whether amendments were necessary to refocus and clarify the declaration criteria. The recommendations made by the Productivity Commission were accepted by the Federal Government, triggering a process to make changes to the CPA [Competition Principles Agreement] access principles and the criteria in the National Access Regime established under Part IIIA of the *Competition and Consumer Act 2010* (Cth).

While Queensland's access regime is separate from the National Access Regime, the amendments to the access criteria in the Bill are intended to reflect the revised criteria being introduced at the national level.

...

²⁷⁷ *Application by Glencore Coal Pty Ltd* [2016] ACompT 6 at [115]

²⁷⁸ *Port of Newcastle Operations Pty Ltd v Australian Competition Tribunal and ors* (2017) 346 ALR 669 at [144]

²⁷⁹ User Group Submission, page 73

²⁸⁰ *Explanatory Notes to the Queensland Competition Authority Amendment Bill 2018*, page 2

The Bill will clarify the access criteria by making the following amendments. These amendments will correspond with the revised criteria being introduced at the National level through changes to the CPA access principles and changes to the National Access Regime:

- amending access criterion (a) so that it reflects a comparison of competition with and without access on reasonable terms and conditions as a result of declaration...

313 Similarly, the Economics and Governance Committee's Report on the Bill explicitly acknowledged that the Bill reframes criterion (a) so that it is a declaration-focused (rather than access-focused) test. The Report states:²⁸¹

The Bill proposes to amend criteria (a), the competition criteria, by reframing it to consider whether declaration rather than access, or increased access, would promote competition. The amendment will reflect 'a comparison of competition with and without access on reasonable terms and conditions as a result of declaration'.

The amendment follows a judicial decision that the Productivity Commission found 'lowered the hurdle for declaration by requiring a comparison of the state of competition without access (even though access was already provided...) and the state of competition with access'.

The Productivity Commission determined that a 'declaration-focussed competition test is the most effective way to target the economic problem that the regime is intended to address'. [Footnotes omitted]

314 It would therefore be a reviewable error of law if the QCA adopted the 'alternative interpretation' suggested by the User Group.

315 Further, there is no credible counterfactual in which there is no access to DBCT. This includes because:

315.1 DBCTM's existing user agreements are often described as 'evergreen' as they are able to be extended at the option of the user. Accordingly, existing users will have the option to extend their agreements and continue to access the Terminal based on the terms of access and volumes set out in those agreements. Contracted tonnages under existing user agreements currently make up almost all of DBCT's current capacity of 85Mtpa.²⁸² All existing users will continue to have all existing rights as they currently have. They will continue to have all contracted tonnage handled at DBCT in accordance with the terms of the existing user agreements which expressly contemplate the QCA potentially having no future role in determining prices under such existing agreements.

315.2 The DBCT Access Framework ensures that access on reasonable terms and conditions would be available in the future without declaration (see section 4.3 of the DBCTM Submission).

315.3 There is no commercially rational or realistic basis on which DBCTM would not provide access to DBCT in circumstances where there is mutual dependency between DBCTM and users. Providing access to users is the fundamental basis of DBCTM's business. If DBCTM did not provide access on reasonable terms and conditions, users could switch to alternative terminals. DBCTM is not vertically integrated so does not have any affiliate that it could seek to advantage by restricting access to the Terminal (and would not be able to do so in the future, for example due to ring-fencing arrangements in the Access Framework).

²⁸¹ Economics and Governance Committee, *Queensland Competition Authority Amendment Bill 2018 - Report No. 2, 56th Parliament*, March 2018, page 4

²⁸² DBCTM Submission at [301] to [304]

- 316 The User Group's outline of what would happen if there was no access to DBCT²⁸³ should therefore be disregarded.

Circumstances of gas pipeline regulation are not relevant to interpretation of criterion (a)

- 317 The User Group Submission provides a 'cautionary tale' of the impact of changes to the regulation of gas pipelines.²⁸⁴ However, the submission provides no basis for asserting that regulation of gas pipelines and the specific circumstances and nature of the gas industry are relevant or applicable in the case of DBCT or the interpretation of criterion (a).
- 318 It would clearly be an irrelevant consideration for the QCA to recommend that the DBCT service be declared on the basis of unique regulatory issues being examined and addressed in other unrelated industries. It would also be an error of law to approach the interpretation of criterion (a) based on alleged unsubstantiated impacts of removing declaration rather than assessing whether declaration would promote a material increase in competition in a dependent market.
- 319 In addition, even if there was perceived to be some parallel with the gas industry, the concerns expressed by the User Group regarding the removal of regulation in the gas context relate to excessive charges and monopoly pricing. The Access Framework addresses such concerns. In particular, the Access Framework ensures that prices will be capped at a level such that coal volumes served at DBCT would be the same as if the floor price (calculated based on the approach taken by the QCA) applied, and will be set based on a willing but not anxious buyer and a willing but not anxious seller. Further, as DBCTM noted in the DBCTM Submission²⁸⁵, the NCC has observed that 'while access or increased access may change the distribution of gains between parties to a vertical production process, this is not what is required to satisfy criterion (a)'.²⁸⁶ Any perceived ability or incentive for DBCTM to exercise market power is also significantly constrained, as set out in section 4.5 of the DBCTM Submission.

3.3 Counterfactual and access without declaration

Access available on reasonable terms without declaration

- 320 In comparing the future with declaration to the future without declaration, it is necessary to consider the terms that would apply if the service was not declared. As noted in the QCA Issues Paper at section 4.1.1 and the DBCTM Submission, this may include existing contractual arrangements or other mechanisms that would operate to ensure access to the services, on reasonable terms and conditions, other than as a result of declaration.
- 321 The User Group's assertions regarding the future scenario without declaration are based on incorrect and unfounded assumptions that there will not be a framework in place to provide certainty of access and efficient pricing, and that DBCTM will have no incentive to put in place such a framework or voluntary access undertaking. The User Group asserts, for example, that in the absence of declaration, 'it is highly likely that stakeholders would cease to have the benefit of each of the matters currently regulated by the access undertaking' and 'DBCTM will have no incentive to put in place [a voluntary access undertaking] in the absence of a threat of declaration or future arbitration of the terms of access'.²⁸⁷ Castalia similarly asserts that that a deed or other legal instrument would be 'markedly inferior' to an approved access undertaking and that it has been advised that there is doubt that such an arrangement would give a legal right to new users in all circumstances.²⁸⁸ As these assertions are a fundamental premise of the User Group

²⁸³ User Group Submission, pages 73-74

²⁸⁴ User Group Submission, page 72

²⁸⁵ DBCTM Submission at [293]

²⁸⁶ NCC, Final recommendation - Declaration of the shipping channel service at the Port of Newcastle, 2 November 2015 at [4.78]

²⁸⁷ User Group Submission, pages 80-81

²⁸⁸ Castalia Report, page 18

Submission, and they are incorrect and totally without factual foundation, the QCA must reject the User Group's criterion (a) submission in its totality.

322 These assertions are incorrect, including because:

322.1 As set out in the DBCTM Submission²⁸⁹ and section 8.5(c) of the User Group Submission, existing user agreements will continue to apply. They therefore (together with the Access Framework) form the basis for the QCA's assessment of criterion (a) and the future without declaration. As noted in the DBCTM Submission, contracted tonnages under existing user agreements currently make up almost all of DBCT's current capacity of 85Mtpa. Users will continue to have access in accordance with their existing agreements, which expressly contemplate that the QCA may have no future role in the regulation of services at DBCT.

322.2 As set out in the DBCTM Submission, the binding and enforceable Access Framework that DBCTM will apply in the future without declaration will ensure that open access to terminal services will continue to be available on reasonable terms in a future without declaration. The table attached at Appendix 3 demonstrates that the Access Framework addresses all concerns raised by the User Group and Castalia regarding protections under the current access undertaking and QCA Act that they assert would be 'lost' if the DBCT service is not declared.

322.3 In respect of the User Group's assertion that DBCTM will 'control the contents' of a voluntary access undertaking and is 'highly unlikely to include terms the QCA has otherwise indicated it considers are appropriate'²⁹⁰, the Access Framework is substantively the same as the current access undertaking and access seekers and users will continue to have the substantive rights they have under the current access regime (as detailed in the DBCTM Submission). The mutual dependency between DBCTM and users, and other constraints on DBCTM set out in section 4.5 of the DBCTM Submission (including the threat of declaration), mean that DBCTM's ability and incentive to change the access terms are limited. DBCTM's ability to change the Access Framework further restricted by the terms of the Deed Poll.²⁹¹

322.4 The Deed Poll provided with the DBCTM Submission confirms, for the benefit of the covenantees, that DBCTM will comply with the terms of the Access Framework and prescribes how the Access Framework may be amended. The Deed Poll has the same legal effect as the existing access undertaking in that it provides for legally binding third party access to services at DBCT.

322.5 The Deed Poll restricts and sets a high threshold for amendments that may be made to the Access Framework, including by:

322.5.1 Requiring that amendments promote the Framework Objective (which is specified to be to promote the economically efficient operation of, use of and investment in, the Terminal, with the effect of promoting effective competition in upstream and downstream markets). The requirement that amendments 'promote' the Objective means that DBCTM could only change the Access Framework if the amendment would advance or encourage the Objective. For example, an amendment to implement an agreed mechanism to improve the overall efficiency of the Dalrymple Bay Coal Chain would advance the Objective by promoting the economically efficient operation of the Terminal. Conversely, DBCTM could not amend the Framework to remove or limit any material right conferred under the

²⁸⁹ DBCTM Submission at [300] to [303]

²⁹⁰ User Group Submission, page 80

²⁹¹ DBCTM also notes that the primary rights and terms of access for access holders are provided for in the access agreement entered into between DBCTM and the access holder, which can only be amended pursuant to normal contractual variation mechanisms.

- Access Framework or make a series of minor amendments the aggregated effect of which does not advance the Framework Objective.
- 322.5.2 Preventing the amendment of the Framework Objective, other than with the prior written consent of the State.
- 322.5.3 Requiring that DBCTM consult with access seekers, access applicants and access holders regarding any proposed amendments.
- 322.5.4 Requiring DBCTM to have regard to the same matters that the QCA must have regard to when considering the acceptance of an access undertaking under section 138 of the QCA Act, including the interests of access seekers and the public interest.
- 322.5.5 Requiring that amendments to the Framework agreed between DBCTM and Access Holders are still subject to clause 8 of the Deed Poll (which requires consultation with access seekers and access applicants, in addition to access holders, on proposed amendments and that the amendment promotes the Framework Objective), to ensure that any competing interests of access seekers and access holders can appropriately be assessed.²⁹²
- 322.5.6 Providing for covenantees (which include access seekers, access applicants and access holders) to refer disputes regarding any amendment to the Access Framework to the courts of Queensland. For example, a covenantee could seek to have the Supreme Court of Queensland resolve a dispute that an amendment did not promote the Framework Objective.
- 322.6 In a future without declaration, there will always be a 'threat of declaration'. As outlined in the DBCTM Submission²⁹³, the threat of declaration under Part 3 or Part 5 of the QCA Act (or under the CCA when the certified DBCT access regime ends) would constrain DBCTM from using any market power to affect competition in dependent markets. The threat of regulation has been accepted to provide some constraint in Tribunal and NCC decisions.²⁹⁴ The User Group's assertion that 'damage to competition could not be resolved quickly by seeking re-declaration'²⁹⁵ is incorrect given:
- 322.6.1 A consultation process will be required under the Deed Poll before any changes to the Access Framework can be made;
- 322.6.2 Disputes regarding amendments to the Deed Poll can be referred to the courts of Queensland, which could make interim orders if there was a real prospect of immediate damage to competition as a result of the amendments. The Access Framework also provides for binding arbitration relating to access disputes;

²⁹² For this reason, the Deed Poll does not provide for a group of access holders or access seekers to veto an amendment or require agreement between all parties. For example, access holders are likely to view any changes to the Framework relating to expansions differently to how access seekers would view the expansion provisions (given the likely position of access holders that expansions should be differentially priced and not socialised), so providing a veto right or requiring full agreement could stymie amendments to the Framework that would promote economic efficiency.

²⁹³ DBCTM Submission at [378] to [379]

²⁹⁴ *Re Duke Eastern Gas Pipeline Pty Ltd* (2001) 162 FLR 1; [2001] ACompT 2 at [130]; NCC, Final recommendation - [Application for revocation of coverage of the Moomba to Adelaide Pipeline System under the National Gas Access Regime](#), 14 December 2005 at [6.122]

²⁹⁵ User Group Submission, page 76

- 322.6.3 The QCA Act imposes timeframes on declaration recommendations and decisions, with a 6 month timeframe for the QCA's recommendation (section 79A) and a 90 day timeframe for the Minister's decision (section 85); and
- 322.6.4 The CCA provides protections against anti-competitive conduct. The User Group's assertion that vertical integration could permanently damage the extent of competition in markets ignores the well-known and established regime for addressing vertical integration issues under the CCA, and the role of the ACCC in ensuring that acquisitions and arrangements do not substantially lessen competition in a market.
- 322.7 Other constraints also ensure that access will be available on reasonable terms and conditions without declaration. For example, as noted in the DBCTM Submission ²⁹⁶, DBCTM's arrangements with the Queensland Government relating to the lease of the Terminal constrain DBCTM's ability or incentive to exercise market power to adversely affect competition in dependent markets. While the arrangements are contractual arrangements between the Queensland Government (State) and DBCTM (and DBCTM acknowledges that the QCA has previously expressed the view that the QCA is not bound to treat the terms of DBCTM's arrangements with the State as determinative), DBCTM considers that being a lessee of the Terminal, and its relationship with the State, operate to constrain its behaviour and mean that DBCTM cannot operate in an unfettered manner.

Providing access on reasonable terms without declaration not a 'contrived counterfactual'

- 323 The User Group asserts that, to the extent that DBCTM raises the prospects of conducting itself differently or dealing differently with users in the absence of declaration, the QCA should not accept that as a legitimate counterfactual.²⁹⁷ It also suggests that, if DBCTM offered alternative contractual terms in the absence of declaration, procured that its Trading Supply Chain Business (**Trading SCB or BPC**) would cease operating, or indicated that it would not vertically integrate in the future, such factors would not be a 'proper counterfactual' or would be a 'contrived counterfactual'.
- 324 It is plainly wrong to suggest that considering contractual terms of access that would be offered in the future without declaration is not a proper counterfactual. The wording of criterion (a) requires the assessment of future access terms. The Access Framework is a credible, binding and enforceable access regime, which DBCTM will be legally required to comply with through the Deed Poll mechanism and contracts entered into under the Framework.
- 325 The Access Framework does not therefore represent a 'contrived', 'artificial' or 'manipulated' counterfactual, and the statement in the ACCC's Merger Guidelines regarding manipulated counterfactuals is not applicable to the Access Framework. If DBCTM is legally required to comply with the Framework (as it will be through the Deed Poll), it would be incorrect and irrational for the QCA not to take it into account in considering the future without declaration. Although DBCTM does not consider that the counterfactual analysis under the ACCC's Merger Guidelines is directly applicable to the analysis under criterion (a), it is also pertinent to note that the ACCC frequently accepts undertakings from merger parties (such as divestment undertakings) to address competition issues. There is no suggestion that such undertakings represent a manipulated counterfactual.

AAPT case study does not support User Group position

- 326 The User Group Submission asserts that 'the QCA should carefully consider the example of [AAPT] in seeking to understand the likely state of markets without declaration of the Service'.²⁹⁸ The implication of the 'case

²⁹⁶ DBCTM Submission at [381]

²⁹⁷ User Group Submission, pages 75-76

²⁹⁸ User Group Submission, page 79

study' provided by the User Group appears to be that, because users have never agreed the proposed charges at AAPT based on the initial charges proposed by the AAPT operator, and that different charges have been negotiated between users and the AAPT operator, there is a market failure. However, the User Group:

- 326.1 Has failed to establish how the case study is relevant to the assessment of whether declaration of DBCT would promote a material increase in competition in a dependent market;
 - 326.2 Does not identify which markets the QCA should 'carefully consider' in light of the case study;
 - 326.3 Has not explained why commercial negotiations (which generally involve negotiation, rather than the acceptance of the first offer) are not efficient;
 - 326.4 Does not acknowledge that the initial proposal put forward by DBCTM with declaration is rarely accepted by users or that costs for lawyers and economists are also incurred in each access undertaking process; and
 - 326.5 Does not provide any evidence that the AAPT process has impacted competition in any market.
- 327 The concern raised by the User Group that users do not have sufficient information to determine appropriate pricing is also not a relevant concern under the Access Framework because the calculation of the TIC based on the willing but not anxious principle and the derivation of the ceiling TIC are not based on information solely within DBCTM's knowledge or possession.
- 328 Accordingly, the AAPT case study does not provide any basis to support the User Group proposition that criterion (a) is satisfied in respect of DBCT.

No increased risk of price coordination

- 329 The Castalia Report states that 'the DBCT User Group considers there is an increased risk of oligopolistic behaviour between coal terminal owners if the declaration of the DBCT service was to cease'.²⁹⁹ It is unclear whether Castalia shares this view (given it appears to be describing a User Group concern).
- 330 However, as explained at section 4.4.3 of the HoustonKemp Review on (a) attached as Appendix 1 of this submission, this suggestion:
- 330.1 has no credible economic foundation as it is not plausible to suggest that the removal of a transparent price benchmark at DBCT will promote coordination between terminals; and
 - 330.2 is inconsistent with Castalia's contentions that DBCTM is a 'profit maximising monopolist'.³⁰⁰
- 331 The CCA also prohibits price collusion through strict and frequently enforced cartel prohibitions.

QCA Staff questions regarding Deed Poll and Access Framework

- 332 QCA staff have raised specific questions regarding the Deed Poll and Access Framework in a paper dated 6 June 2018, *Declaration reviews: Submissions on initial submissions - Staff questions*. That paper notes that staff are particularly interested in the impact, if any, on markets related to the development of new mines and trading of mining entitlements.

²⁹⁹ Castalia Report, page 18

³⁰⁰ Castalia Report, pages 16 and 21

333 DBCTM's response to the questions raised by the QCA is as follows:

(1) Would there be any material differences between the operation of the proposed deed poll and DBCT Access Framework, and the operation of the access regime under Part 5 of the Queensland Competition Authority Act?

334 There would not be any material differences between the operation of the Deed Poll/Access Framework and the operation of the access regime under Part 5 of the QCA Act that are relevant to the assessment of the future scenarios with and without declaration for the purposes of criterion (a).

335 As summarised in Appendix 3, the Access Framework addresses all concerns raised by the User Group and Castalia regarding protections that they assert would be 'lost' if the DBCT service is not declared.

336 In order for there to be a material difference for the purpose of the criterion (a) assessment, there would need to be credible and probative evidence that the operation of the access regime under Part 5 of the QCA Act would promote a material increase in competition in a market compared to the situation in which the Access Framework applies. This would require the volume or quality of products or services in a market, or the structure of the market or conduct of firms, to be different under each scenario and for the difference to mean that there would be a material increase in competition in a market with declaration.

337 As set out in the DBCTM Submission and HoustonKemp Report on (a), this is not the case, including because:

337.1 The Access Framework provides for access to be available on reasonable terms and conditions; and

337.2 The Deed Poll and the pricing provisions of the Access Framework (together with contractual rights granted to users under user agreements) ensure that DBCTM would have no unilateral ability to change the terms of access in a manner that would impact throughput at DBCT or adversely affect competition in dependent markets.

(2) How would the proposed deed poll and DBCT Access Framework affect competition in a market other than the market for the service, compared to the access regime under Part 5 of the Queensland Competition Authority Act? In responding to this question, stakeholders are invited to have regard to aspects of DBCTM's proposal, for example:

(a) The manner in which the terms of access, in particular the terminal infrastructure charge, would be negotiated and determined compared with the manner in which those terms are negotiated and determined under a QCA-approved access undertaking.

(b) The extent to which the proposed arbitration mechanism would be effective in constraining DBCTM's ability to set terms of access, including pricing.

(c) The effectiveness of the proposed mechanism in constraining DBCTM's ability to unilaterally amend the DBCT Access Framework. In this context, are amendments to the proposed Framework subject to any oversight by an independent arbitrator, and is that relevant?

(d) The extent to which the proposed deed poll and access framework would provide certainty about the terms and conditions of access.

(e) The extent to which terminal users would be treated equally.

338 As detailed in section 4 of the DBCTM Submission, the Access Framework and Deed Poll ensure that there will be no difference between competition in the future with declaration and the future without declaration.

(a) Pricing framework ensures no difference in level of throughput

- 339 The access regime under Part 5 of the QCA Act and the current access undertaking provide for the terms of access to be negotiated and, if agreement is not reached, for the matter to be referred to an independent expert or the QCA. Similarly, the Access Framework provides for the terms of access to be negotiated and, if agreement cannot be reached, for the matter to be referred to arbitration. The current access undertaking and Access Framework both provide for terms based on the Standard Access Agreement terms to apply if agreement cannot be reached.
- 340 The manner in which the terminal infrastructure charge would be negotiated and determined under the Access Framework is set out in the pricing framework in Appendix 7 to the DBCTM Submission. As set out in the DBCTM Submission, the pricing framework ensures that there will be no difference in the level of throughput at DBCT with or without declaration (as it includes a ceiling TIC that caps the TIC so that it is no higher than the highest price at which coal volumes served at DBCT would be the same as if the Floor TIC applied, and requires that the TIC be set based on a willing but not anxious buyer and seller principle).
- 341 On 29 June 2018, DBCTM submitted to the QCA the drafting to give effect to the pricing framework, which provides detail as to how the terminal infrastructure charge would be determined under the Access Framework.
- 342 DBCTM notes that the QCA has advised that it does not intend to take the material submitted by DBCTM on 29 June 2018 into account in making its draft recommendation. Although the material provided with the DBCTM Submission provides sufficient detail for the purposes of criterion (a), DBCTM does not consider that its response to the initial submissions and QCA Staff questions would be complete without referring to that material (particularly in circumstances where the User Group has made erroneous submissions regarding access charges in the future without declaration and the QCA has specifically asked for submissions regarding the manner in which the TIC would be determined under the Access Framework). The amendment to the Deed Poll included with the material submitted on 29 June 2018 (to make the obligation to comply with the Framework explicit for the removal of any doubt) also addresses concerns raised by the User Group about the future without declaration and voluntary access undertakings. Accordingly, the material submitted on 29 June 2018 forms part of this submission.
- 343 DBCTM does not consider that it is reasonable in all of the circumstances for the QCA not to take the material into account, given:
- 343.1 the material is directly responsive to submissions made by the User Group and questions asked by QCA staff;
 - 343.2 the material was provided before the period for submissions on initial submissions closed;
 - 343.3 the material does not raise fundamentally new issues that were not raised in the DBCTM Submission (but rather provided the drafting to give effect to the pricing framework that was a key element of the DBCTM Submission); and
 - 343.4 the QCA has a number of months to consider the material before making its draft recommendation.
- 344 DBCTM has concerns that the QCA's administrative law and statutory obligations to comply with natural justice and accord procedural fairness would be breached if the QCA seeks to maintain its position that it is not going to take material submitted by DBCTM into account in making its draft recommendation. If the QCA does not take material submitted by DBCTM into account in making its draft recommendation or invite submissions on that material until after it makes that decision, the QCA is nonetheless required to provide DBCTM with an opportunity to respond to the QCA's considered views on that material and to any stakeholder submissions on that material, in advance of the QCA making its final recommendation. The

QCA's unusual decision not to take the material submitted by DBCTM into account can therefore only prolong the period required for the QCA to make a final recommendation.

(b) *Arbitration mechanism consistent with CPA principles and mechanisms at other terminals*

345 In respect of paragraph (b) of the QCA's question, arbitration is a commonly used and effective mechanism to resolve access disputes. DBCTM's ability to set terms of access and prices will clearly be constrained by:

345.1 The terms of the Access Framework (which DBCTM will be required to comply with pursuant to the Deed Poll and user agreements entered into under Framework), which include standard terms of access through the Standard Access Agreement that access seekers can require be applied.

345.2 The requirement that the TIC be between a floor and ceiling. DBCTM would have no ability or incentive to seek to set a TIC above the ceiling TIC, as the threat of arbitration would constrain it from doing so.

346 Arbitration is an effective mechanism to ensure independent and binding resolution of access disputes. Provisions of the *Commercial Arbitration Act 2013* (Qld) and Resolution Institute Arbitration Rules ensure that disputes are resolved efficiently and by an arbitrator with appropriate expertise.³⁰¹ For example:

346.1 Article 16 of the Rules ensures the timely resolution of disputes, providing that the arbitrator shall use its best endeavours to deliver all awards within 365 days of the appointment of the arbitral tribunal.

346.2 Article 17 of the Rules ensures that arbitration proceedings:

346.2.1 are conducted so as to avoid unnecessary delay and expense;

346.2.2 provide a fair and efficient process for resolving the parties' dispute;

346.2.3 ensure parties are treated with equality and given a reasonable opportunity to present their case; and

346.2.4 can include hearings for the presentation of evidence by witnesses, including expert witnesses, and oral argument.

346.3 Section 18 of the *Commercial Arbitration Act 2013* (Qld) similarly ensures that parties are treated with equality and each party is given a reasonable opportunity of presenting the party's case.

346.4 Article 29 of the Rules provides for an arbitrator to appoint an independent expert to report to it on specific issues. For example, if the arbitrator considered it desirable to appoint an independent expert to report to it on the 'willing but not anxious principle' or the derivation of the ceiling TIC by the parties' experts, it could do so.

346.5 Article 30 addresses issues of default, such as a party failing to produce documents or evidence within a set period of time or failing to comply with directions of the arbitrator.

347 The Resolution Institute Arbitration Rules also set out a clear process for the conduct of arbitrations, including in respect of what notices of arbitration and statements of claim/defence should include, the ability for the arbitrator to grant interim measures and requirements relating to hearings and evidence.

³⁰¹ [Commercial Arbitration Act 2013 \(Qld\)](#); Resolution Institute, [Resolution Institute Arbitration Rules 2016](#)

- 348 The ability for complex disputes such as infrastructure pricing disputes to be determined by arbitration is demonstrated by the fact that other similar regimes provide for commercial arbitration. For example:
- 348.1 Clause 7.2 of the Standard Access Agreement under the current DBCTM access undertaking provides for arbitration of the pricing methodology and calculation of the TIC by an arbitrator other than the QCA.
- 348.2 The access arrangements at AAPT include provision for arbitration of disputes regarding the calculation of the TIC.
- 348.3 The Competition Policy Agreement (**CPA**) principles are based on a negotiate-arbitrate model. Clause 6.4(g) of the CPA provides that, where the owner and a person seeking access cannot agree on terms and conditions for access to the service, they should be required to appoint and fund an independent body to resolve the dispute. The NCC Certification Guide notes that:³⁰²
- The clause 6 principles promote a negotiate-arbitrate model of access regulation, which is the model advocated by the Hilmer Committee ... and reaffirmed by all Australian governments in the Competition and Infrastructure Reform agreement as the underlying principle for the establishing of access terms.
- 349 In respect of clause 6.4(g), the NCC Certification Guide clearly contemplates that an arbitrator would be an independent dispute resolution body that could determine access disputes.³⁰³

(c) Deed Poll significantly constrains ability for DBCTM to unilaterally amend Access Framework

- 350 The constraints on DBCTM's ability to unilaterally amend the Access Framework are set out in the DBCTM Submission,³⁰⁴ and above. The restrictions on amendments that may be made under the Deed Poll include requirements that:
- 350.1 Amendments promote the Framework Objective (which cannot be amended, except with the prior written consent of the State).
- 350.2 DBCTM consult with Confirmed Access Seekers, Access Applicants and Access Holders regarding any proposed amendments (to ensure that any conflicting views of access seekers and access holders are heard and can be addressed).
- 350.3 DBCTM must have regard to specified matters when considering amendments to the Access Framework, which are consistent with the matters that the QCA is required to have regard to under section 138 of the QCA Act when approving a draft access undertaking.
- 351 Further, the Deed Poll provides for disputes to be determined by the courts of Queensland. Providing for disputes such as contractual disputes to be determined by a Court is common and the courts of Queensland are well-equipped to appropriately and efficiently determine a dispute that arises under the Deed Poll. The courts of Queensland (rather than a commercial arbitrator) are an appropriate forum for such disputes and ensure independent oversight of amendments to the Framework.
- 352 Under the dispute resolution provisions of the Deed Poll, access seekers and access holders under the Framework will have the right to issue proceedings for breach of the Deed Poll in the Queensland Supreme Court 'on the merits'. That is, as the Deed Poll provides for disputes about whether amendments to the Framework promote the Framework Objective to be raised, a party could dispute an amendment on the

³⁰² NCC, [Certification of State and Territory Access Regimes: A guide to Certification under Part IIIA of the CCA](#), December 2017 at [3.14]

³⁰³ See, for example, NCC, [Certification of State and Territory Access Regimes: A guide to Certification under Part IIIA of the CCA](#), December 2017 at [5.10] to [5.12]

³⁰⁴ DBCTM Submission at [321]

basis that the amendment does not promote the Framework Objective. Similarly, if DBCTM does not have regard to the factors set out in clause 8.5 of the Deed Poll (which are consistent with the matters that the QCA is required to have regard to under section 138 of the QCA Act), a party could dispute that DBCTM has not had regard to the required factors.

353 In contrast, amendments approved by the QCA to an access undertaking under the QCA Act are only subject to judicial review (for example, if there is a breach of natural justice or an error of law). Accordingly, in the future without declaration, access seekers and access holders under the Framework will have greater rights to object to and seek a form of merits review of the amendments than they do under an access undertaking accepted by the QCA.

(d) Deed Poll, Framework and Standard Access Agreement provide certainty about access terms

354 The Deed Poll, Access Framework and Standard Access Agreement under the Framework provide certainty of access, pricing and other access terms. As set out in the DBCTM Submission and this submission, the Access Framework provides a binding and enforceable open access framework for the negotiation and provision of access. It includes a right for access seekers to negotiate access (pursuant to a process equivalent to Section 5 of the current access undertaking) and a binding dispute resolution mechanism if a dispute arises in relation to such negotiations.

355 The Standard Access Agreement under the Access Framework provides certainty as to the terms of access, with Section 12 of the Access Framework including a right for access seekers to require that the access agreement be substantively identical to the Standard Access Agreement. Clause 20 of the Standard Access Agreement provides for long-term agreements and provides an option exercisable by the user to extend the term (consistent with clause 20 of the current Standard Access Agreement under DBCTM's current access undertaking). Accordingly, access seekers who enter into an agreement with DBCTM under the Framework will have long-term contractual certainty as to the terms of access.

356 The Deed Poll also provides for the Framework to remain in effect for at least 10 years, which is longer than the term of DBCTM's access undertakings under the QCA Act, and for DBCTM to provide at least 12 months' notice before the tenth anniversary of the commencement date as to the renewal of the Framework for a further term. The constraints outlined above on amendments to the Deed Poll further provide a high threshold and mandatory consultation process for any proposed amendments to the Framework.

357 In relation to pricing, the pricing framework provides long-term certainty as to how prices will be calculated. Pricing certainty is provided through the ceiling TIC (which provides certainty as to the maximum price payable relating to the TIC) and the requirement for the TIC to be set based on a willing but not anxious buyer and seller principle (which provides certainty that the TIC will be a market-based price).

(e) Framework ensures no anti-competitive discrimination

358 The Access Framework and Standard Access Agreement under the Framework ensure that access seekers will be able to obtain access to DBCTM on substantively the same terms on which existing users have obtained access.

359 The Access Framework also ensures that there will be no unfair discrimination between access seekers or access holders. Section 8.2 of the Framework provides that DBCTM will not:

359.1 Engage in conduct for the purpose of preventing or hindering an access holder's or access seeker's access.

359.2 Unfairly differentiate between access seekers, access holders or rail operators.

- 360 Section 5.1(d) similarly provides that DBCTM must not unfairly differentiate between access seekers in a way that has a material adverse effect on the ability of one or more access seekers to compete with other access seekers.
- 361 The above requirements are consistent with sections 100, 104, 125 and 168C of the QCA Act, as well as the CPA principles (see Appendix 5 of the DBCTM Submission). It is also pertinent to note that, as DBCTM is not vertically integrated, it has no incentive to treat any particular user differently from another so as to cause a distortion in any related markets.³⁰⁵
- 362 In addition, the Access Framework and Standard Access Agreement ensure that:
- 362.1 There will not be operational discrimination. For example, consistent with the current access undertaking and Standard Access Agreement, Section 6.2(c) of the Framework and clause 3.6(g) of the Standard Access Agreement require that any amendments to the Terminal Regulations operate equitably amongst existing users, access holders, access seekers, expansion parties and (where relevant) rail operators.
- 362.2 The queuing process and commercial principles relating to the queuing process operate between access seekers on a non-discriminatory basis (Section 5.5(t) of the Framework).
- 362.3 If an arbitration determination on an Initial TIC for one or more access holders has previously been made in a Pricing Period, the arbitrator in any subsequent arbitration in that pricing period must determine an Initial TIC for the access seeker that is equal to the Initial TIC determined in the first arbitration (adjusted for CPI and review events).³⁰⁶

3.4 Pricing

Test under criterion (a) not whether access charges would be the same with and without declaration

- 363 Section 8.6 of the User Group Submission asserts that, in the absence of declaration, DBCT would be incentivised to significantly increase prices because the services of other coal terminals are not substitutable.
- 364 As noted in the DBCTM Submission,³⁰⁷ any changes in the charges that might follow the expiry of declaration will not affect economic efficiency but rather just the distribution of coal-export rents between users and DBCTM. The mutual dependency between DBCTM and users, and the provision for the TIC not to exceed the maximum price that would be agreed to by a willing but not anxious buyer, ensures that price outcomes under the Access Framework will be similar to those of commercial bargaining in the absence of regulation.
- 365 It is also important to reiterate that the test under criterion (a) is whether declaration would promote a material increase in competition in a dependent market, not whether declaration would result in a lower price of access. Both the NCC and the Tribunal have made clear that it does not necessarily follow from an ability to increase prices that there will be a reduction in coal production that impacts competition in a market.³⁰⁸ For example, the NCC in the *Port of Newcastle* case stated the following in relation to Part IIIA of the CCA (on which Part 5 of the QCA Act is based):³⁰⁹

³⁰⁵ See HoustonKemp Review on (a) at section 2.1.2

³⁰⁶ Paragraph 22 of Appendix 7 of the DBCTM Submission; Section 10.4(e) of Access Framework submitted on 29 June 2018

³⁰⁷ DBCTM Submission at [316]

³⁰⁸ *Application by Glencore Coal Pty Ltd* [2016] ACompT 6 at [155]; NCC, [Final recommendation - Declaration of the shipping channel service at the Port of Newcastle](#), 2 November 2015

³⁰⁹ NCC, [Final recommendation - Declaration of the shipping channel service at the Port of Newcastle](#), 2 November 2015 at [4.78]

In an economic sense, a promotion of competition is different from the allocation of gains from specific transactions. In a vertical chain of production, parties may argue about the division of the total gains from production and trade; producers at each stage of the production chain will prefer to get more of the gains, leaving less for other parties. This behaviour will be limited by the need for other parties to participate in the production process and actions by one party to seize more of the gains may, but need not, impact on competition in a downstream market. As such, while attempts by one party in the vertical chain to increase its returns may provide evidence of a potential impact on competition in a dependent market, such attempts, by themselves, do not show an actual impact on competition. Similarly, while access or increased access may change the distribution of gains between parties to a vertical production process, this is not what is required to satisfy criterion (a). Rather, the criterion looks at whether access or increased access will promote a material increase in competition in a dependent market.

366 The NCC further pertinently noted that:³¹⁰

the Council notes that third party access under Part IIIA is not *per se* a mechanism for price control or for seeking to limit monopoly prices. Rather, Part IIIA (and therefore the Council) is concerned with the way in which any high prices (or other conduct) may affect competition in a dependent market.

367 and

it does not necessarily follow from an ability to increase prices that there will be a reduction in coal production that impacts competition in a market.

368 Similarly, the Tribunal in the *Port of Newcastle* case stated:³¹¹

As Hilmer pointed out, unless there is vertical integration the position is that competition in upstream and downstream markets is not necessarily affected. The reason is that the effect of monopoly pricing is simply to raise the price of one of myriad input prices. When one of an industry's costs goes up, there is no presumption of an adverse effect on competition.

369 The Tribunal concluded that:³¹²

As to uncertainty in relation to PNO's future charging increases, the Tribunal agrees with the Minister that, compared to the significant uncertainty they face from changes in coal prices, other costs and regulation, any such uncertainty is likely to be very small. It would concern charges that are a very small component of the overall cost of delivered coal, while coal producers also face significant uncertainty from changes in the price of coal, ongoing costs (for example labour costs) and changes in regulation, such as those dealing with carbon emissions. Removing the uncertainty about Port access charges is not likely to promote a material increase in competition in a dependent market.

370 It is therefore clear that it is not correct to approach the test under criterion (a) as being focused on the level or certainty of access charges with and without declaration. As set out further below, the User Group has also not made any cogent submission that declaration would result in an increase in coal production or promote a material increase in competition in any market.

³¹⁰ NCC, [Final recommendation - Declaration of the shipping channel service at the Port of Newcastle](#), 2 November 2015 at [4.87] and [4.93]

³¹¹ *Application by Glencore Coal Pty Ltd* [2016] ACompT 6 at [133]

³¹² *Application by Glencore Coal Pty Ltd* [2016] ACompT 6 at [156]

Coal Flows Model submitted by User Group is incorrect and misleading

- 371 The chart that the User Group included at page 82 of its submission (based on the 'Coal Flows Model' set out in Appendix A to the Castalia Report) is incorrect and misleading. The underlying source data and model have not been disclosed to DBCTM, so cannot be tested by DBCTM or the QCA and accordingly must be given no weight.
- 372 However, even on the limited information provided, it is clear that the inputs and methodology should not be accepted. The chart suggests that if the 'price' at DBCT (which appears to have been specified to include the TIC *and* handling charges) increased by 50 cents/tonne from \$5/tonne, throughput at DBCT would decrease by almost 20Mtpa. This does not accord with reality.³¹³ For example:
- 372.1 The estimate is not consistent with HoustonKemp's analysis of AME and Wood Mackenzie data, or PwC's analysis of User Group data.³¹⁴
- 372.2 The User-owned Operator at DBCT recently increased its prices (which will result in an increase to handling charges of over 25% or more than 65 cents/tonne). There has been no suggestion that that increase will cause throughput at DBCT to change.
- 372.3 The price of coal fluctuates significantly (for example, by US\$100/tonne), without any causing any change in throughput at DBCT, as illustrated in Figure 10 and Figure 11 below.
- 372.4 Contracted tonnages under existing user agreements currently make up almost all of DBCT's current capacity of 85Mtpa. The User Group Submission and accompanying Castalia Report assert inconsistently that:
- 372.4.1 Existing user agreements provide protections, including in relation to pricing, for existing users that will not be provided to future access seekers,³¹⁵ but
- 372.4.2 DBCTM could increase its charges to \$12/tonne, resulting in a significant drop in throughput.³¹⁶
- 373 Those propositions are inconsistent and cannot be reconciled. The proposition that DBCTM could increase its charges to \$12/tonne is also illogical in light of the constraints on DBCTM (as detailed in section 4.5 of the DBCTM Submission).

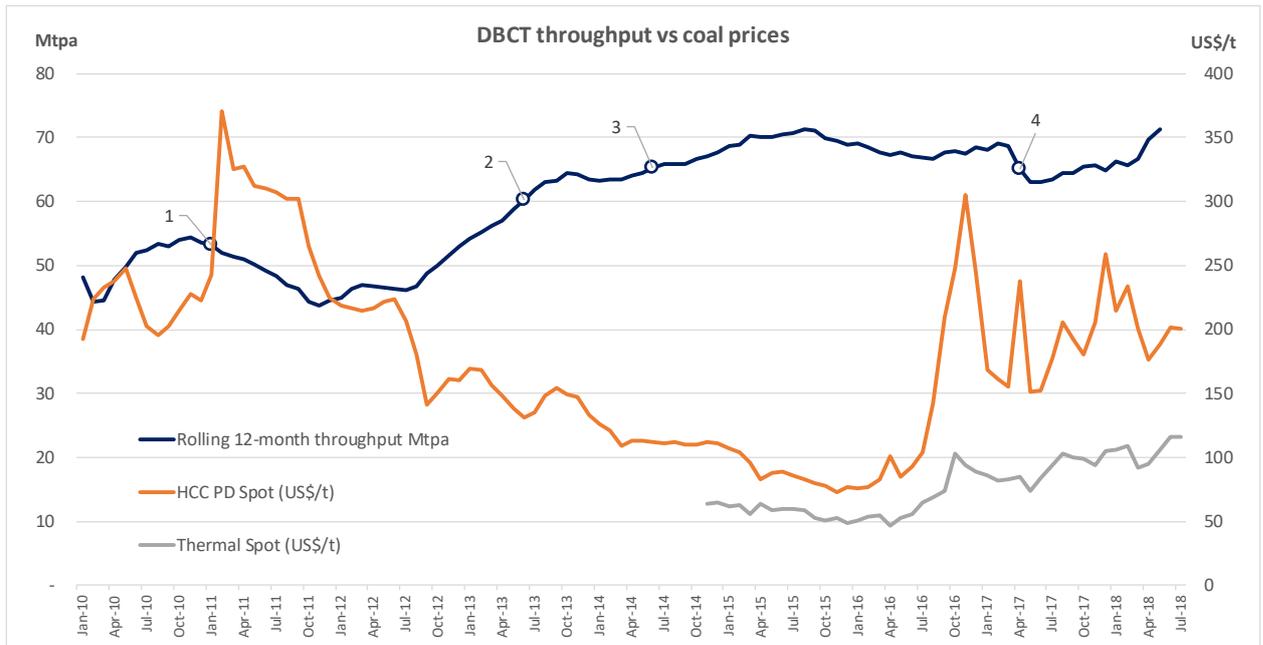
³¹³ The Castalia Report acknowledges to some extent the unrealistic assumptions underlying the Coal Flows Model, noting that it takes no account of contractual and physical constraints: Castalia Report, page 22

³¹⁴ See HoustonKemp Review on (a) at section 4.2.1. HoustonKemp concludes that 'Castalia's analysis appears to be at odds with the reality of demand at DBCT and appears to overstate significantly the predicted sensitivity to coal handling charges at DBCT'.

³¹⁵ See, for example, User Group Submission, page 79 and 83; Castalia Report, pages 10, 16-17 and 19

³¹⁶ See, for example, User Group Submission, pages 81-82; Castalia Report, pages 6 and 15-16. Page 16 of the Castalia Report also refers to forecasts showing tonnages maintained at current levels until at least 2025 and confusingly contends that this 'demonstrates the practical potential for DBCTM to increase prices and maximise revenues as much of this tonnage would already be contracted'.

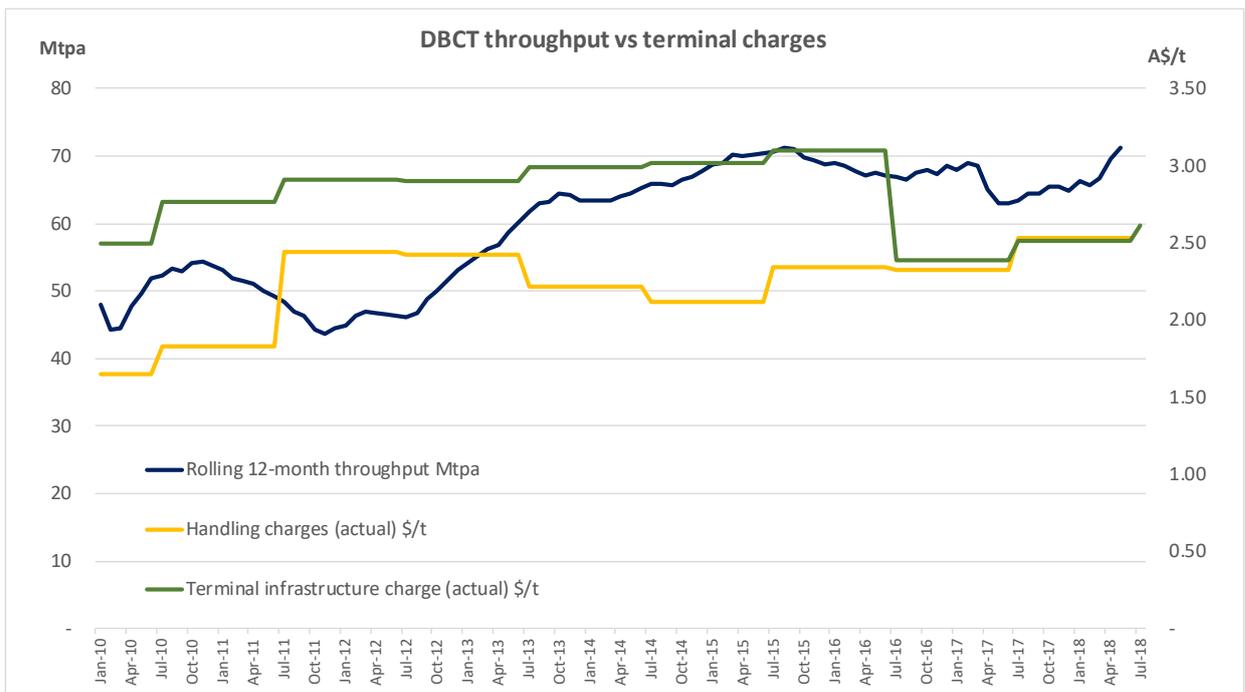
Figure 10: DBCT throughput vs coal prices



1. Severe flooding due to record rainfalls for 2010-2011 wet season
2. In June 2013 a number of users (totalling 12Mtpa) extended their contracts for 5 years to 2019
3. In June 2014 there was a 9 year contract extension of 3.3Mtpa and a 2.5Mtpa assignment executed
4. Cyclone Debbie

374 Figure 10 charts from January 2010 to July 2018 the throughput at DBCT and the benchmark HCC spot price. As illustrated in the chart, a decline in benchmark HCC spot prices from a high of US\$370/t to a low of US\$73/t did not see a corresponding reduction in throughput. During the period during which coal prices were at their lowest (from around December 2011 to July 2016), 22.1Mtpa of contracted tonnage came up for renewal, of which over 80% was renewed for a further 5-year period. This indicates that the level of throughput is not sensitive to changes in price (including changes in price as large as over US\$200/tonne).

Figure 11: DBCT throughput vs terminal charges



- 375 Figure 11 charts from January 2010 to July 2018 the throughput at DBCT and the TIC and handling charges that have applied over the same period. This chart also illustrates that, despite a reduction in the regulated TIC of over 50c/t as a result of the 2016 regulatory reset, there has been no corresponding increase in throughput (and vice versa for the increase in handling charges in 2011 of over 50c/t). This indicates that the User Group Submission's assertion that a 50c/t change in the TIC and handling charges at DBCT would cause a reduction in throughput of ~20Mtpa is completely erroneous, based on market evidence.
- 376 Further, in any event, the pricing framework that will apply under the Access Framework in the future without declaration provides for a Ceiling TIC that will cap the TIC so that it is no higher than the highest price at which coal volumes served at DBCT would be the same as if the Floor TIC applied.
- 377 Therefore, as explained in the HoustonKemp Review on (a):³¹⁷
- 377.1 If Castalia's analysis is applied in light of the terms of the Access Framework, the ceiling TIC would be at most 50 cents/tonne higher than the Floor TIC and therefore could not increase to \$12/tonne as alleged.
- 377.2 To establish that criterion (a) is satisfied, the User Group and Castalia would therefore have to demonstrate that a decrease in price from \$5.50/tonne to \$5.00/tonne for coal handling services at DBCT would promote a material increase in competition in a dependent market.
- 377.3 There is no evidence that a decrease in price from \$5.50/tonne to \$5.00/tonne for coal handling services at DBCT would promote a material increase in any dependent market.
- 378 The User Group seeks to distinguish the *Port of Newcastle* case on the basis that it involved a 'very different set of circumstances'. The key basis for this assertion is that the TIC at DBCT is 'much higher/more material' than the charge for channel services that was relevant in the Port of Newcastle case. However, as noted in the DBCTM Submission,³¹⁸ the TIC represents approximately only 1% to 1.5% of total product price in relation to coking coal. The QCA has similarly previously recognised that rail and port costs are a relatively small proportion of total revenues.³¹⁹
- 379 The User Group also seeks to distinguish the *Port of Newcastle* case on the basis that the mines that use the terminal services at DBCT have less uniform levels of profitability and ability to withstand pricing volatility, and concludes that '[t]hat distortion of competition in metallurgical coal markets - would be likely to be a material reduction in competition if the declaration expired'.³²⁰ However, the User Group does not identify how a change in access charges would 'distort' competition in metallurgical coal markets. It fails to acknowledge that coal export markets are highly and effectively competitive (and would be so with or without declaration).³²¹

3.5 No impact on competition in tenements market

- 380 The User Group's assertion that declaration would promote a material increase in competition in the Hay Point catchment tenements market is incorrect. As set out in the DBCTM Submission³²², access as a result of declaration would not promote a material increase in competition in the mining authorities (or tenements) market.

³¹⁷ See section 4.2.2 of HoustonKemp Review on (a)

³¹⁸ DBCTM Submission at [358]

³¹⁹ As noted at [357] of DBCTM Submission - see QCA, Discussion Paper - Capacity Expansion and Access Pricing for Rail and Ports, April 2013 at page 9

³²⁰ User Group Submission, page 82

³²¹ DBCTM Submission at [352] to [360]

³²² DBCTM Submission at [361] to [365]

381 As a starting point, DBCTM notes that the User Group does not make any cogent submission that declaration would promote a material increase in competition in the primary dependent market(s) of coal export markets.³²³ Given declaration would not promote a material increase in competition in the coal export markets, there cannot be any flow-on effects in any related markets.³²⁴ This position is unambiguously supported by legal precedent. For example, in the *Port of Newcastle* case, the Tribunal (in responding to submissions relating to an impact on demand for mining authorities and competition in the bidding for the award of mining authorities) concluded:³²⁵

The Tribunal does not consider it necessary to address the impacts asserted in relation to derivative markets. If the impact of increased access on the coal export market is not such as to satisfy the Tribunal that it would promote a material increase in competition in that market, it is difficult to see how there would be the flow-on effects on the derivative markets...

382 If the QCA does not determine that criterion (a) is not met on the basis of this clear precedent, it must clearly explain why.

383 Although DBCTM considers that this establishes that declaration would not promote a material impact on competition in the tenements market, DBCTM also sets out in further detail below why:

383.1 The User Group's definition of the tenements market is flawed.

383.2 Declaration would not promote a material increase in competition in a tenements market.

384 A high level summary of the reasons why declaration would not promote a material increase in competition in the tenements market is set out in Figure 12 below.

Figure 12: Factual vs counterfactual - Tenements



³²³ Although the User Group alleges that there will be a distortion of competition in metallurgical coal markets and 'this would be likely to be a material reduction in competition if the declaration expired' (page 82), the User Group appears to accept that there is no basis for sensibly asserting that declaration would promote a material increase in competition in coal export markets as it does not develop any submissions on this point, refers only to a 'potential' impact on the metallurgical coal market (page 88) and focuses on the markets in respect of which it considers it has some basis to make submissions.

³²⁴ As detailed in section 4.4 of the DBCTM Submission

³²⁵ *Application by Glencore Coal Pty Ltd* [2016] ACompT 6 at [139]

Geographical dimension of market broader than Hay Point catchment

385 The User Group contends that the geographic dimension of the tenements market is the Hay Point catchment. Such a narrow definition does not accord with market definition principles, economic theory, commercial reality or previous NCC and Tribunal authority.

386 As detailed in section 3.3.1 of the HoustonKemp Review on (a), the narrow geographic market cannot reasonably be sustained by reference to conventional approaches to market definition.

387 Section 71 of the QCA Act defines a market by reference to the relevant goods and services as well as goods or services that are able to be substituted for, or are otherwise competitive, with those goods or services. The High Court of Australia has described a market to be a 'field of rivalry' between firms in which there is 'substitution between one product and another, and between one source of supply and another, in response to changing prices'.³²⁶

388 In relation to the geographic dimension of a market, the NCC has relevantly observed that the geographic dimension of a market identifies 'the area within which substitution in demand or supply is sufficient for the product(s)/service(s) traded at different locations to be considered to be in the same market'.³²⁷ Similarly, the Tribunal has said:³²⁸

The geographic market is the area of effective competition in which sellers and buyers operate. What is relevant, as a starting point, are actual sales patterns, the location of customers and the place where sales take place, and any geographical boundaries that limit trade. But it is not sufficient to measure only historical and current market behaviour. It is also necessary to consider whether customers would readily turn to more remote suppliers in response to a price increase by local suppliers or whether remote suppliers would choose to enter the local market.

389 The hypothetical monopolist test is a common approach used to define a market, which is based on defining the geographic dimension of a market as the geographic area within which a hypothetical monopolist would be able to raise prices profitably.³²⁹ The Tribunal has described this approach as follows:³³⁰

One identifies tentatively a small geographic area such that a hypothetical firm that is the only present producer of the relevant product or service is not able to profitably impose a price increase. If the product or service could be obtained elsewhere, an attempt to raise the price could not be profitable and the tentative geographic area would be too small. The geographic area is expanded until the hypothetical monopolist's price increase would be profitable.

390 Applying this approach, for the geographic dimension to be as narrow as the Hay Point catchment, it would be necessary to establish that a monopolist seller of tenements in the Hay Point catchment would be able to profitably impose a price increase. As set out in section 3.3.1 of the HoustonKemp Review on (a), this cannot be established given:

390.1 The buyers of tenements are investors who face a vast array of choices about where to acquire the rights to potential resources; and

390.2 There are no special circumstances prevailing in the region around Hay Point that would imply that investors could not substitute towards opportunities in other areas in Central Queensland.

³²⁶ *Re Queensland Co-Operative Milling Association Ltd* (1976) 8 ALR 481 at 517. See also *In the matter of Fortescue Metals Group Limited* [2010] ACompT 2 at [1015]

³²⁷ NCC, [Final recommendation - Declaration of the shipping channel at the Port of Newcastle](#), 2 November 2015 at [4.50]

³²⁸ *In the matter of Fortescue Metals Group Limited* [2010] ACompT 2 at [1022]

³²⁹ See, for example, *In the matter of Fortescue Metals Group Limited* [2010] ACompT 2 at [1024]

³³⁰ *In the matter of Fortescue Metals Group Limited* [2010] ACompT 2 at [1031]

- 391 Further, a monopsony buyer of tenements in the Hay Point catchment could not profitably decrease prices because sellers would easily find a purchaser outside the geographic area.³³¹
- 392 The fact that acquirers of tenements may value individual tenements differently (for example, based on the capital and operating costs of developing and operating the mine and the quality of the resource) does not mean that the tenements are therefore necessarily in different geographic markets or not substitutable.
- 393 A broader geographic market is also supported by the recent *Port of Newcastle* case. In that case, the NCC said:³³²
- parties seeking coal mining authorities may likewise be able to consider different locations (for instance, coal regions located in the Hunter Valley in NSW or coal mining regions in Queensland), thus expanding the field of substitutes.
- 394 The User Group's attempt to dismiss this finding cannot be given any weight. Although it is correct that the NCC did not consider it necessary to define the derivative dependent markets with any precision (because there could be no promotion of competition in such markets if declaration did not promote a material increase in competition in the coal export markets),³³³ it is clear from the NCC's statement that it considered that there were substitution possibilities such that the geographic extent of the tenements market was broader than the Hunter Valley in that case. When paragraphs [4.69]-[4.71] of the NCC's recommendation are read in full and in context, the NCC's finding was evidently that the tenements market was broader than the Hunter Valley but that it did not need to determine the precise boundary.
- 395 The factors listed at paragraph (c) on page 43 of the User Group Submission (regarding why the User Group does not consider that there is a global market for coal tenements) also support the fact that the geographic dimension of the tenements market is not as narrow as the Hay Point catchment.
- 396 The Queensland Government, which runs tenders for coal exploration permits, does not tender on the basis of a Hay Point catchment area or the DBCT service being declared. The Queensland Government's *Call for Tenders for Exploration Permits for Coal (CLR201718-1)*, for example, is not based on tenders for exploration permits in terminal 'catchment areas', but rather promotes coal in Queensland and key coal basins, noting that:³³⁴
- 396.1 There is '[e]xtensive coal transport infrastructure linked to coal export terminals at Abbot Point, Dalrymple Bay, Hay Point, Wiggins Island, RG Tanna, Barney Point, Fisherman Island'; and
- 396.2 In respect of the Bowen Basin, there is '[w]ell-established infrastructure with good road, rail and air connections ... and coal export ports at Bowen (Abbot Point), Mackay (Dalrymple Bay, Hay Point) and Gladstone (Wiggins Island, RG Tanna, Barney Point)'.
- 397 Accordingly, there is no basis for defining the geographic dimension of the tenements market as narrowly as the 'Hay Point catchment'

³³¹ This is consistent with the finding of the Tribunal in *In the matter of Fortescue Metals Group Limited* [2010] ACompT 2 at [1118], which related to an iron ore tenements market

³³² NCC, [Final recommendation - Declaration of the shipping channel at the Port of Newcastle](#), 2 November 2015 at [4.69]

³³³ NCC, [Final recommendation - Declaration of the shipping channel at the Port of Newcastle](#), 2 November 2015 at [4.70]-[4.71]

³³⁴ Queensland Government, [Call for Tenders for Exploration Permits for Coal \(CLR201718-1\)](#), 2018

No impact on competition in market without declaration

- 398 Even if the overly narrow geographic market definition adopted by the User Group is accepted, declaration of the DBCT service would not promote a material increase in competition in the tenements market.
- 399 The User Group's assertions as to why declaration would promote a material increase in competition in the tenements market are incorrect and unsubstantiated. Contrary to the assertions in the User Group Submission, the Access Framework will ensure certainty of access, access terms and efficient pricing. The impact of declaration and coal handling terminal access charges on the purchase of tenements is significantly overstated in the User Group Submission. The submission also fails to address the fact that contracted tonnage under existing evergreen user agreements makes up almost all of DBCT's current capacity.³³⁵

Protections in Access Framework

- 400 The User Group asserts that declaration was a critically important part of the investment decision of members that have invested in tenements in the last few years. It asserts that:³³⁶

members of the DBCT User Group that have invested in the Hay Point catchment tenements market in the last few years have confirmed that the declaration (and resulting protections in the DBCT access undertaking referred to in section 8.4 – principally regulated efficient pricing, standard terms of access, a transparent queue, and long term regulatory certainty) were a critically important part of their investment decision.

- 401 The User Group provides no evidence to substantiate this assertion. However, it is obvious that relying on declaration as a basis for making an investment decision would be risky and unlikely in circumstances where:
- 401.1 the QCA Act provides (and has provided since 2010) that declaration of the DBCT service expires in 2020; and
- 401.2 Subdivision 5 of Division 2 of Part 5 of the QCA Act provides for the revocation of declaration.
- 402 The examples of recent tenement transactions set out in Table 3.1 of the Castalia Report and pages 41-42 of the User Group Submission all occurred after 2010, i.e. after the QCA Act was amended to provide for declaration of the DBCT service to expire in 2020. The acquirers of the tenements should therefore have had full knowledge that the service may not be declared in the future. It should also have been clear to acquirers of tenements that the declaration criteria (and judicial interpretation of the declaration criteria) could change over time. This is particularly the case in light of public inquiry processes that considered changes to the criteria (such as the Productivity Commission's review of the national access regime that commenced in 2012 and the Competition Policy (Harper) Review that commenced in 2014) and the developing nature of the interpretation and application of the criteria on NCC, Tribunal and Court decisions. Further, DBCTM is not aware of any of the tenement transactions being contingent upon or otherwise stated to be made on the basis of declaration of DBCT.
- 403 In any event, as set out in the table in Appendix 3, the Access Framework includes protections referred to in section 8.4 of the User Group Submission and section 3.2.5 of the Castalia Report, including:

³³⁵ DBCTM also notes that the User Group's attempt to rely on the Queensland Government's application for certification of the DBCT Access Regime as a basis for its assertion that declaration would promote a material increase in competition in the tenements market must be rejected. The Government's application did not address the test of whether access as a result of declaration would promote a material increase in competition, but rather indicated that access was necessary to promote competition.

³³⁶ User Group Submission, page 83 and summarised at page 5

- 403.1 **Efficient pricing:** The pricing provisions in the Access Framework ensure efficient pricing levels. The Access Framework provides for access charges to be negotiated between DBCTM and each user, or determined by an independent arbitrator in the event that agreement is not reached. In the event of an arbitration, the arbitrator is required to determine a TIC that (in summary) reflects the price that would be agreed between a willing but not anxious buyer and a willing but not anxious seller and is between a floor and ceiling. As set out at paragraph 332 of the DBCTM Submission, the pricing framework under the Access Framework will ensure that access prices comply with the pricing principles specified in the CPA (which are equivalent to the principles in section 168A of the QCA Act).
- 403.2 **Standard terms of access:** The Standard Access Agreement that forms part of the Access Framework is substantively similar to the Standard Access Agreement under the current access undertaking. Section 12 of the Access Framework includes an equivalent provision to Section 13 of the current access undertaking for a Standard Access Agreement to guide access negotiations, and includes a right for access seekers to require that the access agreement be substantively identical to the Standard Access Agreement.
- 403.3 **A transparent queue:** The Access Framework contains a transparent queuing process that is equivalent to the process under the current access undertaking (see Section 5.4 of the Access Framework).
- 403.4 **Long-term certainty:** Consistent with clause 20 of the Standard Access Agreement under DBCTM's current access undertaking, the Standard Access Agreement under the Access Framework provides that, if the period during which coal is to be shipped during the term of the Agreement is 10 years or more, the user has an option to extend the term for 5 years or more (exercisable at any time up to 12 months prior to the end of the term, including the term as already extended by the exercise of such an option). The Deed Poll also provides for the Framework to remain in effect for at least 10 years, which is longer than the term of DBCTM's access undertakings under the QCA Act.

Likelihood of entry not affected by declaration

- 404 The User Group asserts that 'the competition to buy tenements will be significantly reduced – with the very type of company that has more recently been active in buying exploration or development projects in the Hay Point catchment coal tenements market being likely to exit from, or play a much diminished role in, the market'.³³⁷
- 405 The underlying premise of the User Group's position is that there may be a change in access charges if DBCT was no longer declared, and that different cost structures of new entrants and existing access holders would mean that new entrants would exit the market or would not be likely to enter.
- 406 However, potential buyers of tenements will not be at a material disadvantage to existing DBCT users in the future without declaration compared to the future with declaration. As set out in the DBCTM Submission and Appendix 3, access seekers will continue to have certainty of access, pricing and other access terms. For example, the Access Framework provides:
- 406.1 a ceiling TIC, which provides certainty as to the maximum price payable relating to the TIC; and
- 406.2 for the price to be set based on a willing but not anxious buyer and seller, which provides certainty that the TIC will be a market-based price.
- 407 The five yearly review of the TIC provided for in the Standard Access Agreement under the Access Framework is equivalent to the five yearly review on Agreement Revision Dates in the Standard Access

³³⁷ User Group Submission, page 5

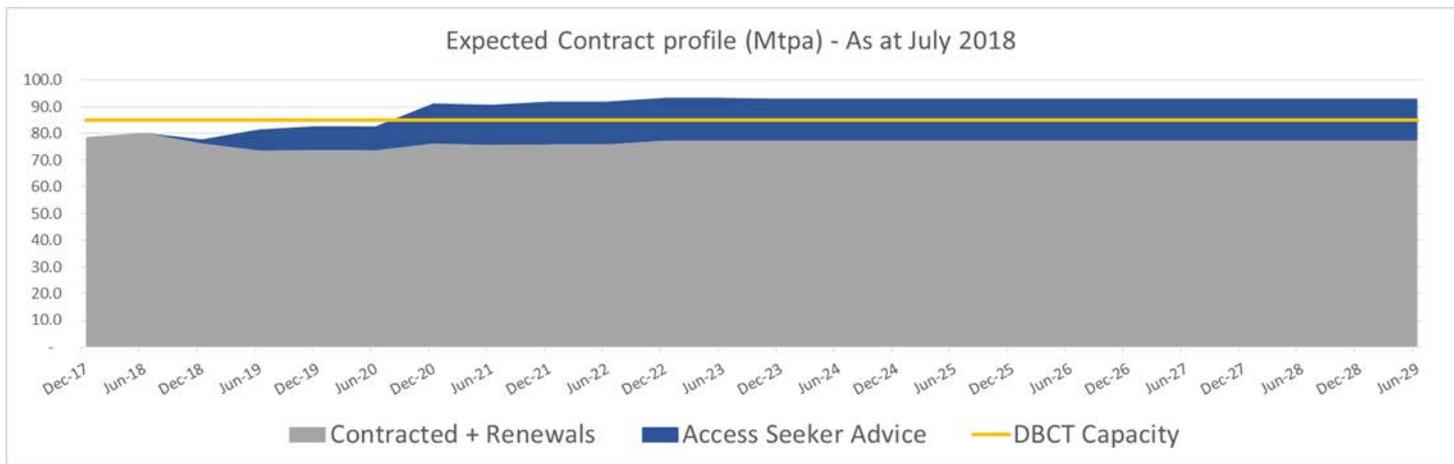
Agreement under the current access undertaking. In the future without declaration, there will be pricing certainty beyond the five year period as the floor and ceiling, together with the willing but not anxious principle, will apply to such reviews.

408 Further, the User Group's assertion that there will be two classes of users in the future without declaration (existing users and new users) and new users will be materially disadvantaged fails to address the fact that contracted tonnage under existing evergreen user agreements makes up almost all of DBCT's current capacity and terminal capacity expansions are similarly likely to result in two classes of users in the future with declaration under the QCA-approved access undertaking. In particular:

408.1 Contracted tonnages under existing user agreements currently make up almost all of DBCT's current capacity of 85Mtpa. Given the evergreen nature of existing user agreements, this means that DBCT would need to be expanded to accommodate any material new tonnage as a result of the acquisition of coal tenements (whether by new users or existing users) if existing users continue to exercise options to renew their agreements. If the existing user agreements are in fact perceived to be more valuable than new access agreements (as asserted, for example, by Castalia at pages 16-17 of the Castalia Report), it is logical to expect that users would renew or assign their existing user agreements.

408.2 Figure 13 below sets out DBCTM's (current) expected contract profile and illustrates that it is expected that existing user agreements will make up most of DBCT's current capacity over the declaration period. Even if access seekers who are actively communicating with DBCTM regarding future expected capacity requirements do not ultimately contract with DBCTM, existing user agreements will make up at least approximately 75Mtpa of DBCT's current capacity based on existing agreements and existing user advice on likely renewals of those agreements.

Figure 13: DBCT expected contract profile



408.3 Under the current access undertaking, Section 11.13 provides that where socialisation of a terminal capacity expansion would increase the TIC for users of the existing terminal, prices will be differentiated between users of the existing terminal and users of the new terminal component (unless circumstances exist that justify socialisation, for example based on the extent to which the expansion is likely to benefit users of the existing terminal). The costs involved with an expansion mean that it is highly unlikely that an expansion would meet the conditions or circumstances necessary for pricing to be socialised.³³⁸

³³⁸ HoustonKemp Review on (a) at section 3.3.2

409 The QCA has previously considered and dismissed competition related concerns relating to differential pricing.³³⁹ In its Final Decision on the DBCTM Differential Pricing Draft Amending Access Undertaking in 2015, the QCA accepted that expansion pricing could give rise to different tariffs applying to existing and expanding users but concluded that:³⁴⁰

there is no evidence to suggest that this will necessarily - or even ordinarily - give rise to an unfair competitive advantage for non-expanding users over expanding users.

410 Further, the QCA found:³⁴¹

We do not consider differential pricing creates an inappropriate competitive advantage for non-expanding users... However, we acknowledge that differences in the timing of investment may lead to existing users obtaining cost advantages over later entrants, which we note is appropriate and consistent with how competitive markets develop over time.

411 The QCA also observed that 'multiple tariffs are not uncommon for regulated entities (e.g. Aurizon Network)'.³⁴²

412 In the future without declaration, an equivalent price ruling process and expansion pricing principles will be applied to determine whether an expansion will be socialised or differentiated (with an independent arbitrator performing the role of the QCA in making the determination).³⁴³

413 Therefore, the potential for asymmetry in access charges between existing users and new users exists both with and without declaration would not promote a material increase in competition in respect of the acquisition of tenements.

414 Even if (contrary to the legal and factual context) the QCA does not accept the above, there are further reasons why the QCA could not rationally conclude that declaration would promote a material increase in competition in a tenements market. In order to do so, the QCA would need to be satisfied that in the future without declaration:

414.1 negotiations or arbitrations under clause 7.2 of an existing user agreements would result in access charges that are materially different to access charges determined through negotiations and arbitrations under the Access Framework;

414.2 access charges for new users would be so high that the new users would not enter the market or be able to compete in the market; and

414.3 the tenements market would not be effectively competitive without declaration.

415 The above propositions cannot be established because:

415.1 It is not possible to predict with any certainty the outcome of a negotiation or arbitration under clause 7.2 of an existing user agreement, and there is no certainty that access charges for existing users would be different or materially different to the charges for new users in the future without declaration. As acknowledged by the User Group's solicitors, Allens, in the letter

³³⁹ QCA, Final Decision - [DBCT Management Differential Pricing Draft Amending Access Undertaking](#), August 2015

³⁴⁰ QCA, Final Decision - [DBCT Management Differential Pricing Draft Amending Access Undertaking](#), August 2015 at page iv

³⁴¹ QCA, Final Decision - [DBCT Management Differential Pricing Draft Amending Access Undertaking](#), August 2015 at page 18

³⁴² QCA, Final Decision - [DBCT Management Differential Pricing Draft Amending Access Undertaking](#), August 2015 at page v

³⁴³ See paragraphs [23]-[26] of Appendix 7 of the DBCTM Submission and Section 10.8 of the Access Framework submitted by DBCTM on 29 June 2018

submitted with the User Group Submission, '[t]here are of course going to be numerous complexities or uncertainties about how such an arbitrator would determine pricing'.³⁴⁴

415.2 However, there is certainty that the outcome of an arbitration under the Access Framework will be a market-based TIC that is no higher than the ceiling TIC (being the highest TIC at which coal volumes served by the relevant Terminal Component would be the same as if the Floor TIC applied).³⁴⁵ Accordingly, there is no basis to conclude that access charges for new users would be so high that the new users would not enter the market or be able to compete in the market. If the QCA found otherwise, this would be a fundamental finding of fact and the QCA would have no clear legal basis for such a finding. DBCTM also has no ability or incentive to use any perceived market power to adversely affect competition in dependent markets.³⁴⁶

415.3 Even if there were differences in access charges, access charges make up only a small part of the overall cost structure of a user. There is no evidence that an increase in access charges at DBCT would render tenements unviable. The User Group's attempt to distinguish the recent *Port of Newcastle* case is also flawed. The User Group asserts that:³⁴⁷

the coal handling services and resulting change in infrastructure costs (particularly when related rail costs are taken into account) will be a significant proportion of a coal producer's costs – such that unlike the findings in the Newcastle shipping channel proceedings, the impact on a producer's investment decisions in the tenements market will be material

416 However, the User Group does not provide any basis for the assertion that the costs will be a significant proportion of a coal producer's costs. Conversely, as set out in the DBCTM Submission, the Terminal Infrastructure Charge represents approximately only 1-1.5% of the total product price for coking coal.³⁴⁸ This is not materially dissimilar to the proportion in the *Port of Newcastle* case (in which, as at 2015, port charges were approximately 0.65% of the coal price per tonne).³⁴⁹

417 Further, the following chart (showing the producer cost stack for an average mine for FY18) illustrates that the TIC is less than 3% of total costs.³⁵⁰

³⁴⁴ Allens letter, page 4

³⁴⁵ See paragraphs [16]-[19] of Appendix 7 of the DBCTM Submission and [16]-Section 10 and Schedule C, Part A of the Access Framework submitted by DBCTM on 29 June 2018

³⁴⁶ See Section 4.5 of the DBCTM Submission

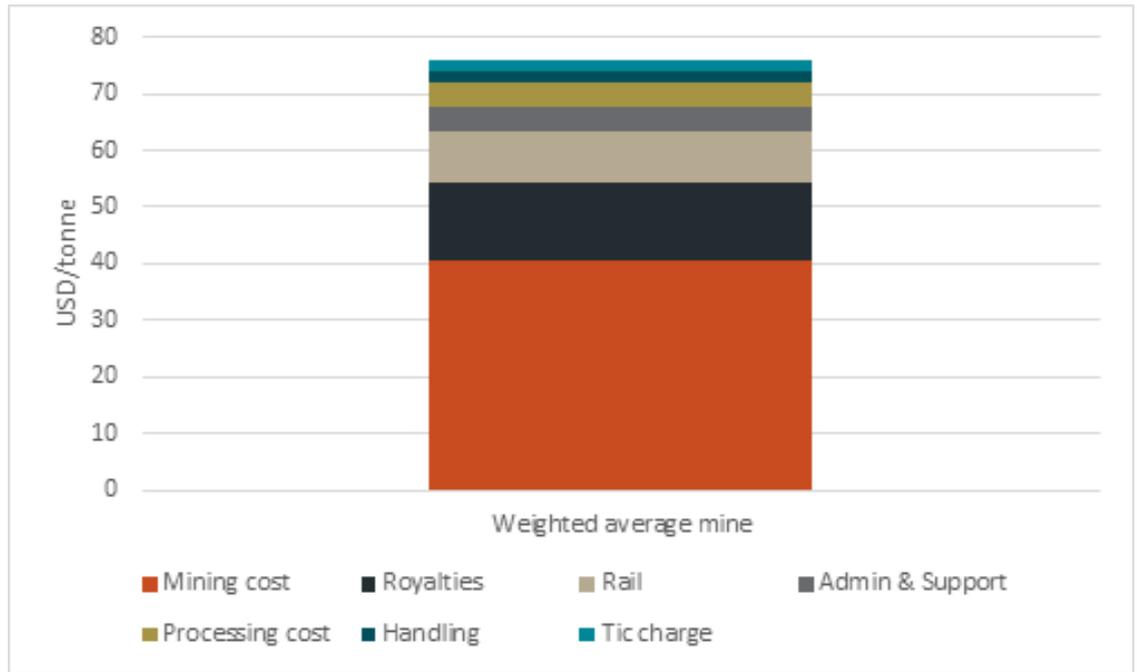
³⁴⁷ User Group Submission, page 5

³⁴⁸ For further details of the basis for this calculation, see DBCTM Submission at [358]

³⁴⁹ Port of Newcastle Operations, [Submission in response to Glencore's application to the National Competition Council](#), 18 June 2015, page 10

³⁵⁰ Figure 14 is based on the TIC charged up to 31 March 2018 at DBCT of AUD 2.5175; AME data on costs for all active mines at DBCT in 2018, with costs weighted by 2018 tonnage to represent a benchmark indicative mine producer cost stack; and DBCT charges converted to USD using an average exchange rate over the period 3 April 2017 to 29 March 2018.

Figure 14: TIC as proportion of coal producer costs



417.1 The tenements market (whether defined very narrowly as contended by the User Group or more broadly as supported by previous declaration decisions) is effectively competitive and would be so with or without declaration. For example, In the *Fortescue* case, the Tribunal found the tenements market in that case was an effectively competitive market.³⁵¹ Although that case related to iron ore tenements in the Pilbara region, there is no evidence to suggest that the same factors that made the tenements market in that case effectively competitive do not apply in the case of coal tenements in Queensland. The User Group also appears to accept that the reasoning in the *Fortescue* case relating to iron ore tenements is applicable, as its definition of a tenements product market is predominantly based on that case.³⁵²

418 Finally, it is difficult to reconcile the assertions of the User Group regarding the impact of declaration on the purchase of tenements with the fact that no other terminal that provides coal handling services in Australia is declared, yet there is no indication or evidence that the lack of declaration has impacted competition relating to tenements in other areas. The assertion that there is a 'complete lack of alternative terminals which could be used to export product' from greenfield coal projects is also false, as evidenced in the DBCTM Submission.³⁵³

419 Accordingly, for the reasons set out above, the User Group's contention that declaration would promote a material increase in competition in the coal tenements market must be rejected.

3.6 No impact on secondary capacity trading competition

420 The User Group's assertion that declaration would promote a material increase in competition in a DBCT secondary capacity trading market is incorrect.

³⁵¹ *In the matter of Fortescue Metals Group Limited* [2010] ACompT 2 at [1120]

³⁵² See, for example, User Group Submission at pages 40-41

³⁵³ See for example DBCTM Submission at [371] to [377]

- 421 As a starting point, DBCTM notes that secondary trading is a derivative market to the coal export markets. As set out section 4.4 of the DBCTM Submission, given declaration would not promote a material increase in competition in the coal export markets, there would not be any flow-on effects in any related markets.
- 422 The User Group Submission (and the accompanying Castalia Report) submit that, in the absence of declaration, there would be no restriction on anti-competitive behaviour such as DBCTM refusing to consent to assignments/capacity trading unless done through the Trading SCB or the Trading SCB acquiring all surplus capacity and only selling it on a monopoly pricing basis.
- 423 However, the concerns of the User Group are misplaced because DBCTM will not be a participant in the secondary capacity trading market (and will be constrained from doing so) in both the future with declaration and the future without declaration.
- 424 A high level summary of the reasons why declaration would not promote a material increase in competition in the secondary capacity trading market is set out in Figure 15 below.

Figure 15: Factual vs counterfactual - Secondary capacity trading



- 425 On 27 June 2018, DBCTM submitted a Draft Amending Access Undertaking (DAAU) to the QCA, advising that the Trading SCB will cease its trading of capacity at DBCT as of 1 September 2018. This is consistent with the DBCTM Submission in May 2018 that DBCTM would close the business prior to the expiry of declaration. As set out in the Trading SCB DAAU letter, the services of the Trading SCB have largely become redundant and capacity transfers are now more frequently and materially being transacted directly between Access Holders and Access Seekers, without the need for the Trading SCB. The table set out in the appendix to DBCTM's letter to the QCA regarding the Trading SCB DAAU highlights that there is an active secondary market for direct assignments (with only approximately 7% of secondary capacity transfers since July 2015 having been made through the Trading SCB).
- 426 The User Group concerns about the anti-competitive effects of DBCTM being vertically integrated with the Trading SCB cannot therefore arise. Concerns about future integration will also be well addressed in the future without declaration through:
- 426.1 Ring-fencing provisions in the Access Framework. The Access Framework contains equivalent ring-fencing provisions to the ring-fencing provisions in the current access undertaking (see section 8), which include that DBCTM and its related bodies corporate will not own or operate a Supply Chain Business in any market that is related to or uses the Terminal.
- 426.2 Provisions of the *Competition and Consumer Act 2010* (Cth), enforced by the ACCC, which prohibit arrangements and acquisitions that have the effect or likely effect of substantially lessening competition in a market.
- 427 Even if the Trading SCB was not to cease operations or the Framework did not include ring-fencing provisions, the User Group's assertions regarding the impact of declaration on the secondary trading of

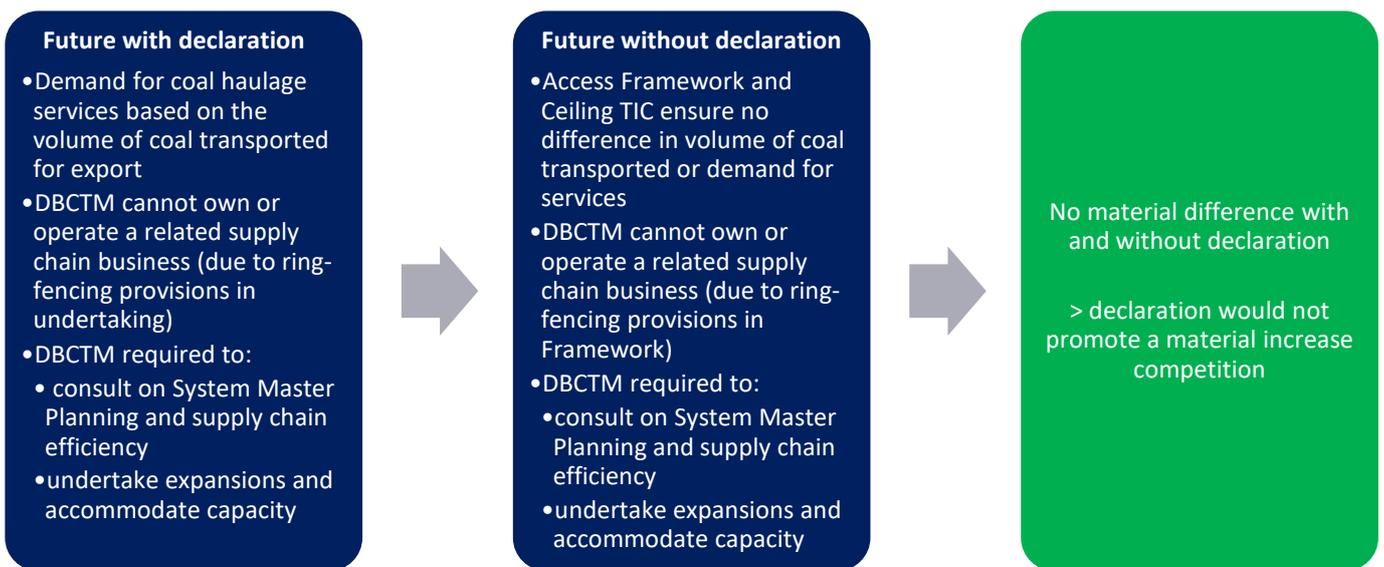
capacity do not acknowledge the contractual limitations on DBCTM relating to secondary trading and assignments. Clause 12 of the Standard Access Agreement, approved by the QCA through the access undertaking process, limits DBCTM's discretion to refuse to consent to an assignment. DBCTM's ability to refuse to consent to an assignment will be limited in a similar manner under the Access Framework. In particular:

- 427.1 Clause 12.2 requires that DBCTM's consent must not be unreasonably withheld.
- 427.2 Clause 12.3 requires DBCTM to consent to an assignment unless DBCTM (acting reasonably) is satisfied of certain matters such as that the assignor is in material breach of the Agreement or the assignee is not of good financial standing or is incapable of performing the obligations under the Agreement. Refusals to consent to a transfer are also subject to binding dispute resolution under the Agreement.
- 427.3 Clause 12.5 requires that DBCTM's consent for the user to permit a third party to ship coal through the Terminal and treat it as part of the user's Annual Contract Tonnage must not be unreasonably refused.

3.7 No impact on competition in coal haulage market

- 428 The User Group's assertion that declaration would promote a material increase in competition in the coal haulage market is incorrect. As set out in the DBCTM Submission³⁵⁴, access as a result of declaration will not promote a material increase in competition in the coal haulage services market.
- 429 As with the other markets discussed above, the coal haulage market is a derivative market to the coal export markets. Given declaration would not promote a material increase in competition in the coal export markets, there would not be any flow-on effects in any related markets - including the coal haulage market.
- 430 A high level summary of the reasons why declaration would not promote a material increase in competition in the coal haulage market is set out in Figure 16 below.

Figure 16: Factual vs counterfactual - Coal haulage



- 431 The User Group suggests that declaration would promote a material increase in competition in the central Queensland coal haulage market on the basis that declaration of the DBCT service has created the

³⁵⁴ DBCTM Submission at [361] to [365]

conditions or environment for improving and enhancing competition. It is important to note that the relevant test under criterion (a) is not whether declaration has (previously) created the conditions or environment for improving and enhancing competition, but rather whether declaration would promote a material increase in competition. However, in any event, the User Group does not provide credible evidence or a logical argument as to why declaration would impact competition in the coal haulage services market. It is telling that the User Group's own expert economist (Castalia) has not addressed this market in its report.

432 Further, the concerns raised in the User Group Submission and Pacific National's submission regarding a lack of certainty if the DBCT service is not declared are directly addressed in the Access Framework. The Framework addresses the specific factors that the User Group³⁵⁵ alleges rail haulage providers require certainty about. Specifically, the Access Framework provides certainty that:

432.1 *DBCTM will not become a vertically integrated with a supply chain business and then favour its related rail haulage operator or coal producer (or discriminate against non-related entities) –* In particular, Section 8.1 of the Access Framework provides that DBCTM and its Related Bodies Corporate will not own or operate a Supply Chain Business in any market that is related to or uses the Terminal. Section 8.2 further provides that DBCTM will not engage in conduct for the purpose of preventing or hindering an access holder's or access seeker's access or unfairly differentiate between access seekers, access holders or rail operators. The *Competition and Consumer Act 2010* (Cth) also provides protections from anti-competitive behaviour (such as arrangements or acquisitions that substantially lessen competition in a market, and conduct that substantially lessens competition if a corporation has a substantial degree of power in a market).

432.2 *DBCTM will not engage in monopoly pricing that will hinder future investment in coal production and/or damage the financial viability of existing coal producers -* As set out above, the pricing provisions in the Access Framework (which include a ceiling TIC and prices set based on a willing but not anxious buyer and seller) ensure that the TIC is constrained such that the use of DBCT remains the same with or without declaration.

432.3 *DBCTM will work collaboratively to improve supply chain efficiency -* The Access Framework contains equivalent provisions to the current access undertaking relating to whole of supply chain efficiency and master plans (see Sections 13 and 14).

432.4 *DBCTM will expand the terminal when demand exists to do so to provide for growth in the haulage business -* The Access Framework contains equivalent provisions to the current access undertaking regarding obligations to accommodate capacity and Terminal capacity expansions (see Section 11). The Port Services Agreement also imposes obligations on DBCTM relating to expansions.

433 The Framework also ensures that there will be no difference in volume shipped through DBCT in the future with declaration and the future without declaration (as set out in the DBCTM Submission and HoustonKemp report on (a) provided with that submission). In relation to the effect of declaration on the coal haulage services market, HoustonKemp's expert report on criterion (a) (attached as Appendix 9 to the DBCTM Submission) concluded:

Declaration of the DBCT service does not have any direct effect on the rail haulage service. Therefore, a change in volumes supplied is the only way that declaration of the DBCT service could affect this market. Given that volumes transported by each firm will not change, the structure and conduct of firms in the market are also not affected by declaration. For example, the likelihood of entry will be the same.

³⁵⁵ User Group Submission, page 87

The same coal haulage services will be required with and without declaration. Therefore, there is no reason for the quality of coal haulage services to change as a result of the declaration of the DBCT service.

We conclude that declaration of the DBCT service would not promote a material increase in competition in any rail haulage market, given that it would not affect:

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

434 The HoustonKemp Review on (a) at Appendix 1 of this submission confirms that the User Group submissions on the coal haulage market do not alter the basis for this conclusion.³⁵⁶

435 NCC and Tribunal precedent also clearly supports DBCTM's position that, as declaration will not impact the primary coal export markets, it would also not have flow-on effects for infrastructure markets such as rail.³⁵⁷

3.8 No impact on competition in other markets

436 The User Group's submission focuses on the three markets outlined above, but also asserts that it would be able to provide submissions on further dependent markets where it considers there would be a material promotion of competition. If the User Group had credible evidence of such an impact on other markets, it would be highly unusual not to put that forward in its submission. It is clear from the User Group's selection of three dependent markets that the three dependent markets put forward are the markets in which the User Group thinks it has the strongest case. However, as set out above, the User Group's assertions in relation to declaration promoting a material increase in competition in those markets are baseless.

437 To the extent that the User Group seeks to put forward submissions on further dependent markets at a later date, DBCTM notes that natural justice requires that it be properly consulted on such submissions and provided a meaningful opportunity to respond.

438 A high level summary of the some of the key reasons why declaration would not promote a material increase in competition in the coal export markets is set out in Figure 17 below.

³⁵⁶ HoustonKemp Review on (a) at 3.5

³⁵⁷ *Application by Glencore Coal Pty Ltd* [2016] ACompT 6 at [139]; NCC, *Final recommendation - Declaration of the shipping channel service at the Port of Newcastle*, 2 November 2015 at [4.106]

Figure 17: Factual vs counterfactual - Other markets

- 439 The above factors are supported by legal precedent. For example, as set out in the DBCTM Submission, the recent *Port of Newcastle* case provides significant precedent regarding dependent markets in the coal supply chain being effectively competitive and declaration not promoting a material increase in competition in any dependent markets.
- 440 The User Group's attempts to distinguish the *Port of Newcastle* case cannot be accepted. The factors listed at page 82 of the User Group Submission do not establish that there are differences in the Hunter Valley coal supply chain compared to the Central Queensland coal supply chain that means the nature of competition in dependent markets is different.
- 441 For example, the following factors relied on by the Commonwealth Minister in finding (based on the NCC's recommendation) that declaring access to the Port of Newcastle shipping channel would not promote a material increase in competition in the dependent markets are also directly applicable and pertinent in the case of the proposed declaration of the DBCT service.³⁵⁸
- 441.1 Any impact on the identified dependent markets will be the result of business decisions by coal producers. Those business decisions would have to be materially affected by changes in the terms of access before it could be considered that there is a material effect on any of the dependent markets. There is insufficient evidence that the identified dependent markets are not workably competitive.
- 441.2 The charges represent a small fraction of the overall coal price at present and even if the charges are increased significantly in future, it will remain a minor cost element.
- 441.3 Coal producers currently manage a range of uncertainties in their businesses, many of which are likely to be far greater than that which exists in relation to the charges.³⁵⁹
- 441.4 The infrastructure provider has a long-term lease and is heavily reliant upon coal as the largest share of its throughput.
- 441.5 The infrastructure provider is not vertically integrated into any dependent market in a way that affects its business decisions.

³⁵⁸ M Cormann (Acting Treasurer), [Decision and Statement of Reasons concerning Glencore Coal Pty Ltd's Application for Declaration of the Shipping Channel Service at the Port of Newcastle](#), January 2016, pages 3-4

³⁵⁹ See also *Application by Glencore Coal Pty Ltd* [2016] ACompT 6 at [156]

442 The subsequent Tribunal and Court decisions in the *Port of Newcastle* case do not alter the importance of the above factors, as the decision to declare the service was based on the application of the 'with and without access' test rather than the 'with and without declaration' test (as is now the test under criterion (a)).

3.9 Conclusion on criterion (a)

For the reasons set out above and in the DBCTM Submission, DBCTM maintains that access (or increased access) to the DBCT service, on reasonable terms and conditions, as a result of a declaration of the service would not promote a material increase in competition in any market. The User Group Submission and Castalia Report do not provide any logical or credible basis for finding otherwise. As criterion (a) is not satisfied, there is no reasonable basis on which the QCA can recommend that the DBCT service be declared.

4 Criterion (d)

4.1 Summary

- 443 The recent changes to the access criteria include raising the threshold of section 76(2)(d), which now requires a positive finding that 'access, or increased access, on reasonable terms and conditions as a result of declaration promotes the public interest'. Under the revised criterion, the QCA must be satisfied that declaration results in significant net public benefits, requiring an affirmative finding that the benefits of declaration are sufficiently large to demonstrably outweigh the inevitable costs and frictions of declaration.³⁶⁰
- 444 The User Group Submission fails to put before the QCA any probative evidence sufficient to properly enable the QCA to be affirmatively satisfied that criterion (d) is met. It makes no effort to show that the potential benefits of declaration outweigh the potential detriments to the extent necessary to satisfy the threshold required under the revised version of criterion (d).
- 445 In summary, the User Group Submission:
- 445.1 fails to substantiate any of its claims about declaration generating significant public benefits. As shown in Figure 19, the User Group asserts that declaration results in significant public benefits but fails to provide supporting evidence. In many cases, it makes the error of assuming that because an event occurred during the period of declaration, the event was caused by declaration.
 - 445.2 fails to acknowledge the main detriments resulting from declaration, including:
 - 445.2.1 the unnecessary regulatory burden and compliance costs³⁶¹ imposed in circumstances where commercial negotiation would result in efficient outcomes;³⁶²
 - 445.2.2 the adverse impact on incentives to invest in DBCT associated with declaration;³⁶³
 - 445.2.3 regulating access to just one of five accessible CQCN terminals is likely to distort the inter-terminal pattern of investment.³⁶⁴
 - 445.3 fails to recognise that any change in pricing in the future without declaration will not be detrimental in social welfare terms, as any mere transfers in the future without declaration do not affect allocative efficiency.
 - 445.4 fails to meaningfully consider the counterfactual, and the constraints to DBCTM and residual protections to Users that would apply without declaration.

4.2 Mischaracterising the process and role of the Declaration Review

- 446 DBCTM reiterates the significance of the amendments to criterion (d) and notes that the User Group appears to consistently mischaracterise the process required of the declaration review.
- 447 Several User Group arguments misinterpret the process and role of the declaration review. The outcome of the review must not be determined by the QCA's view of how successful the declaration has been

³⁶⁰ DBCTM Submission, at [396] to [414].

³⁶¹ QCA Act, Section 76(5)(c)

³⁶² DBCTM Submission, at [428] to [429]

³⁶³ QCA Act, Section 76(5)(b)(i)

³⁶⁴ DBCTM Submission, at [470] to [474]; and QCA Act, Section 76(5)(b)

historically. Rather, it should turn on an objective, forward looking assessment of whether the DBCT service currently satisfies the access criteria.

- 448 The similarity of the wording in the test required of criterion (a) and (d) confirms that criterion (d), like (a), is prospective in nature and requires a comparison of the future with and without declaration.³⁶⁵ Whilst the QCA can draw upon the empirical evidence of the previous period in which the deemed declaration applied to DBCT in order to assess the likely future 'with' declaration, the declaration review must not lapse into an assessment of the historical effectiveness of the deemed declaration. The User Group submission is pervaded by this fundamental mischaracterisation of the process of the declaration review.³⁶⁶
- 449 Whilst an elementary point, it is worth articulating the basic legal process required of the review.
- 449.1 The current declaration expires on 8 September 2020 by virtue of section 250(2)(a) of the QCA Act.
- 449.2 In this context the QCA must conduct a review in order to recommend that the currently deemed declared services satisfy the access criteria (section 87A and section 76). If the QCA is satisfied about all access criteria for a service, then the QCA must recommend for the service to be declared. Conversely, if the QCA is not satisfied about all access criteria for a service, then the QCA must recommend that the service not be declared.
- 449.3 There is no requirement for the QCA to consider if the antecedent deemed declaration should be 'continued' or be 'renewed'.
- 450 Despite the clarity of the legislative provisions, the User Group submission contains assertions as to whether the QCA should allow the declaration to 'expire' or not, and assertions that benefits will be promoted by the 'continuation' of the existing declaration.³⁶⁷ By way of example, the following phrase clearly conflates the expiration of the deemed declaration and the role and process of the declaration review:³⁶⁸
- The DBCT User Group understands that DBCTM is potentially considering, as part of seeking to have the declaration expire, proposing a contractual or other method of how access wo[u]ld be provided in the future - in the absence of regulation
- 451 Any submission that the QCA is to consider the public interest effects of declaration 'expiring', or the public interest effects of the declaration 'continuing' is inaccurate, conflates the two separate declarations, and involves error. In particular, DBCTM submits that arguments underpinned by 'the expectation that the deemed declaration would continue' are irrelevant considerations. Not only are such expectations subjectively irrational, given the explicit term for which each service is declared, they are objectively irrelevant and inappropriately insert an extraneous consideration regarding the nature of the historical deemed declaration.³⁶⁹ Figure 19 contains comments on this issue.

³⁶⁵ DBCTM Submission, at [406]

³⁶⁶ See examples in User Group Submission, at page(s) 4, 8, 11, 24, 27, 72, 76, 100, 102, 103,104

³⁶⁷ See examples in User Group Submission, at page(s) 4, 8, 11, 24, 27, 72, 76, 100, 102, 103,104

³⁶⁸ User Group Submission, page 102

³⁶⁹ QCA Act, Section 76(2); see also Aurizon Network, *Review of Declared Services in the Central Queensland Coal Network*, 30 May 2018, page 9

4.3 Substantive issues with the User Group Submission

The User Group fails to substantiate that the claimed public benefits are the result of declaration

- 452 DBCTM submits that the following 'public benefits', to a large extent, are not causally dependent upon declaration under Part 5 of the QCA Act. This is because the benefits are likely to arise in the future with or without declaration:
- 452.1 Environmental benefits arising from DBCTM adhering to its environmental obligations that are not imposed under the AU administered by the QCA;
 - 452.2 Economic benefits arising from increased economic activity that are not directly dependent upon declaration. This includes macroeconomic improvements in the regional and Queensland economies due to a broad range of global and macroeconomic factors, including increases in the global coal commodity price;
 - 452.3 The User Group have not asserted that DBCT not being declared will result in any change in coal volumes, let alone provided any rationally probative evidence to substantiate such assertion. Therefore, there cannot be any impact upon surrounding communities arising from changes in coal volumes as a result of services at DBCT not being declared post September 2020;
 - 452.4 The broad assertion that any investment during the deemed declaration is a result of declaration, without considering whether the investment would have been undertaken in the absence of declaration, fallaciously conflates temporal correlation with causation, and is addressed below.

Issues with the User Group's analysis of the effect of declaration on incentives to invest

- 453 In section 10 of its submission, the User Group focuses on investment incentives, asserting that declaration increases the incentives to invest in the following areas:
- 453.1 mines that could access DBCT;
 - 453.2 the upstream rail haulage markets; and
 - 453.3 DBCT itself.
- 454 The User Group submission erroneously assumes that the effects of declaration of DBCT upon the incentives to invest in dependent markets are as strong as the effect of declaration of DBCT upon the incentives to invest in DBCT itself.
- 455 Whilst DBCTM acknowledges that prices and price certainty can have impacts on user incentives to invest in upstream activities, the effect of declaration of DBCT on these incentives is likely to be weaker than the effect of declaration of DBCT on the incentive to invest in DBCT itself. This is due to the materiality of the terminal infrastructure charge (TIC) as a proportion of total input costs for mining compared with the materiality of the TIC from the perspective of investing in DBCT.³⁷⁰ Accordingly, the QCA must reject the User Group's implication that investment effects are symmetric, and appropriately account for the relative sensitivities of the returns in upstream activities and in DBCTM itself to declaration of DBCT.

³⁷⁰ Aurizon Network, *Review of Declared Services in the Central Queensland Coal Network*, 30 May 2018, page 24

Declaration has an adverse effect on incentives to invest in DBCT

- 456 DBCTM agrees with the User Group submission that declaration constrains the returns that DBCTM can earn relative to the case in which it is not subject to access regulation as a result of declaration.³⁷¹ DBCTM is therefore perplexed by the User Group's claim that notwithstanding declaration's tendency to reduce returns, it nonetheless facilitates investment in DBCT.³⁷²
- 457 The QCA must reject the unfounded assertion that declaration facilitates investment in DBCT in the absence of evidence to support this and in light of conventional economic theory that declaration introduces the risk of regulatory error and inherently deters investment in significant infrastructure.³⁷³ This includes the well documented 'x-inefficiency' or 'dynamic efficiency' losses associated with regulation due to the weakening of incentives to invest in regulated infrastructure.³⁷⁴ As noted previously, this deterrence is particularly acute for DBCT because the QCA Act has no merits review mechanism providing for an avenue to challenge pricing determinations.
- 458 A particular problem is that DBCT is disadvantaged in attracting investment for terminal expansions compared with nearby unregulated terminals. This can mean that terminal capacity expansion might occur elsewhere even if DBCT is the most economic option from a public-interest perspective.

Temporal correlation does not establish causation

- 459 The User Group attempts to substantiate its assertion that declaration promotes incentives to invest in the terminal by pointing out that substantial expansions of the terminal have occurred since the terminal was declared. This conflates temporal correlation with causation, and is fallacious in the absence of any evidence that establishes that the expansions would not have occurred without declaration.
- 460 The User Group has failed to note that *all* expansions at DBCT were committed to *prior* to the first Access Undertaking coming into effect in 2006. This establishes that the expansions would have occurred even in the absence of arrangements approved by a Regulator. It is primarily the demand for capacity that determines expansion requirements.
- 461 PwC asserts "a clear framework for future expansions has successfully supported several previous terminal capacity augmentation initiatives."³⁷⁵ This assertion is factually incorrect, as the AU framework did not exist at the time of commitment to any previous expansions, as illustrated in the table below.

³⁷¹ See for example, User Group Submission, page 99

³⁷² User Group Submission, page 97

³⁷³ See Productivity Commission, Review of the National Access Regime (2013), page 104; National Competition Policy Review Report (Hilmer Report) (25 August 1993), page 251; 7 NCC, Declaration of Services - A guide to declaration under Part IIIA of the Competition and Consumer Act 2010 (Cth), April 2018 at [6.11]; Harper et al. Competition Policy Review (Final Report), page 439; and see Aurizon Network, *Review of Declared Services in the Central Queensland Coal Network*, 30 May 2018, pages 10-12 and 16-23

³⁷⁴ See DBCTM Submission at [458] to [463]; NCC, Declaration of Services - A guide to declaration under Part IIIA of the Competition and Consumer Act 2010 (Cth), April 2018 at [6.21]; National Competition Policy Review Report (Hilmer Report) (25 August 1993), page 251; K Tilman and X Su, *Open Access and Dynamic Efficiency 2010*, American Economic Journal: Microeconomics, 2(2): 64-96; for a broad description of the issues see OECD, [Public Policies and Investment in Network Infrastructure](#), 29 September 2011,

³⁷⁵ PwC Report, Page 49

Figure 18: DBCT expansion history

Stage	Capacity Mtpa	Approval / Commitment	Construction timing		Lease status at Commitment	Regulatory Status at Construction Commencement	Comments
			Commenced	Completed			
1	15.0		1980	1983	Not leased	Not declared	-
1A	22.5		1988	1990	Not leased	Not declared	-
2	26.5		1991	1995	Not leased	Not declared	-
2A	28.5		1995	1996	Not leased	Not declared	-
3	33.0		Oct-96	Dec-98	Not leased	Not declared	-
4	37.5		Jun-98	Oct-99	Not leased	Not declared	-
5	45.5	Feb-00	Apr-01	Feb-02	Not leased	Not declared	-
6	56.0	Mar-00	Apr-02	Jun-03	Not leased	Declared via QCA Regulation. No AU in place	Project commenced prior to lease of terminal
Short Gain	59.0	Jul-04	Nov-04	Aug-06	Leased	Declared via QCA Regulation. No AU in place	Project commenced without need for QCA approval because no draft AU existed.
7X Phase 1	68.0	Aug-06*	Sep-04	Mar-08	Leased	Declared via QCA Regulation. AU not in place until Oct 2006	Project commenced 2 years before QCA approval. DBCTM committed \$330M prior to QCA approval. Refer User Group meeting presentations 15 Aug 06 and 6 Dec 06.
7X Phase 2/3 Step A	72.0	Oct-06*	Oct-04	Dec-08			
7X Phase 2/3 Step B	85.0	Oct-06*		Jun-09			

*For these expansion steps the Approval/Commitment column refers to QCA Expansion Approval. For expansion steps up until the Short Gain expansion the approval required was the DBCTM or PCQ Board as the case may be.

- 462 As shown above, all expansions of DBCT were commenced prior to the 2006 AU. DBCTM committed \$330M to 7X prior to the QCA approval of 7X Phase 1 in August 2006 and 7X Phase 2/3 in October 2006, which irrefutably establishes that these expansions would have occurred irrespective of declaration (and did not occur *because of* declaration).
- 463 DBCTM points out that the 2010 DBCT Access Undertaking represented a package agreed between DBCTM and the DBCT users that was designed to support expansion of the terminal. It included a WACC that was more generous to DBCTM than the QCA would have (and has subsequently been) prepared to allow.³⁷⁶ Similar outcomes have been achieved by negotiations between ARTC and users of the corporation's Hunter Valley Coal Network.³⁷⁷
- 464 The successful negotiation of such agreements illustrates a central point made in DBCTM's submission. That is, declaration cannot be regarded as promoting the public interest because it is costly and does not lead to outcomes that are superior to those that can be achieved through commercial negotiations between the service provider and service users, when the provider and the users are large sophisticated corporations that are mutually dependent on each other.
- 465 The 2010 experience demonstrates that effective outcomes can be achieved by commercial negotiation. DBCTM considers that the declaration was of no substantial help in facilitating the agreements that it negotiated with users at that time. In contrast, rulings made by the QCA generally lead to disputes between infrastructure providers and users (e.g. the protracted process for review of Aurizon Network's Standard User Funding Agreement³⁷⁸ and Aurizon Network's tension with users about CQCN maintenance practices in light of the QCA's UT5 draft decision³⁷⁹).
- 466 Despite periods of strong demand for terminal capacity since the approval of the first access undertaking, DBCTM has not been able to progress any attempts at further expansion of DBCT past the feasibility stage. The User Group has argued that DBCTM had an "unwillingness" to expand capacity at DBCT and that this was the major reason that the Lake Vermont and Middlemount mines contracted for capacity at APCT in 2012³⁸⁰. DBCTM has addressed this incorrect assertion in the criterion (b) section above and in Appendix 6. DBCTM explains that the lack of further expansion of DBCT has been a function of the demand for capacity

³⁷⁶ QCA Final Decision on DBCT 2015 DAU; 107. The QCA reduced DBCTM's equity beta from 1.0 (under 2010 AU) to 0.87 (for 2017 AU)

³⁷⁷ ACCC Decision on ARTC application to vary the 2011 Hunter Valley AU 29 June 2017: p29

³⁷⁸ The SUFA DAU process started in 2012 and has still not concluded

³⁷⁹ See, for example AFR 5-Mar-18 [Legal swords drawn as Aurizon cuts start to bite](#)

³⁸⁰ User Group Submission, page 33

at the time access seekers were asked to commit to underwriting agreements rather than any unwillingness to expand on the part of DBCTM.

The User Group Submission fails to consider the relative welfare impacts of over- and under-investment in significant infrastructure

467 It is well settled that the economic costs of underinvestment in significant infrastructure are likely to exceed the costs of overinvestment.³⁸¹ Underinvestment can threaten the viability of the whole supply chain. Overinvestment adds a margin to infrastructure costs, which typically represent only a small share of getting coal to the export market.³⁸²

468 This well-established economic principle was recognised by the PC.³⁸³

The Commission considers that the consequences for efficiency from setting access prices too low are, all else equal, likely to be worse than setting access prices too high. This is because deterring infrastructure investment (from setting access prices too low) is likely to be more costly than allowing service providers to retain some monopoly rent (from setting access prices too high).

The User Group Submission does not meaningfully consider the counterfactual, which includes significant constraints on DBCTM and residual protections to Users, and demonstrates the benefits of commercial negotiation

469 Criterion (d) is prospective and requires a comparison of two future states of the world to ascertain whether or not the net effects of 'declaration would promote the public interest'.

470 The User Group does not engage in any meaningful consideration of the 'future without' declaration, and superficially assumes that declaration is superior to any other future outcome from a public interest perspective. To the extent the User Group discusses the counterfactual, it relies on the assertion that 'protections' afforded by declaration would be lost in the absence of declaration.³⁸⁴

471 DBCTM reiterates that there will be significant commercial constraints and voluntary (and binding) commitments on DBCTM in the future without declaration. These constraints serve a dual purpose.

472 Firstly, they demonstrate that there are significant benefits of pursuing an access framework which emphasises commercial negotiation, where sophisticated commercial entities are incentivised to strike efficient commercial outcomes. Secondly, they ensure that there are residual protections against any ability or incentive for DBCTM to exert market power in the future without declaration.

473 As pointed out in DBCTM's initial submission, there are significant commercial factors which will constrain DBCTM in the future without declaration. A framework that emphasises commercial negotiation with recourse to arbitration in the event that agreement cannot be reached is likely to achieve efficient outcomes that promote the public interest.

474 The main constraints (and residual protections to Users) facing DBCTM³⁸⁵ post declaration are:

474.1 The effectively competitive nature of the seaborne coal market, undermining any ability of any party to meaningfully influence the coal price.³⁸⁶ This provides strong incentives to ensure that

³⁸¹ See [QCA final decision on DBCT 2004 DAU](#), p. 149 and [PC Review of the National Access Regime \(2001\)](#), p. 83; See also DBCTM Submission at [461] to [469]

³⁸² DBCTM Submission at [465] to [469]

³⁸³ Productivity Commission, *Review of the National Access Regime*, 2013, page 104

³⁸⁴ See for example the User Group Submission, page 96

³⁸⁵ DBCTM Submission at [425] to [447] elaborates on the constraints faced by DBCTM post declaration

³⁸⁶ On this point, and the contrast between non-traded distribution networks (i.e. domestic electricity networks) compared with traded

- access is provided and means that commercially viable variations in access prices merely transfer economic rents between miners and access providers;
- 474.2 The mutual dependence between participants in coal value chains, which creates strong incentives to reach agreement;
- 474.3 Competitive constraints imposed by the countervailing power of terminal users including recourse to alternative terminals;
- 474.4 Constraints imposed by the binding Access Framework;
- 474.5 Constraints imposed by the threat of regulation/declaration; and
- 474.6 Constraints imposed by Terminal lease arrangements with the State.
- 475 These constraints effectively replace the 'protections' provided by declaration and therefore such 'protections' will not be lost in the future in which DBCTM has no incentive or ability to exert market power and is legally obliged to provide access on reasonable terms and conditions under the Access Framework. Moreover, the constraints identified above firmly substantiate that a model emphasising commercial negotiation, with arbitration as a last resort, will lead to efficient outcomes that promote the public interest.
- 476 The benefits of adopting a binding Access Framework to replace heavy-handed regulation are substantial, and embody fundamental precepts of the CPA, to which the State is a party and upon which the QCA Act is based. The fundamental principle is market based:³⁸⁷

Wherever possible third party access to a service provided by means of a facility should be on the basis of terms and conditions agreed between the owner of the facility and the person seeking access.

The User Group fails to acknowledge the broader costs of declaration

- 477 DBCTM reiterates that there are substantial costs from declaration under the QCA Act and that these costs materially exceed the benefits from declaration. These costs are largely associated with the design and performance of the current regulatory framework. The public interest is likely to be promoted by a substantial reduction in the costs of regulation, which will be promoted by the future negotiate-arbitrate model under the Access Framework.
- 478 Broadly, the economic costs of declaration involve:³⁸⁸
- 478.1 Productive inefficiency (including extra resources involved in administering and complying with the undertaking compared with the resources required to deal with contractual arrangements resulting from freely-negotiated contracts);
- 478.2 Allocative inefficiency (including the inefficiencies associated with uniform pricing, where mines may fail to be viable due to differentiated cost-base mines being subject to a uniform price); and,
- 478.3 Dynamic inefficiency (includes the deterrence of incentives to invest in economically efficient practices, projects or technology which arise when there are errors in setting access prices).

commodity value chains, refer to page 19 of the Aurizon submission. In summary, the infrastructure service providers facing a *domestically determined* demand curve are able to influence the price, due the highly inelastic nature of final demand for domestic electricity. In contrast, the infrastructure service providers servicing export markets face a *highly elastic* demand curve for sea-borne coal.

³⁸⁷ [Competition Principles Agreement](#), Clause 4(a), page 21

³⁸⁸ See NCC, *A guide to declaration under Part IIIA*, 2018, [6.21]; See Aurizon submission page 16

479 The declaration review provides an opportunity to assess the appropriateness of declaration and the proportionality of declaration against the economic efficiency objectives that underpin access regulation. The imposition of prescriptive access regulation must be applied sparingly and only to the minimum extent necessary to achieve the desired policy objectives. The Queensland Parliament's Economic and Governance Committee provided as follows:³⁸⁹

Reviews of this kind are an important element of the Queensland Government's commitment to regulatory best practice by ensuring that the impacts of regulatory intervention, such as the declaration, are transparently assessed. The review will involve an assessment of the services against the access criteria. The criteria are designed to ensure that access regulation is applied appropriately.

480 DBCTM echoes Aurizon's caution that overly prescriptive regulatory regimes risk becoming rules based frameworks with an excessive focus on processes rather than outcomes.³⁹⁰ Moreover, the rationale and intended objectives for the *outcomes*, meaning the promotion of allocative efficiency, must be at the forefront of the assessment of whether declaration would promote the public interest; as access regulation is a 'means to an end, not an end in itself'.³⁹¹

The User Group inappropriately dismisses the substantial compliance and administrative costs of declaration

481 DBCTM refutes the claim in the User Group Submission³⁹² that compliance and administrative costs associated with declaration are marginal. To the contrary, there is direct, tangible, and quantitative evidence which establishes that the direct regulatory costs of declaration are recurrent and substantial.³⁹³ DBCTM estimates that an illustrative period of declaration, from 2015-2022, imposes direct regulatory costs of approximately \$46.7m in real terms.

482 These costs are resource costs, and from a social welfare perspective, the extent to which they are borne by Users or DBCTM is irrelevant. If any technical argument is raised as to the precise wording of section 76(5)(c) which refers specifically to 'compliance costs that would be incurred by the provider of the service if the service were declared', then even if the QCA adopts a restrictive or narrow reading of section 76(5)(c), DBCTM submits that these costs are to be considered as a relevant factor under section 76(5)(d).

The User Group erroneously asserts that 'windfall gains' resulting from changes to the access price constitute public detriments

483 Mere transfers of economic rents between participants in vertical coal supply chains are neutral in social welfare terms, as there is no loss in allocative efficiency.³⁹⁴ Without any substantiation or justification, the User Group imply that allocating rents to access holders by decreasing the TIC is preferable to allocating rents to access providers by increasing the TIC.³⁹⁵ This is predicated on self-interest, and the User Group provides no justification for it. In the absence of any justification of the User Group's view, such a redistribution of rents should be regarded as neutral from a public interest perspective.

484 The User Group's argument fails to recognise the fundamental difference between *economic rents* and *monopoly rents*. The former, reflects the distribution of economic profits between vertically separated participants in the coal value chain, the latter, reflects the allocative efficiency justification for access

³⁸⁹ Queensland Treasury, *Briefing note to Economic and Governance Committee on the Queensland Competition Authority Amendment Bill 2016*, 2018

³⁹⁰ Aurizon Network, *Review of Declared Services in the Central Queensland Coal Network*, 30 May 2018 submission, page 18

³⁹¹ Aurizon Network, *Review of Declared Services in the Central Queensland Coal Network*, 30 May 2018 submission, page 13

³⁹² User Group Submission, page 101

³⁹³ DBCTM Submission, at [485] to [489]

³⁹⁴ DBCTM Submission, at [436] to [440]

³⁹⁵ See for example, User Group Submission, pages 100-101

regulation where there is inefficient under-consumption (in terms of quantity) of infrastructure services arising from an enduring lack of competition in dependent markets.³⁹⁶

485 For example, the PC provided as follows:³⁹⁷

The existence of economic rents does not, of itself, justify government intervention. Economic rents do not affect supply decisions of existing suppliers ...

486 DBCTM submits that the QCA should not accept the User Group's implication that lower access prices, which merely reflect a transfer of economic rents from access providers to access holders, are inherently in the 'public interest'. Such an assumption is not grounded in the legislation or in the economic rationale for access regulation. The Exports and Infrastructure Taskforce provided as follows:³⁹⁸

There is therefore a risk that lower prices will be seen as inherently good, with regulators concentrating on securing price falls for infrastructure without sufficient consideration of the long term consequences.

4.4 Table of DBCTM's responses to the User Group's arguments

487 The User Group's submission on criterion (d) contains many errors of interpretation and many examples of the fallacy of assuming that because events occurred after the declaration, they were caused by the declaration. These errors of interpretation and logic are listed in Figure 19.

³⁹⁶ NCC, Declaration of the shipping channel service at the Port of Newcastle: Final Recommendation, November 2015, page 13 and 14 at [3.15]; NCC, 'Application for declaration of a service under section 44F of the Trade Practices Act 1974 (Cth): Herbert River cane railway', July 2010, page 63 at [10.23];

³⁹⁷ Productivity Commission, *Review of the National Access Regime* 2013, page 91-92

³⁹⁸ B Fisher, M Moore-Wilton, and H Ergas, *Australia's Export Infrastructure: Report to the Prime Minister*, 2005, page 44

Figure 19: Table of errors and misinterpretations in Section 10 of the User Group Submission

Issue	Reference	DBCTM's comments
1	10.2, pp.95-6: Statements in BIP submission to NCC investigation of certification of DBCT access regime	The User Group represents these statements as supporting the declaration of DBCT. In fact, they just express support for continuing the State-based regime rather than exposing DBCTM to the possibility of having to adjust to regulation under the Commonwealth regime. In any case, the current review of the DBCT declaration is not a review of the historical effectiveness of the access regime. Rather, it is a review of whether DBCT now satisfies the recently revised declaration criteria.
2	10.2(a), p.96: Protections alleged to be provided by access declaration.	<p>10.2(a)(iii) implies that “discriminatory” pricing is inefficient. This is incorrect, as is recognised by clause 168A(b) of the QCA ACT. This explicitly allows for “<i>price discrimination when it aids efficiency</i>”. DBCTM notes also that the QCA’s current policy on expansion pricing is to prefer differentiated pricing in cases in which expansion of a facility raises the average cost of access provision. The QCA justifies this policy position on efficiency grounds.^{399,400}</p> <p>10.2(a)(vi) overlooks the fact that, according to clause 119(2)(c) of the QCA Act, there is no obligation for the infrastructure owner to expand the facility at its own cost. The history of Aurizon Network’s GAPE and WIRP expansions demonstrate that the obligation-to-invest provision of the QCA access regime does not provide users with certainty around infrastructure expansions. (Indeed, the failure of expansions to come to fruition in the Goonyella system has been more pronounced than in the Newlands/GAP and Blackwater systems). But in the case of DBCT, such certainty is provided by the PSA, which applies with or without declaration.</p> <p>Furthermore, as part of the declaration review, DBCTM has submitted a proposed binding Access Framework that will apply to access seekers and users, which demonstrates that the aforementioned protections would indeed exist if the DBCT service were no longer declared.</p>
3	10.2(b), pp.96-7: Claim that declaration facilitates investment in the coal industry.	<p>There has been no attempt by the User Group to show that historical investments would not have occurred in the absence of declaration. DBCTM understands that CQCN producers’ decisions to operate and expand their output are driven mostly by their medium- and long-term expectations for the coal market and the ability to secure <i>access</i> to port and rail capacity. It is not the <i>declaration</i> of the DBCT service that is the driver for such decisions. Indeed, DBCTM notes that no members of the DBCT User Group⁴⁰¹ have announced in their annual reports and production plans (or other media releases) that the continued declaration of DBCT is pivotal (or indeed relevant) to their supply-chain certainty and requirements. DBCTM recognises that the ability to <i>access</i> a terminal is essential for a miner to enter the export trade, but points out that it has no commercial incentive to deny access to financially viable miners and that its proposed access framework will guarantee access rights post declaration.</p> <p>The User Group fails to recognise that:</p> <ul style="list-style-type: none"> • DBCTM’s proposed Access Framework will provide substantially the same protections for investors as are provided by declaration • In the absence of declaration, DBCTM would have a strong incentive to accommodate new mines. <p>DBCTM also notes that it has arrangements with the Queensland Government that enshrine the access-related protections associated with the regulation of significant port terminal infrastructure. DBCTM will still be obliged to fulfil these requirements in a future without declaration.</p>

³⁹⁹ QCA draft decision on DBCTM 2015 DAU p 218

⁴⁰⁰ QCA discussion paper [Capacity Expansion and Access Pricing for Rail and Ports](#) April 2013 : p16

⁴⁰¹ DBCTM notes that the recent Environmental Authority Application made by Pembroke Resources, with relation to the Olive Downs Project, demonstrates that the project is not contingent on the declaration of DBCT. In fact, it is not contingent on *access* to DBCT – which demonstrates the substitutability of terminals. See [Pembroke Resources' EA application](#) :

- Page 43 notes the project may be based on a “Blackwater-based” train configuration indicating a potential to rail to the Port of Gladstone
- Page 43 further notes “Subject to availability of rail and port allocation, the DBCT would be used for the Project” – this demonstrates that it is *access*, not *declaration*, that is relevant to the project. And even then, the project is not contingent to access to DBCT.

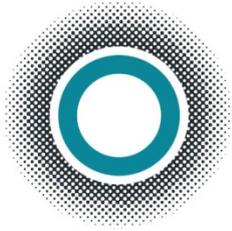
Issue	Reference	DBCTM's comments
4	10.2(c), p.97: Claim that declaration facilitates investment in the above- and below-rail industries.	Fails to acknowledge that the two most recent expansions of the CQCN rail system (GAPE and WIRP) were to provide access to unregulated port terminals. Moreover, to be prepared to undertake those expansions, Aurizon required that users pay access charges in excess of what was provided for by the normal provisions of the Aurizon Network regulatory regime. See above for an explanation of the disproportionate impact of declaration on the incentives to invest in the regulated facility itself, and facilities in upstream and downstream markets.
5	10.2(e), pp.97-8: Claim that declaration facilitates investment in the DBCT facility.	<p>No attempt to show that DBCT would not have expanded in the absence of declaration, even though the User Group assumes that DBCTM would have been able to extract more favourable access terms had it not been declared.</p> <p>Fails to acknowledge that the terminal owner committed to the Stage 5 and 6 expansions prior to declaration.</p> <p>Fails to acknowledge that for future expansions the QCA has indicated that it's preferred position is not to approve socialisation in cases in which expansion raises average costs.</p> <p>Fails to acknowledge the fact that declaration, and the introduction of regulatory risk, deters incentives to invest in regulated facilities. See the 'x-inefficiency' or 'dynamic inefficiencies' imposed on society due to the deterrence of investment in significant infrastructure associated with declaration.</p>
6	10.3, p.98: Environmental benefits.	<p>Fails to acknowledge that government could still impose environmental restrictions in absence of declaration. In 10.3(a), the contrary is acknowledged with respect to protection of the Great Barrier Reef. As noted at 10.3(a), the <i>Sustainable Ports Development Act 2015</i> (Qld) and Federal and State Government commitments to preserve the World Heritage sites are in existence with or without declaration. DBCTM submits that it is illogical, irrelevant, and irrational to assert that any aspect of DBCTM's environmental obligations are in any way influenced by whether or not DBCT is a declared facility under the QCA Act.</p> <p>No substantiation of the claim in 10.3(a) that multiple small terminals would have been developed without declaration of DBCT. In fact, there is direct evidence that HPCT has been expanded notwithstanding DBCTM's declaration including the HPX3 expansion completed in December 2015. This refutes the claim that declaration has prevented duplication of infrastructure and demonstrates that DBCT is not a natural monopoly. Further, the claim is predicated on the erroneous assumption that DBCT would not be open access without declaration, failing to recognise DBCTM's commercial incentive to maximise utilisation of DBCT and DBCTM's binding Access Framework.</p> <p>10.3(b) fails to acknowledge that the PSA imposes remediation obligations and will continue to do so in the absence of declaration. Although funding of this obligation is not particularly relevant in the context of the current declaration review, it is reasonable to assume that remediation costs would continue to be covered by access charges in the absence of declaration.</p>
7	10.4(a), pp.98-9: Claim that declaration produces wider economic benefits for regional communities.	<p>Depends on unsubstantiated assertions that declaration promotes investment in coal production, above- and below-rail industries and other sectors. As pointed out in row 3 of this table and using the Olive Downs South EAS from May 2018 as an illustrative example, no members of the DBCT User Group have announced in their annual reports and production plans (or other media releases) that the continued declaration of DBCT is pivotal (or indeed relevant) to their supply-chain certainty and requirements.</p> <p>Fails to acknowledge dependence of property prices in mining areas on coal prices. Again, the User Group submission has conflated temporal correlation with causation, where it is apparent that property prices in mining areas are impacted by the global forces of supply and demand in global coal markets. DBCTM notes that the AFR article does not refer to declaration, but rather the upturn in coal prices.</p>
8	10.4(b), p.99: Claim that declaration has reduced access charges and <i>"been important in allowing (the coal industry) to survive volatile coal prices"</i> .	It is simply implausible to claim that small changes in the DBCT TIC could have been significant to the industry in the face of very large fluctuations in the coal price. DBCTM provides a chart of historical coking/thermal coal prices against DBCTM's historical terminal infrastructure charges to demonstrate that the TIC relative to the coal price is very small (see section (b) of this submission)

Issue	Reference	DBCTM's comments
9	10.4(c), pp.99-100: Claim that declaration increases coal royalties.	<p>Point (i) should be discounted because it depends on the User Group's unsubstantiated assertions that declaration promotes investment in coal production.</p> <p>With respect to point (ii), DBCTM acknowledges that port-terminal costs are deductible from the gross value of coal exports in calculating the value to which the royalty rate applies. But this effect would be small unless the User Group is claiming that the difference between access charges with and without declaration is very large. The User Group should provide its estimates of the size of this effect.</p>
10	10.4(d), p.100: Claim that DBCT is a natural monopoly asset and that declaration has prevented its duplication.	<p>DBCTM does not concede that DBCT is a natural monopoly according to the test of criterion (b). In any case, see row 6 above for the fact that duplication has empirically occurred with notable expansions to HPCT notwithstanding DBCT's historical declaration, and the problem with the assumption that DBCT would not remain open access without declaration given the commercial incentive to maximise utilisation and the existence of the binding Access Framework.</p>
11	10.4(e), p.100: claim that continuation of declaration is required in the interests of regulatory certainty.	<p>This claim fundamentally misunderstands the declaration review process. The relevant question is not whether <i>continuation</i> of DBCT's deemed declaration is socially desirable. Rather, the relevant inquiry is whether the DBCT facility satisfies each and every access criteria in an objective forward looking analysis. The fact that DBCT was historically a 'deemed declared' facility is not relevant to the assessment required under the legislation.</p> <p>To the extent that regulatory certainty is a relevant factor related to investment incentives, DBCTM submits that the binding Access Framework promotes regulatory certainty in the future without declaration.</p> <p>In any event, it has been clear since at least 2010 that the declaration would be reviewed at the end of the current declaration period. Historically, investments in coal mining and in the terminal have proceeded despite this knowledge. As pointed out in rows 3 and 7 of this table, no members of the DBCT User Group have announced in their annual reports and production plans (or other media releases) that the continued declaration of DBCT is pivotal (or indeed relevant) to their supply-chain certainty and requirements.</p> <p>Further, it would be a perverse precedent that currently declared facilities must continue to be declared in all perpetuity in order to preserve regulatory certainty. Such an outcome fundamentally misunderstands the dynamic nature of the economic regulation of dynamic markets, and the underlying objective for the access criteria to set a rigorous standard for declared facilities that is to be reviewed over time.</p>
12	10.4(f), pp.100-101: Claim that continuation of declaration would prevent "substantial windfall gains and losses"	<p>DBCTM regards points (ii) (A)-(D) as assertions that are unsubstantiated and largely irrelevant to the question of whether DBCT satisfies the current declaration criteria.</p> <p>With regard to claim (i), DBCTM submits that characterising any distributional gains or losses from a decision not to declare DBCT as public benefits or detriments is inaccurate given that mere transfers are neutral in public interest or allocative efficiency terms.</p> <p>With regard to claim (ii)(A), this unnecessarily duplicates the coal royalties point in 10.4(c). See row 9 above. This also asserts that the purchase price received by the State was based on the expectation that DBCT would continue to be regulated. As above, the QCA Act did not impose access regulation on any facility for perpetuity, and such an expectation is not founded in the legislation or the economic objectives of access regulation. Further, the history of the privatisation of infrastructure assets and subjective expectations of purchasers has no relevance in the objective application of the facility against the access criteria which is required by the declaration review.</p> <p>With regard to claim (ii)(B), the claim that the 'windfall' to access providers comes at the expense of access holders fails to demonstrate that any inefficiency or economic problem is imposed by redistribution of economic rents. Again, this assertion is predicated on the assumption that redistribution of economic rents to benefit access holders is inherently favourable to distribution of rents to access providers.</p> <p>With regard to claim (iii)(C), again, the impact of declaration upon the coal industry and related markets must be shown to be meaningfully affected by the future with declaration compared against the future without declaration. Again, DBCTM considers that marginal changes in the price of access will not influence the incentives to invest in facilities in upstream or downstream markets.</p>

Issue	Reference	DBCTM's comments
13	10.5(a), p.101: Claim that administrative and compliance costs are irrelevant because they are paid by users (not DBCTM) and are caused by DBCTM's actions.	<p>This misunderstands that the administrative and compliance costs of regulation are resource costs to society, whether they are paid by users or DBCTM. DBCTM's actions, including its recent DAAUs, have all been legitimate responses to the requirements of the regulatory regime. To the extent that they are costly, this reflects the onerous nature of that regime. Further, the User Group's dismissal of the significance of compliance and administrative costs in the criterion (d) assessment are contrary to the express words of the statute, which mandatorily require that the QCA and Minister consider 'the administrative and compliance costs that would be incurred by the provider of the service if the service were declared'. Moreover, the criterion (d) jurisprudence and previous regulatory determinations establishes that the direct and indirect administrative costs of prescriptive, heavy-handed, or onerous access regulation are significant detriments or costs associated with declaration.</p> <p>Separately, PwC asserts in its report (page 50) that "Administrative costs of regulation, as measured by the QCA levy, would be unchanged by the ongoing declaration of DBCT." Firstly, this compares the costs of a declared entity with the future costs of a declared entity. This is the wrong comparison, the costs should be compared to those applying without regulation. Secondly, the QCA levy is only a small subset of the administrative and compliance costs of regulation.</p>
14	10.5(b), p.102: Claim that declaration has not discouraged investment in DBCT.	<p>DBCTM agrees that the main drivers of investment in the terminal are anticipated demand and coal prices. It is the PSA, rather than declaration, that imposes an effective obligation on DBCTM to expand the terminal to meet demand. Although substantial expansions have been completed since declaration, DBCTM certainly did not regard them as underwritten by the declaration. DBCTM reiterates that the 2010 AU reflected a package of agreements between it and users to facilitate expansion of the terminal. It is a misrepresentation for the User Group to say that DBCTM's actions or BIP's statements show that declaration "provides strong incentives to invest in DBCT". They just acknowledge that the regulatory regime under declaration provides sufficient regulatory certainty for the terminal's owners to be comfortable with their plans for terminal expansions. Further, the Brookfield submission quoted at page 102 is in relation to the certification of the DBCT's AU, in which Brookfield was supportive of the certification of the Queensland regime to avoid the duplication of dual Federal and State access regulation. In this light, Brookfield is making the uncontroversial case that certification is needed to promote the certainty of the <i>State</i> regime, however this cannot be used to establish that DBCTM considers that terminal expansion and investment is promoted by <i>declaration</i>. DBCTM submits that reproducing the quote, devoid of context, is misleading.</p> <p>DBCTM also notes that under the QCA regime its plans for the Zone 4 expansion (lifting capacity from 85 Mtpa to 89 Mtpa) will likely be subject to differential pricing and onerous approval-to-construction requirements, making it more difficult for DBCTM to secure financing for the expansion.</p> <p>Additionally, in DBCTM's view, renewing the declaration in the context of competing terminals remaining unregulated threatens to distort the inter-terminal pattern of incentives for capacity expansion. Apart from financial concerns, DBCTM notes that the requirements of the regulatory regime substantially extend the period required for DBCTM to obtain expansion approvals.</p> <p>The User Group's claim fails to acknowledge the uncontroversial proposition that regulatory risk deters investment in infrastructure. Further, the dynamic inefficiency or x-inefficiency economic losses caused by such deterrence is well established in the relevant economic literature and the User Group has not adduced evidence to support claims to the contrary.</p> <p>With regard to 10.5(b)(vi), the assertion that the access undertaking 'has always provided DBCTM with an appropriate return on capital' is inaccurate. In fact, the RBA, Federal Treasury, and the current Chairman of the ACCC, have expressly stated that the WACC for DBCT has been inappropriately low, and has directly contributed to delayed, or otherwise insufficient investment in DBCT (see [478] of the DBCTM Submission).</p>
15	10.6(d), p.103: Claim that resolution of issues under declaration is less onerous than under commercial arrangements.	<p>This ignores the difficulty that the QCA has had in resolving disputes between infrastructure users and infrastructure owners – as shown most recently by its experience with Aurizon. It also ignores the fact that declaration is unusual and that relations between customers and service providers in most sectors of the economy are effectively dealt with by unregulated commercial arrangements.</p> <p>With regard to 10.6, the characterisation that access in the future without declaration amounts to 'the absence of regulation' is inaccurate. In the future without declaration, DBCTM is subject to a plethora of regulatory obligations and commercial constraints including lease arrangements with the State, the PSA, environmental obligations, the Competition and Consumer Act, the QCA Act, ongoing contractual obligations which remain in place without declaration, and most importantly, is bound to adhere to an open access framework set out in its submissions. Further, the User Group's broad assertion that 'declaration is preferable to other theoretical means of achieving access', is not substantiated with a critical assessment of any such alternative means. DBCTM notes that its binding Access Framework aligns with the CPA in that it follows the best-practice 'negotiate-arbitrate' framework, which will result in more efficient and timely outcomes that are in the public interest.</p>

Issue	Reference	DBCTM's comments
16	10.7, p.103: APCT case study	<p>DBCTM finds it difficult to understand the main point(s) that the User Group is trying to infer from the APCT experience. It notes that, whatever difficulties have arisen at APCT, they have eventually been settled to users' satisfaction. Further, the inference that 'differential pricing' between users reflects an undesirable outcome is not supported by the economic literature, the legislation, and the uncontroversial fact that users with different cost bases may pay different prices in order to promote allocative efficiency.</p> <p>For only two (i.e. Jellinbah Resources and QCoal) out of seven users has arbitration been required. DBCTM further notes that users have not sought declaration of the terminal.</p> <p>As noted in its submission, DBCTM agrees that difficulties arise when just one among several competing terminals has been singled out for declaration.</p>

Appendix 1 HoustonKemp review of issues raised on criterion (a)



HOUSTONKEMP
Economists

Review of the economic issues raised in relation to criterion (a)

A report for DLA Piper

13 July 2018

Report Authors

Greg Houston

Daniel Young

Bronwyn McDonald

Contact Us

Sydney

Level 40
161 Castlereagh Street
Sydney NSW 2000

Phone: +61 2 8880 4800

Singapore

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

Phone: +65 6817 5010

Disclaimer

This report is for the exclusive use of the HoustonKemp client named herein. There are no third party beneficiaries with respect to this report, and HoustonKemp does not accept any liability to any third party. Information furnished by others, upon which all or portions of this report are based, is believed to be reliable but has not been independently verified, unless otherwise expressly indicated. Public information and industry and statistical data are from sources we deem to be reliable; however, we make no representation as to the accuracy or completeness of such information. The opinions expressed in this report are valid only for the purpose stated herein and as of the date of this report. No obligation is assumed to revise this report to reflect changes, events or conditions, which occur subsequent to the date hereof. All decisions in connection with the implementation or use of advice or recommendations contained in this report are the sole responsibility of the client.

Contents

1.	Introduction	1
1.1	Scope of this report	1
1.2	Structure of this report	2
2.	Defining the promotion of competition	3
2.1	Castalia has not defined promotion of material increase in competition	3
3.	Castalia's approach to criterion (a)	5
3.1	Castalia's finding as to competition in the market for tenements	5
3.2	Comparisons to vertical integration are inapt	7
3.3	Differential terms for new users do not distort competition for tenements	8
3.4	Secondary trading of capacity	11
3.5	Coal haulage in Central Queensland	12
4.	Effect of DBCT's proposed access framework	13
4.1	Effect of DBCT's proposed access framework	13
4.2	Access framework constrains price increases at DBCT	14
4.3	Access framework makes DBCTM indifferent to volume changes	16
4.4	Concerns about arbitrated right to access	17
5.	Declaration	20

Figures

Figure 3:1 Summary of Castalia’s logic for competitive harm in the tenements market	7
Figure 4.1: Castalia’s analysis of DBCT’s throughput and revenue	14



1. Introduction

The Queensland Competition Authority (QCA) is reviewing whether each of the declared services specified in section 250 of the *Queensland Competition Authority Act 1997* (QCA Act) should continue to be declared following the expiry of the existing declarations on 8 September 2020.

1.1 Scope of this report

We¹ have been asked by DLA Piper (DLA), on behalf of DBCT Management Pty Limited (DBCTM), to review the economic issues raised in the Castalia report² submitted to the QCA as part of the DBCT User Group's submission as well as the discussion relating to central Queensland coal haulage in the User Group submission itself.³

The Castalia report concludes that the coal handling service supplied at Dalrymple Bay Coal Terminal (DBCT) satisfies criterion (a) of section 76(2) of the QCA Act, being:

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

An earlier report we prepared (our earlier report) was provided to the QCA as part of DBCTM's submission, and similarly addresses whether the coal handling service supplied at DBCT (the DBCT service) satisfies criterion (a). In our earlier report, we concluded that the DBCT service does not satisfy criterion (a).⁴

Our earlier report explained that a material increase in competition in a dependent market will be promoted if:

- the structure of the market or conduct of firms is changed in a way that can be expected to bring about a material enhancement of the competitive process; and
- the volume and/or quality of output in the market is expected to increase.

Applying this framework, we concluded that declaration of the DBCT service will not result in a material increase in competition in any coal export market because:

- declaration would not change the structure of those markets or the conduct of any mines, since:
 - > price will still be determined in the same way by the Asia-Pacific or global seaborne coal market;
 - > the volume transported by each miner will not be affected, so there will be no change in the structure of the market, including to the likelihood of entry; and
- declaration would not affect the total volume or quality of coal supplied in any coal export market because:
 - > no mine would change the quantity of coal that it sends to any terminal as a result of declaration;
 - > neither the quality of coal itself nor the mix of coal at each terminal will change as a result of declaration; while
 - > the non-price terms and conditions for accessing DBCT will remain substantively the same, and so this will not change the service provided to coal miners.

¹ The authors of this report are: Greg Houston, Daniel Young and Bronwyn McDonald. Copies of our respective curricula vitae are attached as Annexure A to this report.

² Castalia, *Dalrymple Bay coal terminal: Economic analysis of declaration criteria*, May 2018.

³ Dalrymple Bay Coal Terminal User Group, *Declaration review regarding Dalrymple Bay Coal Terminal: Submission to the Queensland Competition Authority*, May 2018, pp 86-88.

⁴ HoustonKemp, *Does DBCT's coal handling service satisfy criterion (a)?* May 2018, p 22.

We concluded in our earlier report that the volumes supplied in each of the other dependent markets turn on the volumes supplied in the coal export market, and so they will also not change as a result of declaration. There is also no reason for the quality of the services in other dependent markets to be affected by declaration of the DBCT service. Since there is no reason for the structure of the market, nor conduct of firms in those markets to change, declaration will not promote a material increase in competition in those markets.

The analysis we present in this report shows that neither the material presented in Castalia's report nor pages 86 to 88 of the DBCT User Group submission provide any grounds for altering the analysis or conclusions presented in our earlier report. Rather, we find that:

- Castalia's conclusions in relation to the tenements market and the secondary capacity for coal handling services market are each founded on an incorrect application of core economic principles, including:
 - > an opaque discussion of how criterion (a) should be interpreted, with the consequence that it is not clear what Castalia considers would constitute a 'promotion of a material increase in competition' in a related market;
 - > a misspecification of the incentives faced by DBCTM, including through the absence of any rationale to support its claim that DBCTM would have the incentive to act in a way that would distort competition in downstream markets;
 - > the overlooking of DBCT's capacity constraints and the consequences of those constraints for competition both with and without declaration; and
 - > defining an inappropriately narrow geographic market for mining tenements; and
- since no stakeholder in the declaration review process could have accurately foreseen the nature and terms of the proposed access framework that DBCTM has submitted to the QCA, which sets out the terms of access at DBCT, both Castalia and the DBCT User Group have mis-specified the nature of competition in the coal handling market without declaration and so incorrectly concluded that there are competitive benefits associated with declaration.

1.2 Structure of this report

The remainder of this report is organised as follows:

- section 2 critiques Castalia's approach to defining 'promotion of a material increase in competition';
- section 3 comments on Castalia's approach to assessing whether the DBCT service satisfies criterion (a); and
- section 4 summarises DBCTM's binding access framework and explains why the implementation of this framework addresses the concerns raised in the Castalia report.



2. Defining the promotion of competition

In this section we examine Castalia's approach to interpreting the 'promotion of competition' element of criterion (a).

2.1 Castalia has not defined promotion of material increase in competition

Criterion (a) requires an assessment of whether declaration of the DBCT service would result in the 'promotion of a material increase in competition' in a dependent market. In order to make any assessment as to whether criterion (a) is satisfied, it is important to be clear as to the economic interpretation of this term.

2.1.1 Our interpretation

In our earlier report, we explained that the promotion of a material increase in competition in a dependent market as a result of declaration requires that:⁵

- the structure of the market or conduct of firms is changed in a way that can be expected to bring about a material enhancement to the competitive process; and
- the volume and/or quality of output in the market is expected to increase.

2.1.2 Castalia's interpretation

The Castalia report initially points to the Sydney Airport decision of the Competition Tribunal for guidance on the meaning of promotion of a material increase in competition, stating that:⁶

[application of criterion (a)] ... requires identification of the relevant upstream and downstream market(s) and a determination of whether (to use the words of the Australian Competition Tribunal in the Sydney Airports decision): 'the opportunities and environment for competition given declaration, will be better than they would be without declaration'.

One clear way of evidencing that is identifying a dependent market where DBCT's behaviour, in the absence of a declaration, would affect the competitive process and distort the outcomes of competition.

However, Castalia omits to describe either what such a 'distortion of outcomes' might look like or how significant any such distortion must be before its prevention would 'promote a material increase in competition' in a market.

Castalia goes on to say that:⁷

A priori, there is likelihood that competition could be affected if the service provider is vertically integrated into upstream and downstream markets. In the absence of vertical integration, other factors need to be present to cause exercise of monopoly power in the absence of declaration to cause a decrease of competition. Of particular importance would be any factors that resulted in differences in treatment of participants in the market that may distort demand or supply from that which would exist where there was effective competition in the market.

One implication of this statement by Castalia is that, for declaration to promote a material increase in competition, the dependent market in question must not be effectively competitive in the absence of declaration – otherwise, sustained distortion of outcomes in a market would not be possible. We also made

⁵ HoustonKemp, *Does DBCT's coal handling service satisfy criterion (a)?* May 2018, p 18.

⁶ Castalia, *Dalrymple Bay coal terminal: Economic analysis of declaration criteria*, May 2018, p 4.

⁷ Castalia, *Dalrymple Bay coal terminal: Economic analysis of declaration criteria*, May 2018, p 4.

this point in our earlier report – there is no need for government intervention to constrain firms' market power in an effectively competitive market.⁸

We describe in section 3.2 below that because DBCTM is not vertically integrated into other functional markets in the supply chain, it has no incentive to treat any particular user differently from another so as to cause a distortion in any related markets. Rather, a vertically separate provider of services generally has an incentive to treat its customers or users in a manner that maximises competition between them. The overlooking of these principles is a core problem with Castalia's logic, as we explain further in section 3.2.

Finally, in establishing its framework for analysis of criterion (a) as it applies to DBCT, Castalia states that it will:⁹

...show that, absent continued declaration, the level of competition would be materially decreased.

This appears to be a further and different (and more demanding) economic interpretation of criterion (a) than those referenced elsewhere by Castalia, which we identify above. For the 'with and without' declaration assessment the three different concepts referenced by Castalia can be summarised as:

- 'the opportunities and environment for competition will be better';
- 'factors that may distort demand or supply from that which would exist if there was effective competition' and
- 'the level of competition (absent declaration) would be materially decreased'.

One consequence of its mixed discussion of the economic interpretation of criterion (a) is that it remains opaque as to exactly what Castalia considers would constitute a 'promotion of a material increase in competition'.

⁸ HoustonKemp, *Does DBCT's coal handling service satisfy criterion (a)?* 29 May 2018, p 9.

⁹ Castalia, *Dalrymple Bay coal terminal: Economic analysis of declaration criteria*, May 2018, p 5.

3. Castalia's approach to criterion (a)

The Castalia report focuses on two markets where it considers that declaration of the service would promote a material increase in competition, being the tenement market and the secondary capacity for coal loading services market. This section summarises our understanding of the reasoning underpinning the conclusion drawn by Castalia in relation to each market and presents our analysis of that reasoning. We also discuss the matters raised in the DBCT User Group submission in relation to one further market, being that for coal haulage services.

Castalia contends that, without declaration, discrimination between incumbent and new entrant miners would give rise to 'distortions' to competition in related markets, including the market for tenements. It likens this to the circumstance of a vertically integrated monopoly provider of access.

Our analysis shows that Castalia's conclusions are drawn from an incorrect application of economic principles to the circumstances that would apply without declaration in these markets. Castalia does not demonstrate that declaration of the DBCT service would result in a promotion of a material increase in competition in either of these markets.

In relation to the market for tenements:

- Castalia's comparison of the circumstances at DBCT to those of a vertically integrated monopoly provider of access are inapt, since DBCTM has no incentive to act in a way which would distort competition in downstream markets;
- the geographic boundary of the market for tenements postulated by Castalia is limited to the Hay Point catchment – whereas, within a more appropriately defined market, the prices charged by DBCT would not be expected to materially affect competition for tenements;
- Castalia's analysis turns on an assumption that the expiry of declaration would introduce asymmetry in pricing between incumbent and new entrant miners – this is not the case since there is already an asymmetry between the price for existing capacity and the price for expanded capacity at DBCT under declaration, and this would not change without declaration; and
- Castalia's analysis also turns on an assumption that a material number of new entrant miners in its postulated Hay Point market for tenements would be exposed to the effects of any distortions – whereas, given the capacity constraints at DBCT it is likely that the extent of new entrants in this market that are served by existing capacity will be negligible.

In relation to the market for secondary trading, Castalia does not explain why DBCTM would alter its conduct without declaration so as to charge fees for, or limit, the ability of its customers to engage in such trades. Declaration does not itself constrain DBCTM from engaging in such conduct. Nevertheless, DBCTM has indicated in its Draft Amending Access Undertaking submitted to the QCA on 27 June 2018 that its related body corporate will exit the secondary market completely as at 1 September 2018. This would appear to render this potential concern – even if valid – as no longer relevant.

The remainder of this report explores the implications for Castalia's analysis of the access framework proposed by DBCTM, which ensures that the price of the DBCT service is constrained such that the use of DBCT remains the same with or without declaration.

3.1 Castalia's finding as to competition in the market for tenements

Castalia defines a market for the supply and acquisition of rights to explore for or develop resources of coking coal, thermal coal or both in the 'Hay Point catchment'.

Castalia contends that declaration imposes two types of constraints on DBCTM's conduct, being constraints:

- on 'the exercise of monopoly power to raise prices'; and
- on 'vertical price and non-price discrimination'.¹⁰

Castalia states that the absence of declaration would 'create two classes of tenement acquirers among potential DBCT users', where those with existing capacity contracts with DBCT are somewhat protected by arbitration clauses in their existing contracts from future price rises, while new access seekers face unconstrained monopoly behaviour.¹¹

Castalia likens this situation to one of vertical integration, in which some access seekers are provided preferential terms. In particular, Castalia contends that new entrants would be materially disadvantaged by having to negotiate terms and conditions of access with an unconstrained monopolist, DBCTM, which is incentivised to maximise price and non-price terms in its own favour.

According to the Castalia report, the result of the disadvantage to new users is that (new user) demand for tenements in the Hay Point catchment will diminish, while supply of tenements by existing users will also fall since existing users (of DBCT) now value the tenements more highly than potential new users at DBCT, given that the latter face a higher total supply chain cost. As a result:

- bids for new tenements will be largely restricted to incumbents while bids from new entrants 'will not be able to compete on price';¹² and
- demand for thermal only tenements will fall because it is the relatively less valuable resource, and market participants will prefer to focus on higher value coking coal projects.

Castalia concludes that declaration would promote a material increase in competition in the market for tenements in the Hay Point catchment, such that criterion (a) would be satisfied.

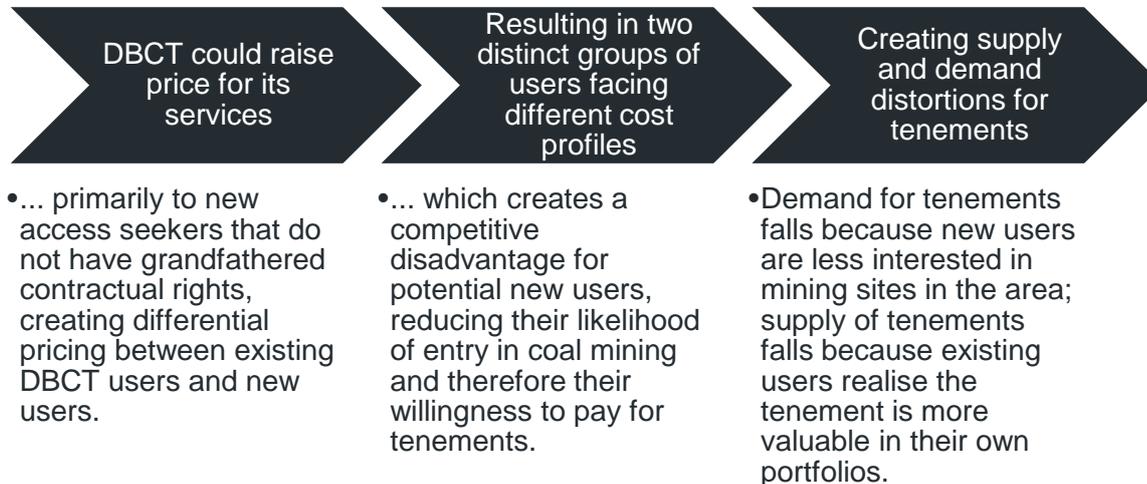
Figure 3:1 below summarises the logic that underpins Castalia's conclusion.

¹⁰ Castalia, *Dalrymple Bay coal terminal: Economic analysis of declaration criteria*, May 2018, p 10.

¹¹ Castalia, *Dalrymple Bay coal terminal: Economic analysis of declaration criteria*, May 2018, p 10.

¹² Castalia, *Dalrymple Bay coal terminal: Economic analysis of declaration criteria*, May 2018, p 19.

Figure 3:1 Summary of Castalia's logic for competitive harm in the tenements market



3.2 Comparisons to vertical integration are inapt

Castalia likens the situation in which incumbent and new entrant users of DBCT access the service on different terms and conditions to the outcome of vertical integration in which an upstream monopoly provider of access favours its downstream affiliate. This comparison is inapt.

When an upstream firm that provides a bottleneck service also competes in a downstream market, it may face incentives to provide access to the service on a preferential basis to its downstream affiliate, foreclosing or disadvantaging its rivals in the downstream market. These incentives may arise if the combined firm can increase its profits by capturing a greater share of the downstream market and/or causing a reduction of competition in that market.

There is no similarity between this standard theory of harm arising from control of a bottleneck facility by a firm that is also present in a downstream market, and the circumstances cited by Castalia in respect of DBCT and its users. DBCTM is not active in mining operations and faces no incentives to provide access on a preferential basis to any of its users.

The prospect of different prices being set for different users of DBCT cited by Castalia does not result from actions pursued by DBCTM. Rather, it results from the existence of long term contracts that Castalia claims will manifest in a way so as to benefit existing customers. There is some irony in the fact that these arrangements, which Castalia assumes would operate to benefit DBCT's existing users, are being raised on behalf of those users as an example of distortionary pricing at DBCT. Elsewhere, incumbent users have been strong advocates that any expansions to DBCT capacity be priced differently from existing capacity.¹³

It is also important to note that the prospect of different prices for different users of DBCT arises not only because of the terms of existing contracts, but also from application of the regulatory regime applied by the QCA under declaration. In section 3.3.2 we explain that differential prices are likely to apply to any expansions undertaken at DBCT in the future.

¹³ See, for example, DBCT User Group submission to the QCA on the 2015 Draft Amending Access Undertaking (DAAU), p 24.

Further, DBCTM does not stand to benefit from inducing any 'distortion' in downstream markets, beyond the entirely unexceptional benefit that any firm would experience from being able to charge higher prices, whether vertically integrated or otherwise. To the extent that differential pricing gives rise to situations in which higher cost incumbent miners are able to operate to the exclusion of lower cost new entrants, this does not benefit DBCTM. Rather, to the extent that its customers may be willing to pay less for its services, in aggregate, than would otherwise be the case, such arrangements are more likely to harm DBCT.

In conclusion, there is no similarity in either circumstances or outcomes as between the market in which the DBCT service is presently provided (with or without declaration) and a market in which a vertically integrated monopoly supplies any form of access service.

3.3 Differential terms for new users do not distort competition for tenements

Castalia's analysis turns on the proposition that, without declaration, there exists two classes of potential DBCT users, and the potential difference in the terms and conditions of access to DBCT between these groups gives rise to distortions in the market for tenements.

However, this proposition relies on three assumptions that cannot be made out, being that:

- the geographic market for tenements is limited to the Hay Point catchment – whereas within a more appropriately defined market, the prices charged by DBCTM would not be expected to have a material effect on competition for tenements;
- the expiry of declaration would introduce asymmetry in pricing between incumbent and new entrant miners – however, under declaration, there is already likely to be asymmetry between the price for existing capacity and the price for any expanded capacity at DBCT; and
- that there would be a material number of new entrant miners in the proposed Hay Point market for tenements that would be exposed to the effects of any distortions – whereas, given the capacity constraints at DBCT it is likely that the participation of new entrants in this market will be negligible.

We explain the basis for these views in more detail below.

3.3.1 Castalia adopts an overly narrow geographic market

Castalia's key proposition rests upon the assumption that a market for tenements can be defined within the limited geographic confines of the Hay Point catchment, and that the price for access to DBCT has material consequences for competition in this market. However, this assumption cannot reasonably be sustained by reference to conventional approaches to market definition. Rather, the market for tenements is likely to encompass a substantially wider geographic region, such that the pricing adopted at DBCT cannot reasonably be said to be material to competition outcomes in this broader market. We explain the basis for these conclusions below.

Castalia notes that the demand for tenements depend on a variety of factors, including:¹⁴

- the long run average resource price for the period of production;
- the capital and operating costs of developing and operating the mine – affected by the quality of the resource; and
- the total cost of the logistics chain from mine to port and ship loading.

In other words, the price for the DBCT service is only one relevant factor (among several) to the demand for tenements.

If the proposition that an increase in the price for access to the DBCT service may reduce the expected profitability of tenements that may be developed into mines that would then become potential customers of

¹⁴ Castalia, *Dalrymple Bay coal terminal: Economic analysis of declaration criteria*, May 2018, p 7.

the DBCT service was accepted, it does not follow that competition in the market for tenements is harmed by this action.

Under the hypothetical monopolist test, a candidate market is taken to be defined if a hypothetical monopolist controlling all suppliers serving the geographic area of the candidate market is profitably able to impose a small but significant non-transitory increase in price (SSNIP) of five to ten per cent. However, if the SSNIP is defeated by substitution towards suppliers that were not presumed to be in the candidate market, then the market must expand to accommodate these additional suppliers.

Applying this framework to the market nominated by Castalia,¹⁵ a monopolist seller of tenements in the Hay Point catchment would not profitably be able to impose increases in the price of tenements. However, the buyers of tenements are investors who face a vast array of choices about where to acquire the rights to potential resources. There are no special circumstances prevailing in the region around Hay Point that would imply investors could not substitute towards opportunities in other areas in Central Queensland.

In our opinion, Castalia's view that the geographic dimension of a market for tenements is limited to the Hay Point catchment has not been tested by reference to the conventional framework for making such assessments, and cannot reasonably be sustained.

Our reasoning is supported by the Australian Competition Tribunal's reasoning in *Fortescue Metals*:¹⁶

Examining a map of tenements in the Pilbara, it is obvious that tenement purchasers (whether outright or partial purchasers) have not confined themselves to buying tenements around a specific railway line. This provides strong evidence that a monopoly seller of tenements around a specific line could not profitably apply a price increase because buyers would substitute to other tenements. Further, a monopsony buyer of tenements around a specific line could not profitably decrease price because sellers would easily find a purchaser outside this geographical area.

The consequence of the geographic scope of the market for tenements being likely to extend beyond the Hay Point catchment (to, say, Central Queensland) is that the actions of DBCTM at Hay Point are unlikely to be material to this broader market for tenements.

If Castalia's overly narrow market definition is set aside, then the market for tenements is not a dependent market in which declaration of the DBCT would promote a material increase in competition.

3.3.2 Differential prices for capacity are not an outcome of declaration

Castalia contends that, without declaration, new entrants will be disadvantaged in bidding for new tenements.¹⁷ This claim turns on the assumption that, under declaration, new entrant miners can gain access to DBCT on the same terms as incumbent miners. It also assumes that incumbent miners have access to additional capacity on similar terms as those upon which they access existing capacity. These assumptions are not borne out by the facts.

DBCT is currently contracted to near capacity. Looking forward, we understand that even if none of the current access seekers (that DBCT presently expects to proceed to finalise contracts for available capacity) take up capacity, existing contracts and anticipated renewals are expected to comprise on average around 77 mtpa of DBCT's total 85 mtpa capacity. It follows that there is little or no prospect that either new entrant miners or incumbents will be able to enter into contracts with DBCT for existing capacity on the prevailing regulated rates in the near future (irrespective of DBCT's declaration status).

¹⁵ Castalia, *Dalrymple Bay coal terminal: Economic analysis of declaration criteria*, May 2018, p 8.

¹⁶ Australian Competition Tribunal, *In the matter of Fortescue Metals Group Limited [2010] ACompT 2*, 30 June 2010, p 258, paras 1118-1119. This decision relates to iron ore, a similar commodity resource.

¹⁷ Castalia, *Dalrymple Bay coal terminal: Economic analysis of declaration criteria*, May 2018, p 19.

In the event DBCT was to be expanded, the price for access to expanded capacity at DBCT is unlikely to be the same as that for existing capacity. Under the current access undertaking, expansions to terminal capacity may either be:¹⁸

- 'socialised' such that the costs of existing and expanded capacity at the terminal are pooled, with a single price determined across the combined capacity; or
- 'differentiated', such that the costs of existing and expanded capacity at the terminal are split, with separate prices determined for each tranche of capacity.

The access undertaking provides that an expansion will be socialised if doing so would either decrease prices for users of the existing terminal or where the special nature and circumstances of cost-sensitive expansions justify socialisation.¹⁹ It follows that, if the annualised unit costs associated with the construction and operation of a terminal expansion are lower than the terminal infrastructure charge (TIC) for the existing terminal, then that expansion will be socialised. Otherwise, it will be differentiated.

The available evidence suggests it is highly unlikely that any expansion of capacity at DBCT would meet the conditions necessary for its pricing to be socialised. As at 1 July 2018, the TIC applying to existing capacity is \$2.62 per tonne. By comparison, the potential expansion opportunities disclosed by DBCTM are far costlier when compared on a like-for-like basis. PwC's report assesses these costs, expressed in annualised and unitised terms assuming full utilisation of each expansion, as:²⁰

- \$8.30 per tonne in respect of the Zone 4 expansion;
- \$6.19 per tonne in respect of the combined Zone 4 and 8X expansions; and
- \$7.32 per tonne in respect of the combined Zone 4, 8X and 9X expansions.

On these estimates, under declaration new entrant miners are only likely to be able to access capacity at DBCT at prices that may be two or three times the prices faced by incumbent miners. Further, even to achieve this access will require a lengthy process before the expansion can be investigated, approved and constructed.²¹

Castalia states that, in the absence of declaration:²²

Bids for new tenements will largely come from incumbents as they have access through existing contracts at arbitrated prices. Bids from new entrants will be at a significant disadvantage as they will not be able to compete on price and will have a more complex process to negotiate access.

Both new entrants and incumbents will be less likely to bid for thermal only tenements...

This statement seems unlikely to be true. The only way that 'incumbents [which]...have access through existing contracts at arbitrated prices' could use any benefit of those contracts to bid for new tenements would be if either the particular new tenement just happened to become available at exactly the same time as an existing mine was reaching the end of its economic life or DBCT had unallocated capacity available and an existing user was first in the queue and allowed to increase its contracted tonnage.²³ Otherwise, it can be presumed that 'incumbents' are continuing to use their 'access through existing contracts at arbitrated prices' to serve their existing needs.

¹⁸ DBCTM, *Dalrymple Bay Coal Terminal Access Undertaking*, 2017, clause 11.1.

¹⁹ DBCTM, *Dalrymple Bay Coal Terminal Access Undertaking*, 2017, clause 11.13(a) and (c).

²⁰ PwC, *Dalrymple Bay Coal Terminal User Group: 2018 access declaration review*, May 2018, p 57.

²¹ DBCTM, *DBCT declaration review: DBCT Management submission to the QCA*, 30 May 2018, Appendix 15.

²² Castalia, *Dalrymple Bay coal terminal: Economic analysis of declaration criteria*, May 2018, p 19.

²³ Section 11.1 of DBCT's Standard Access Agreement provides existing users with the ability to seek to increase their contracted tonnage, which DBCTM may allow subject to a number of factors including the availability of unallocated terminal capacity.

In any case, these conditions will apply equally for the situation with declaration as they would without declaration. In other words, Castalia does not show that declaration will alter (let alone alleviate) any asymmetry in pricing between new and incumbent miners. Further, Castalia does not establish how an incumbent would be advantaged in the market for tenements with or without declaration and, even if it was, how this could cause a material change to competition in a properly defined tenements market.

3.3.3 The class of new potential users is small relative to the class of existing users

Castalia's contentions regarding the prospects for distortion in the tenements market do not contemplate the impact of the likely quantum of relative contribution to demand for services provided by DBCT from the two classes of users that it identifies – incumbent and new entrant miners. Castalia is silent as to whether the distortion in the tenements market that it contends would materialise would be affected if the class of new potential users without existing contractual rights is very small relative to the group of existing users. In fact, the likely proportion of new entrant miners is expected to approach zero at certain times over the relevant period.

DBCT's existing and planned contractual obligations are expected to result in the terminal having very limited spare capacity, as noted in section 3.3.2 above. It follows that, irrespective of DBCT's declaration status, potential buyers in the tenements market (that are also potential new entrant purchasers in the market for DBCT's service) are unlikely to rely on access to existing capacity at DBCT in determining their willingness to invest in a tenement – since DBCT does not have existing capacity to service new users.

Put differently, under declaration, the number of potential buyers of tenements in the Hay Point catchment that might reasonably expect to access (existing capacity for) the DBCT service is very small, and possibly zero. It follows that, assuming the distortion contended for by Castalia is a relevant consideration, the impact of declaration on demand for tenements would therefore be correspondingly small. It is not obvious that this impact on demand would meet the standard for promotion of a material increase in competition, even in the narrow market for tenements asserted by Castalia.

We explain in section 2.1.2 above (and in detail in our previous report)²⁴ that a market which is (or would be) effectively competitive in absence of declaration is unlikely to be considered a dependent market for which declaration would promote a material increase in competition. If the field of potential new entrants in the market for tenements is very small relative to existing users of DBCT, then it is unlikely that competitive conditions in the tenements market as defined by Castalia would alter at all in absence of declaration.

3.4 Secondary trading of capacity

The Castalia report also identifies a market for the secondary trading of DBCT capacity. It claims that declaration would promote a material increase in competition in this market since, in the absence of declaration, DBCTM would have an incentive to:

- charge a fee in respect of any secondary capacity trades; and/or
- limit or restrict the ability of contracted users to engage in secondary trading of unused capacity under take or pay contracts.²⁵

It is important to note that there are no changes to institutional arrangements that would be expected to give rise to the conduct contended by Castalia. Castalia fails to take into account the following market observations:

- DBCTM currently facilitates secondary trading through its affiliate, Brookfield Port Capacity (BPC) – however, BPC will exit the secondary market completely as at 1 September 2018, as set out in DBCTM's Draft Amending Access Undertaking, submitted to the QCA on 27 June 2018;

²⁴ HoustonKemp, *Does DBCT's coal handling service satisfy criterion (a)?* 29 May 2018, section 3, pp 11-18.

²⁵ Castalia, *Dalrymple Bay coal terminal: Economic analysis of declaration criteria*, May 2018, p 21.

- alongside secondary trading through BPC, DBCTM provides for secondary capacity trades that have been agreed directly between third parties – over the last three years, approximately 93 per cent of total secondary trades were made directly between parties;²⁶ and
- DBCTM has never withheld consent for a secondary trade of capacity, and there is no reason to expect that its willingness to provide for such trading would be affected with or without declaration (and Castalia does not offer any such reason).

In addition, the arrangements that DBCTM proposes to apply when declaration expires will also serve to eliminate any incentive for DBCTM to take the actions cited by Castalia. We explain these arrangements and their effects at section 4.3.

3.5 Coal haulage in Central Queensland

The DBCT User Group identified rail haulage in central Queensland as a dependent market for which declaration would promote a material increase in competition, although Castalia's report does not comment on this dependent market.

Our earlier report addressed this market.²⁷ We discussed in detail that the volume of coal in the mining supply chain and transported along each train path will not be affected by whether or not the DBCT service is declared. It follows that under any market definition for coal haulage services, the volume supplied in that market would also not be affected by declaration. Put differently, declaration of the DBCT service does not have any direct effect on the rail haulage market.

Given that volumes transported by each firm will not change, the structure and conduct of firms in the market are also not affected by declaration. For example, the likelihood of entry will not be impacted, the same services are required with and without declaration, and there is no reason for the quality of coal haulage services to change as a result of the declaration of the DBCT service.

We therefore concluded in our earlier report that declaration of the DBCT service would not promote a material increase in competition in any rail haulage market. None of the considerations identified in either the DBCT User Group submission or the Castalia report alter the basis for our earlier conclusion.

²⁶ DBCTM, Letter to QCA dated 27 June 2018 'DBCT 2017 AU - Trading SCB DAAU', page 3 (available at <http://www.qca.org.au/getattachment/b1a2acb1-5f6b-4707-8aaa-d318c4bc7f06/DBCTM—Letter-on-Trading-SCB-DAAU.aspx>).

²⁷ HoustonKemp, *Does DBCT's coal handling service satisfy criterion (a)?* May 2018, p 34.

4. Effect of DBCT's proposed access framework

DBCTM has proposed an access framework that sets out the terms and conditions under which the DBCT service will be supplied if it is not declared. The proposed framework represents an important component of the case presented by DBCTM for why it does not satisfy criterion (a) – a component that was not available to Castalia and therefore could not be taken into account in its assessment of criterion (a).

In this section we consider how the terms and conditions of DBCTM's proposed access framework bear on Castalia's findings that declaration of the DBCT service would materially promote competition in the markets it identifies for Hay Point tenements and for secondary capacity. In particular, we:

- revisit the relevant terms of DBCT's proposed access framework and, in light of that framework, our conclusions as to the effect of declaration on competition in related markets;
- describe how the terms of the access framework would affect Castalia's analysis of DBCTM's ability and incentive to increase prices at DBCT;
- explain that the terms of the access framework alleviate the concerns raised by Castalia in relation to a market for the secondary trading of capacity; and
- review Castalia's concerns about an arbitrated right to access without declaration as compared to a regulated right to access with declaration.

4.1 Effect of DBCT's proposed access framework

Our earlier report explains that, given the access framework, declaration will not promote a material increase in competition in dependent markets. We explain below that a key function of the access framework is to set a ceiling terminal infrastructure charge (TIC) at a level that ensures the coal volumes served at DBCT do not fall if DBCT is not declared, relative to volumes under declaration.

DBCTM's proposed access framework provides that a TIC is to be agreed between DBCTM and each user. In the absence of such agreement, an arbitrator is to determine a TIC that must:²⁸

- reflect the TIC that would be agreed between a willing but not anxious buyer and a willing but not anxious seller of coal handling services for mines that are proximate to the Port of Hay Point;
- not be less than the floor TIC, being that which would apply under a QCA administered pricing regime; and
- not be greater than the ceiling TIC, being the highest TIC at which coal volumes served at DBCT would be the same as if the floor TIC applied – with this assessment being made without reference to any contractual limitations on volumes that are able to be delivered to DBCT or any other coal terminal.

These terms ensure that:²⁹

- the TIC can be no lower than would apply if DBCT was declared (the floor TIC); and
- the TIC can be no higher than the highest TIC at which the use of DBCT is the same as it would be if DBCT was declared (the ceiling TIC).

The direct effect of the access framework is that use of DBCT is the same at all values of the TIC within this floor and ceiling range. Put another way, the access framework ensures that declaration of the DBCT service

²⁸ HoustonKemp, *Does DBCT's coal handling service satisfy criterion (a)?* 29 May 2018, p 19.-

²⁹ HoustonKemp, *Does DBCT's coal handling service satisfy criterion (a)?* 29 May 2018, pp 19-20

would not lead to an increase in volumes at DBCT, as compared with the outcome that would apply without declaration. Since no miner would be expected to change its infrastructure usage decisions in response to declaration, it follows that declaration will also not affect the use of other facilities such as coal terminals and railway systems.³⁰

In the absence of changes to the use of infrastructure, the structure of markets that depend on this infrastructure and the conduct of firms operating in these markets will not be affected. For example, there is no reason to suppose that the volume or quality of coal supplied in any export market will be affected by declaration. Under the access framework, non-price terms and conditions for accessing DBCT will remain substantively the same with and without declaration, and so this will not change the service provided to coal miners.³¹

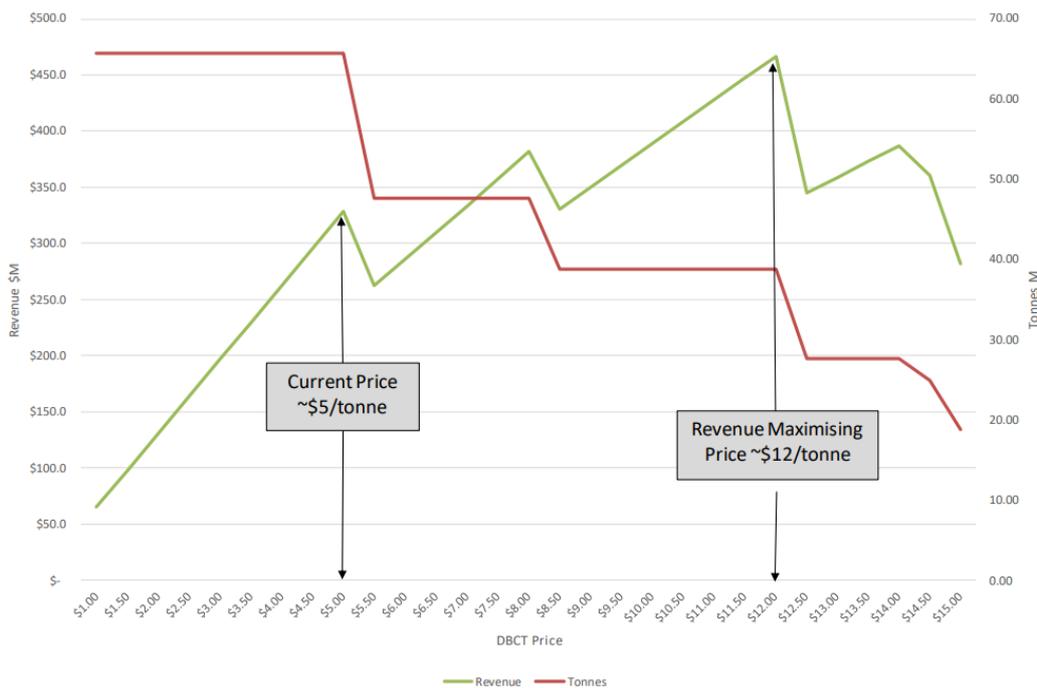
4.2 Access framework constrains price increases at DBCT

Castalia states that, without declaration, DBCTM will have a unilateral incentive and ability to increase prices for its coal handling service:³²

...DBCTM, as a rational profit maximising monopolist, has the opportunity and the incentive to increase its charges to the point just before it becomes economic for users to switch to an alternative rail line, load and port export chain.

Castalia's analysis finds that current charges at DBCT could approximately double before alternative coal handling facilities become the lowest cost supply network.³³ This is demonstrated at figure 3.2 of Castalia's report, which we reproduce below.

Figure 4.1: Castalia's analysis of DBCT's throughput and revenue



Source: Castalia report, figure 3.2, p 16.

³⁰ HoustonKemp, *Does DBCT's coal handling service satisfy criterion (a)?* 29 May 2018, pp 20-21.

³¹ HoustonKemp, *Does DBCT's coal handling service satisfy criterion (a)?* 29 May 2018, p 22.

³² Castalia, *Dalrymple Bay coal terminal: Economic analysis of declaration criteria*, May 2018, p 16.

³³ Castalia, *Dalrymple Bay coal terminal: Economic analysis of declaration criteria*, May 2018, pp 14-16

Castalia's analysis assumes that, absent declaration, DBCT will have monopoly pricing power. It calculates that the profit maximising level of coal handling charges at DBCT is approximately \$12.00 per tonne, compared to approximately \$5.00 per tonne under declaration. At these prices, Castalia estimates that the throughput served at DBCT would be approximately 38 mtpa, considerably lower than 67 mtpa under declaration.

4.2.1 Castalia's analysis of DBCT throughput and revenue

We broadly agree with Castalia's framework for analysing the response of customers to higher charges at DBCT. However, a number of the inputs that Castalia uses to populate this framework are problematic.

In particular, Castalia appears to find that about 18mtpa would no longer use DBCT in response to a \$0.50 increase to coal handling charges at DBCT. This estimate is not credible, and is inconsistent with:

- our analysis of AME and Wood Mackenzie data;
- PwC's analysis of DBCT User Group data;
- DBCTM's observations that the demand response to a recent increase in Operator charges by more than 20 per cent resulted in zero change in throughput at DBCT; and
- coal export price fluctuations of much greater magnitudes, that do not result in such drop-offs in throughput.

Taken together, Castalia's analysis appears to be at odds with the reality of demand at DBCT and appears to overstate significantly the predicted sensitivity to coal handling charges at DBCT.

4.2.2 DBCT's access framework

Since the terms and conditions of the proposed access framework were not available at the time it prepared its advice, Castalia's analysis of the likely effects on competition in the tenement market and in the secondary capacity market does not take them into account. Given the substantive constraint that the proposed access framework places on the ability of DBCTM to determine the TIC, it is important to consider whether Castalia's findings would continue to hold given the proposed access framework. Our analysis shows that they would not.

Combining the access framework with Castalia's own analysis (noting our concerns with some of Castalia's demand modelling as above) illustrates how the access framework would operate so as to constrain the pricing outcomes at DBCT without declaration.

Under the proposed access framework, the TIC cannot exceed the ceiling TIC, which is defined as being *'the highest TIC at which coal volumes served at DBCT would be the same as if the floor TIC applied'*. The agreed TIC must be between the floor TIC and the ceiling TIC.

The coal volumes served at DBCT if the floor TIC applied are, on Castalia's assessment, 67 mtpa. However, figure 4.1 shows that when the TIC increases by as little as \$0.50 per tonne, volumes served at DBCT decrease dramatically, to about 49 mtpa. It follows that the ceiling TIC, on Castalia's assessment, would be at most \$0.50 per tonne higher than the floor TIC. However, we note that this \$0.50 per tonne difference between the floor and ceiling TIC is a function of Castalia's analysis, rather than an assumption about future prices.³⁴

If the ceiling TIC exceeded the floor TIC by \$0.50 per tonne, it would not meet its own objective of ensuring that volumes at DBCT are not lower than they would be under a QCA administered pricing regime. Therefore, Castalia's analysis suggests that coal handling charges at DBCT cannot increase from \$5.00 per tonne to \$12.00 per tonne under the proposed access framework. Instead, they would increase to a

³⁴ We expect that the ceiling TIC at DBCT would exceed the floor TIC by more than \$0.50 per tonne.

maximum of \$5.50 per tonne and, in accordance with the 'willing but not anxious' concept, more likely somewhere between the floor and ceiling TIC, ie, less than \$5.50 per tonne.

Combining Castalia's analysis of throughput and revenue at DBCT with the access framework that will apply if DBCT is not declared implies that, for Castalia to be internally consistent in concluding that criterion (a) is satisfied, Castalia must demonstrate that a decrease in price from \$5.50 per tonne to \$5.00 per tonne for coal handling services at DBCT would lead to the promotion of a material increase in competition in related markets. It does not do so.

4.3 Access framework makes DBCTM indifferent to volume changes

Castalia raises a concern that, absent declaration, DBCTM would have the incentive and ability to affect the number of trades for secondary capacity by either or both:³⁵

- charging a fee to consent to trades; or
- refusing consent to trades entirely.

It concludes that declaration has the effect of materially promoting competition in a market for secondary capacity trading, so that criterion (a) is satisfied.

We discussed in section 3.4 above that BPC will exit the secondary market completely by 1 September 2018. We further noted above that:

- alongside secondary trading through BPC, DBCTM provides for secondary capacity trades that have been agreed directly between third parties; and
- DBCTM has never withheld consent for a secondary trade of capacity, and there is no reason to expect that its willingness to provide for such trading would be affected with or without declaration (and Castalia does not offer any such reason).

In addition to the points above, DBCTM's proposed access framework ensures that there is no basis for the concerns outlined by Castalia, as outlined below.

The incentives cited by Castalia might arise in circumstances in which:

- there is uncontracted capacity at DBCT; and
- DBCTM would profit by affecting users' choices so as to make them more likely to enter into contracts for capacity in the primary market rather than entering into secondary capacity trades.

However, neither of these circumstances hold.

We understand that 76.3 mtpa of capacity at DBCT is currently under contract (with a ramp up profile over time), and that DBCTM expects to enter into new contracts that will further diminish its spare capacity (ultimately to 0 mtpa), as noted in section 3.3.2. At the current time, at least, there appears little prospect of the incentives raised by Castalia being realised.

Further, the operation of the proposed access framework means that DBCTM has no incentive to undertake actions that would encourage current or prospective users to seek capacity in the primary market in preference to using capacity acquired through secondary market trades. Under the proposed framework, a change in the aggregate annual contract tonnage at the terminal triggers a review event which results in an adjustment to the TIC of each user by reference to the formula:

$$TIC_t = UAF_t \times TIC_{t-1}$$

³⁵ Castalia, *Dalrymple Bay coal terminal: Economic analysis of declaration criteria*, May 2018, p 21.

where:

TIC_t is the TIC in respect of the Existing Terminal or Differentiated Expansion Component (as relevant) applicable for AH_u consequent upon the Review Event;

UAF_t is the utilisation adjustment factor, which is equal to TUR_t / TUR_{t-1} ;

TUR is the terminal utilisation ratio, calculated as follows:

(Existing Terminal Capacity or Differentially Priced Capacity (as relevant) / Aggregate Annual Contract Tonnage in respect of the Existing Terminal or Differentiated Expansion Component (as relevant));

TUR_{t-1} is the TUR immediately prior to the occurrence of the Review Event;

TUR_t is the TUR consequent upon the Review Event; and

TIC_{t-1} is the TIC in respect of the Existing Terminal or Differentiated Expansion Component (as relevant) applicable for AH_u immediately prior to the occurrence of the Review Event.

The effect of these terms is that the overall revenue of the terminal is not affected by a change in aggregate annual contract tonnage. A substantially similar mechanism currently applies, under declaration.

In substance, these provisions mean that, under the proposed access framework, DBTCM has no incentive to undertake actions that would encourage current or prospective users to seek capacity in the primary market in preference to using capacity acquired through secondary market trades. The same situation applies to the current circumstances in which the DBCT service is declared.

It follows that, if the proposed access framework is to apply without declaration, then declaration will not promote the material increase in competition claimed by Castalia in a related market for secondary capacity trades.

4.4 Concerns about arbitrated right to access

Castalia raises concerns about how options for pricing at DBCT after the expiry of declaration may manifest. It notes particular concerns about the workability and desirability of providing an arbitrated right to access DBCT.

4.4.1 Access to arbitration would be on terms determined by DBTCM

Castalia notes that, if DBTCM were to provide access after the expiry of declaration by executing a deed or other legal instrument, this may raise other concerns because:³⁶

We have been advised that there is doubt that such an arrangement would give a legal right to new users in all circumstances.

Any access to arbitration would be only in terms of the legal arrangement set up by DBTCM.

Again, such an arrangement would be markedly inferior to that of an approved Access Undertaking in terms of rights and certainty. It is also questionable whether it is an appropriate counterfactual to assume a position asserted in the context of the declaration review that has not been proposed previously.

The basis for Castalia's concerns about the type of arrangement that DBTCM has proposed are not clear to us. These concerns do not seem to relate to matters that are relevant to an assessment of criterion (a) and the question of whether:

³⁶ Castalia, *Dalrymple Bay coal terminal: Economic analysis of declaration criteria*, May 2018, p 18.

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

The fact that the access to arbitration would be on the terms of the proposed access framework prepared by DBCTM is neither a reason to conclude that criterion (a) is satisfied nor a basis upon which to conclude that the proposed arrangement would be 'markedly inferior' to the current regulatory regime overseen by the QCA.

4.4.2 Arbitration would be a lengthy and expensive process

Castalia implicitly contends that arbitration would be lengthy and expensive for DBCT users (in the absence of declaration of the DBCT service), by commenting on the arbitration process at AAPT:³⁷

We understand that the privately owned and unregulated Abbott Point coal loader provides access through a negotiation process with arbitration on parameters set by Abbott Point. We have been told that the process has been lengthy, and each renegotiation has proceeded to arbitration or resulted in confidential settlement which may be on different pricing for different users or both.

Any process culminating in a regulatory or arbitral determination of the price for coal handling services at DBCT is likely to reflect the large economic value of the transactions involved and the strong economic interests of:

- users to achieve a lower price; and
- DBCTM to achieve a higher price.

It is unrealistic to expect that any such process will not be lengthy. Consistent with this expectation, the current regulatory processes are already exceedingly lengthy. For example, on 12 October 2017, the QCA formally started the process under which DBCTM is required to prepare and provide to the QCA a draft access undertaking, even though the current access undertaking will remain in force until 30 June 2021.³⁸

To establish that an access regime outside of declaration would result in decision-making that is unreasonably lengthy would require considerations that Castalia has not undertaken: namely to undertake a careful assessment of the elapsed time under both processes. In addition, it would be necessary to assess:

- the terms and conditions of the access regime that would give rise to delays; and
- the ability for reasonable alternative approaches to providing access to avoid these delays.

4.4.3 Arbitration would increase the prospect of price coordination

Castalia cites the prospect that, with the replacement of a transparent regulated price for DBCT with a confidential arbitrated outcome, there may be an increased risk of coordination between terminals to increase prices.³⁹

This suggestion has no credible economic foundation. Price coordination is promoted by transparency and frequent interactions between relevant parties, so that the coordinating parties can monitor their respective compliance with the explicit or implicit coordination strategy. It is not plausible to suggest that the removal of a transparent price benchmark at DBCT will promote coordination between terminals.

In any case, price coordination will only provide benefits to coordinating parties in circumstances in which competition plays a role in restraining the prices that these parties could otherwise determine. Castalia does

³⁷ Castalia, *Dalrymple Bay coal terminal: Economic analysis of declaration criteria*, May 2018, p 18. We note that since the processes by which any disputes at AAPT have been resolved, and their outcomes, are confidential, the basis and accuracy of Castalia's contention is unclear.

³⁸ QCA, *Initial undertaking notice*, 12 October 2017.

³⁹ Castalia, *Dalrymple Bay coal terminal: Economic analysis of declaration criteria*, May 2018, p 18.

not reconcile how its concerns about price coordination may manifest when it also describes DBCT as a 'profit maximising monopolist' that would not face competitive constraints on its price after the expiry of declaration.⁴⁰

Finally we note that the provisions of the *Competition and Consumer Act 2010* would apply to inhibit anti-competitive coordination or price fixing.

⁴⁰ Castalia, *Dalrymple Bay coal terminal: Economic analysis of declaration criteria*, May 2018, p 16.

5. Declaration

We are pleased to confirm that in relation to the analysis presented and the conclusions drawn in our report:

- the factual matters set out in our report are, as far as we know, true;
- in preparing this report, we have made all the enquiries we consider appropriate; and
- that the opinions stated in our report are genuinely held by us and that our report contains reference to all matters that we consider significant.

Greg Houston / Daniel Young / Bronwyn McDonald
13 July 2018

Annexure 1 Curricula vitae



Greg Houston

Partner

HoustonKemp
Level 40, 161 Castlereagh St
Sydney NSW 2000
Tel: +61 2 8880 4810
Mob: +61 417 237 563
E-mail: Greg.Houston@houstonkemp.com
Web: HoustonKemp.com



Overview

Greg Houston is a founding partner of the firm of expert economists, HoustonKemp. He has twenty five years' experience in the economic analysis of markets and the provision of expert advice in litigation, business strategy, and policy contexts. His career as a consulting economist was preceded by periods working in a financial institution and for government.

Greg has directed a wide range of financial, competition and regulatory economics assignments during this consulting career. His work in the Asia Pacific region principally revolves around the activities of the enforcement and regulatory agencies responsible for these areas, many of whom also number amongst his clients. On competition and antitrust matters he has advised clients on merger clearance processes, competition proceedings involving allegations of anticompetitive conduct ranging from predatory pricing, anti-competitive agreements, anti-competitive bundling and price fixing. Greg also has deep experience of infrastructure access regulation matters, and intellectual property and damages valuation. In his securities and finance work Greg has advised clients on a large number of securities class actions, as well as market manipulation and insider trading proceedings, and on cost of capital estimation.

Greg's industry experience spans the aviation, beverages, building products, cement, e-commerce, electricity and gas, forest products, grains, medical waste, mining, payments networks, office products, petroleum, ports, rail transport, retailing, scrap metal, securities markets, steel, telecommunications, thoroughbred racing, waste processing and water sectors.

Greg has acted as expert witness in valuation, antitrust and regulatory proceedings before the courts, in various arbitration and mediation processes, and before regulatory and judicial bodies in Australia, Fiji, Malaysia, New Zealand, the Philippines, Singapore, the United Kingdom and the United States.

Prior to the formation of HoustonKemp in April 2014, Greg was a Director of the global firm of consulting economists, NERA Economic Consulting, where for twelve years he served on its United States' Board of Directors, for five years on its global Management Committee and for sixteen years as head of its Australian operations.

Greg also serves on the Competition and Consumer Committee of the Law Council of Australia.

Qualifications

1982 **University of Canterbury, New Zealand**
B.Sc. (First Class Honours) in Economics

Prizes and scholarships

1980 University Junior Scholarship, New Zealand

Career details

2014- **HoustonKemp Economists**
Partner, Sydney, Australia

1989-2014 **NERA Economic Consulting**
Director (1998-2014)
London, United Kingdom (1989-1997)
Sydney, Australia (1998-2014)

1987-89 **Hambros Bank, Treasury and capital markets**
Financial Economist, London, United Kingdom

1983-86 **The Treasury, Finance sector policy**
Investigating Officer, Wellington, New Zealand

Project experience¹

Competition, access and mergers

2018 **Queensland Rail**
Access to facilities
Advice in relation to the Queensland Competition Authority's review of the presently declared status of services provided by QR's five rail networks.

2018 **Westpac Banking Corporation**
Competition analysis
Expert report prepared for the Productivity Commission in response to the draft finding in its banking competition inquiry that each of Australia's banks holds substantial market power.

2017-18 **Ashurst/Confidential client**
Anti-competitive bundling
Advice in relation to an ACCC investigation of bundled discounts that are alleged to have had an anti-competitive effect.

2018 **DLA Piper/DBCT Management**
Access to facilities
Expert reports submitted to the Queensland Competition Authority's review of the presently declared status of services provided by the Dalrymple Bay Coal Terminal.

2017-18 **Gilbert + Tobin/Confidential client**
Alleged cartel conduct
Advice in relation to an ACCC investigation of alleged cartel conduct.

¹ Past ten years only.

- 2017-18** **Wilson Harle/Confidential client**
Competitive effects of merger
Advice in relation to a Commerce Commission investigation of an already completed merger transaction.
- 2017-18** **King & Wood Mallesons**
Competition analysis
Advice to a major digital platform service provider on potential competition concerns arising in the ACCC's digital platforms inquiry.
- 2017** **Minter Ellison Rudd Watts/Complete Office Supplies**
Competitive effects of merger
Expert reports submitted in High Court of New Zealand proceedings concerning the proposed acquisition of OfficeMax by Platinum Equity injunction.
- 2017** **Minter Ellison/CrownBet**
Merger authorisation
Expert reports and testimony in Competition Tribunal proceedings concerning the proposed acquisition of Tatts by Tabcorp.
- 2016** **Bird & Bird/Generic Health**
Competitive effects of patent infringement
Expert reports and testimony in Federal Court proceedings concerning the damages arising from infringement of a pharmaceutical patent.
- 2016** **Manildra Group**
Competition analysis
Advice and preparation of an expert report assessing competitive constraints in the supply of fuel grade ethanol.
- 2016** **Clayton Utz/Anglo American**
Competitive effects analysis
Expert reports assessing the economic impact on the equine critical industry cluster if certain thoroughbred breeding operations were to leave the Upper Hunter.
- 2014-16** **Ashurst and Gilbert + Tobin/Confidential client**
Competitive effects of agreements
Analysis and advice prepared in context of an ACCC investigation of agreements between a supplier and its major customers that are alleged to harm competition.
- 2015-16** **King & Wood Mallesons/Confidential client**
Competition analysis
Analysis and advice in the context of the ACCC's inquiry into eastern and southern Australia wholesale gas prices.
- 2015** **Port of Newcastle Operations**
Access to facilities
Expert report submitted to the National Competition Council on matters arising in the applying the criteria for declaration under Part IIIA, in the context of the application by Glencore for declaration of services provided by the Port of Newcastle.
- 2015** **Corrs/Confidential client**
Merger clearance
Analysis, advice and expert report submitted to the ACCC in the context of a proposed acquisition in the office products sector.

- 2014-15** **Australian Government Solicitor/Commonwealth of Australia**
Competition and trade analysis
Expert report on competition and trade in tobacco products, prepared in the context of the World Trade Organisation dispute settlement proceedings concerning Australia's tobacco plain packaging legislation.
- 2014-15** **King & Wood Mallesons/Confidential client**
Competitive effects of agreement
Analysis and advice prepared in context of an ACCC investigation of agreements between a supplier and its major customers that are alleged to harm competition.
- 2013-14** **Corrs/Australian Competition and Consumer Commission**
Effect of cartel conduct
Expert report on the price effects of an alleged market sharing arrangement in relation to the supply of forklift gas, prepared in the context of Federal Court proceedings brought against Renegade Gas (Supagas).
- 2013-14** **Australian Competition and Consumer Commission**
Merger clearance
Expert report and testimony before the Competition Tribunal in the context of the ACCC's decision to oppose the acquisition of Macquarie Generation by AGL Energy.
- 2013-14** **Ashurst/BlueScope**
Merger clearance
Expert reports submitted to the ACCC in the context of the clearance of three approved transactions in the domestic steel industry.
- 2013-14** **Australian Government Solicitor/ACCC**
Merger clearance
Analysis and advice prepared in the context of the ACCC's review of the proposed acquisition of petrol retailing sites in South Australia.
- 2013** **Corrs/Generic Health**
Patent damages estimation
Expert report on the nature and extent of the analysis necessary to estimate damages in a patent infringement proceeding.
- 2012-13** **Minter Ellison/Confidential client**
Merger clearance
Expert reports submitted to the ACCC in the context of a confidential application for clearance of a proposed acquisition in the industrial gases industry.
- 2011-12** **Gilbert + Tobin/Pact Group**
Merger clearance
Expert reports submitted to the ACCC on the competitive implications of the proposed acquisition of plastic packaging manufacturer Viscount Plastics by Pact Group.
- 2011** **Gilbert + Tobin/Caltex**
Access to facilities
Expert report submitted to the National Competition Council on matters arising in the applying the criteria for declaration under Part IIIA, in the context of the application by the Board of Airline Representatives of Australia (BARA) for the declaration of services provided by the Caltex jet fuel pipeline serving Sydney airport.

- 2010-12** **Mallesons/APA**
Merger clearance
Expert reports submitted to the ACCC on the competitive implications of the proposed acquisition of the gas pipeline assets of Hastings Diversified Utilities Fund by APA Group.
- 2010-11** **Johnson Winter & Slattery/ATC and ARB**
Competitive effects of agreement
Expert reports and testimony in Federal Court proceedings concerning the competitive effects of restrictions on the use of artificial techniques in the breeding of thoroughbred horses for racing.
- 2010-11** **Victorian Government Solicitor/State of Victoria**
Competitive effects of agreement
Expert report prepared for the State of Victoria on the effects of certain restrictions applying to the trading of water rights on inter-state trade in the context of a constitutional challenge brought against the state of Victoria by the state of South Australia.
- 2009-11** **Arnold + Porter/Visa Inc, Mastercard Inc and others**
Payment card markets
Expert reports and deposition testimony on behalf of defendants in the United States Re Payment Card Interchange Fee and Merchant Discount Antitrust Litigation, on the effects of regulatory interventions in the Australian payment cards sector.
- 2010** **Australian Competition and Consumer Commission**
NBN Points of Interconnection
Report and advice on the competition implications in the markets for both telecommunications backhaul and retail broadband services of different choices as to the number of 'points of interconnection' in the proposed architecture of the national broadband network.
- 2010** **JWS, Gilbert & Tobin/Jetset Travelworld, Stella Travel Services**
Merger clearance
Advice on the competitive implications of the merger between Jetset Travelworld and Stella Travel Services.
- 2009-10** **Australian Government Solicitor/ACCC**
Misuse of market power
Expert report and testimony in the context of Federal Court proceedings brought by the ACCC against Cement Australia in relation to conduct alleged to have breached sections 45, 46 and 47 of the Trade Practices Act.
- 2008-10** **Gilbert & Tobin/Confidential client**
Merger assessment
Advice on the competitive implications of the then proposed merger and then subsequently the proposed iron ore production joint venture between BHP Billiton and Rio Tinto.
- 2008-10** **Allens/Amcor**
Cartel damages assessment
Advice and preparation of an expert report on the approach to and quantification of economic loss in the context of two separate actions seeking damages arising from alleged cartel conduct.

- 2009** **State Solicitor’s Office/Forest Products Commission**
Alleged breach of s46
Expert advice in the context of Federal Court proceedings alleging breaches of section 46 of the Trade Practices Act.
- 2009** **Clayton Utz/Confidential client**
Joint venture arrangement
Reviewed the competitive implications under s50 of the Trade Practices Act of a proposed joint venture transaction in the rail industry.
- 2009** **Blake Dawson Waldron/Airservices**
Effect of potential industrial action by Air Traffic Controllers
Expert report in the context of a potential application to the Australian Industrial Relations Commission for termination or suspension of a bargaining period addressing the economic effect that certain forms of industrial action by Air Traffic Controllers would be likely to have on passengers, businesses, and the Australian economy.
- 2005-06, 08-09** **Phillips Fox/Fortescue Metals Group**
Access to facilities
Expert report and testimony in the Federal Court proceedings concerning whether or not access to the BHP Billiton and Rio Tinto rail lines, serving iron ore export markets in the Pilbara, amounted to use of a production process. Subsequently, prepared expert reports on matters arising in interpreting the criteria for declaration under Part IIIA, and testified before the Competition Tribunal in late 2009.
- 2009** **Clayton Utz/Confidential client**
Competitive implications of agreement
Advice on the competitive effects of a joint venture arrangement in the port terminal sector, in the context of Federal Court proceedings brought by the ACCC under section 45 of the Trade Practices Act.
- 2009** **Australian Competition and Consumer Commission**
Competitive effects of buy-sell agreements
Advice to the ACCC on the extent to which buy-sell arrangements between the four major refiner-marketers of petroleum products in Australia may be inhibiting competition in a relevant market.
- 2008-09** **Watson Mangioni/ICS Global**
Alleged misuse of market power
Expert report prepared in the context of Federal Court proceedings alleging breaches of section 46 of the Trade Practices Act.
- 2008-09** **Australian Competition and Consumer Commission**
Competitive effects of various agreements
Expert advice on potential theories of competitive harm arising from agreements between competitors in the oil and gas, and petroleum retailing industry sectors.
- 2008** **Johnson Winter & Slattery/Pepsico**
Merger analysis
Advice on the competitive implications certain potential transactions in the soft drinks sector.

- 2008** **Australian Competition and Consumer Commission**
Exemption from access undertaking
'Peer review' report of the ACCC's draft decision on applications by Telstra for exemption from its standard access obligations (SAOs) for the supply by resale of the local carriage service (LCS) and wholesale line rental (WLR) in 387 exchange service areas in metropolitan Australia.
- 2008** **Deacons/eBay**
Exclusive dealing notification
Expert report submitted to the ACCC analysing the competitive effects of eBay's proposal that users of its online marketplace be required to settle transactions using eBay's associated entity, PayPal
- 2007-08** **Australian Energy Market Commission**
Wholesale market implications for retail competition
Provided an overview of the operation and structure of the wholesale gas and electricity markets within the National Electricity Market (NEM) jurisdictions and identified issues the AEMC should consider when assessing the influence of the wholesale markets on competition within retail gas markets.

Regulatory analysis

- 2017-18** **King & Wood Mallesons/Tasmania Gas Pipeline**
Gas pipeline arbitration arrangements
Expert reports on economic aspects of the Part 23 regime arbitration with Hydro Tasmania on the terms of access to the Tasmanian Gas Pipeline.
- 2017-18** **Victorian and South Australian electricity distribution networks**
Productivity adjustments
Expert report on the conceptual and empirical basis for pre-emptive productivity adjustments to DNSPs' projected operating expenditure.
- 2017-18** **Jemena**
Gas pipeline arbitration arrangements
Advice and analysis in relation to the new rules for arbitration of prices for services provided by non-scheme gas pipelines.
- 2016-2018** **APA Group**
Gas market reform
Expert reports submitted to the Gas Market Reform Group in the context of its review of the gas pipeline coverage criteria, and the proposal to introduce the compulsory auction of contracted but un-nominated gas pipeline capacity.
- 2016-2017** **Minter Ellison Rudd Watts/Trustpower, New Zealand**
Transmission pricing methodology
Expert reports submitted to the Electricity Authority and to the High Court of New Zealand in relation to proposed reforms to the transmission pricing methodology and the distributed generation pricing principles.
- 2016** **Johnson Winter & Slattery/Australian Gas Networks**
Materially preferable decision
Expert report reviewing whether aspects of the Australian Energy Regulator's (AER's) draft access arrangement decision would be likely to result in a materially preferable decision in terms of achievement of the national gas objective.

- 2015-17** **Government of New South Wales**
Economic regulation for privatisation
Advisor to government of New South Wales on all economic regulatory aspects of the proposed partial lease the electricity transmission and distribution entities, TransGrid, AusGrid and Endeavour Energy.
- 2014-16** **Powerco**
Input methodologies review
Advice and several expert reports prepared in the context of the Commerce Commission's reviews of cost of capital and others aspects of the Input Methodologies governing the determination of maximum prices for New Zealand electricity and gas distribution networks.
- 2015** **ActewAGL**
Regulatory price review
Expert report on the economic interpretation of provisions in the national electricity law and rules in relation to the application of the national electricity objective to the entire price determination of the Australian Energy Regulator.
- 2014-16** **Atco Gas**
Access price review
Expert reports on the economic interpretation of provisions in the national gas law and rules in relation to depreciation and the application of the national gas objective to the entire draft decision, submitted to the Economic Regulation Authority of WA.
- 2014-16** **Government of Victoria**
Economic regulation for privatisation
Advisor to government of Victoria on the design, development and application of the framework for economic regulation of the Port of Melbourne Corporation in the context of the privatisation of the port by way of long term lease.
- 2013** **Actew Corporation**
Interpretation of economic terms
Advice on economic aspects of the decision of the Independent Competition and Regulatory Commission in relation to the price controls applying to Actew.
- 2012-13** **Gilbert + Tobin/Rio Tinto Coal Australia**
Price review arbitration
Analysis and expert reports prepared in the context of an arbitration concerning the price to be charged for use of the coal loading facilities at Abbott Point Coal Terminal.
- 2012-13** **Ashurst/Brisbane Airport Corporation**
Draft access undertaking
Advice, analysis and expert reports in the context of the preparation of a draft access undertaking specifying the basis for determining a ten year price path for landing charges necessary to finance a new parallel runway at Brisbane airport.
- 2012** **King & Wood Mallesons/Origin Energy**
Interpretation of economic terms
Expert reports and testimony in the context of judicial review proceedings before the Supreme Court of Queensland on the electricity retail price determination of the Queensland Competition Authority.

- 2012** **Contact Energy, New Zealand**
Transmission pricing methodology
Advice on reforms to the Transmission Pricing Methodology proposed by Electricity Authority.
- 2011-12** **Energy Networks Association**
Network pricing rules
Advice and expert reports submitted to the Australian Energy Market Commission on wide-ranging reforms to the network pricing rules applying to electricity and gas transmission and distribution businesses, as proposed by the Australian Energy Regulator.
- 2010-12** **QR National**
Regulatory and competition matters
Advisor on the competition and regulatory matters, including: a range of potential structural options arising in the context of the privatisation of QR National's coal and freight haulage businesses, particularly those arising in the context of a 'club ownership model' proposed by a group of major coal mine owners; and an assessment of competitive implications of proposed reforms to access charges for use of the electrified network.
- 2002-12** **Orion New Zealand Ltd, New Zealand**
Electricity lines regulation
Advisor on regulatory and economic aspects of the implementation by the Commerce Commission of the evolving regimes for the regulation of New Zealand electricity lines businesses. This role has included assistance with the drafting submissions, the provision of expert reports, and the giving of expert evidence before the Commission.
- 2011** **Meridian Energy, New Zealand**
Undesirable trading situation
Advice on the economic interpretation and implications of the New Zealand electricity rule provisions that define an 'undesirable trading situation' in the wholesale electricity market.
- 2011** **Ausgrid**
Demand side management
Prepared a report on incentives, constraints and options for reform of the regulatory arrangements governing the role of demand side management in electricity markets.
- 2010-11** **Transnet Corporation, South Africa**
Regulatory and competition policy
Advised on the preparation of a white paper on future policy and institutional reforms to the competitive and regulatory environment applying to the ports, rail and oil and gas pipeline sectors of South Africa.
- 2010-11** **Minter Ellison/UNELCO, Vanuatu**
Arbitral review of decision by the Vanuatu regulator
Expert report and evidence before arbitrators on a range of matters arising from the Vanuatu regulator's decision on the base price to apply under four electricity concession contracts entered into by UNELCO and the Vanuatu government, including country risk component of the allowed rate of return and bringing to account events from the prior regulatory period.

- 2007-11** **Powerco/CitiPower**
Regulatory advice
Wide ranging advice on matters arising under the national electricity law and rules, such as the framework for reviewing electricity distribution price caps, the treatment of related party outsourcing arrangements, an expert report on application of the AER's efficiency benefit sharing scheme, the potential application of total factor productivity measures in CPI-X regulation, and arrangements for the state-wide roll out of advanced metering infrastructure.
- 1999-2004,** **Sydney Airports Corporation**
2010-11 **Aeronautical pricing notification**
Wide ranging advice and expert reports on regulatory matters, including advice and expert reports in relation to SACL's notification to the ACCC of substantial reforms to aeronautical charges at Sydney Airport in 2001. This involved the analysis and presentation of pricing principles and their detailed application, through to discussion of such matters at SACL's board, with the ACCC, and in public consultation forums. Subsequent advice on two Productivity Commission reviews of airport charging, and notifications to the ACCC on revised charges for regional airlines.
- 2010** **Industry Funds Management/Queensland Investment Corporation**
Due diligence, Port of Brisbane
Retained to advise on regulatory and competition matters likely to affect the future financial and business performance of the Port of Brisbane, in the context of its sale by the Queensland government.
- 2009-10** **New Zealand Electricity Industry Working Group, New Zealand**
Transmission pricing project
Advice to a working group comprising representatives from lines companies, generators, major users and Transpower on potential improvements to the efficiency of New Zealand's electricity transmission pricing arrangements.
- 2007-09** **GDSE, Macau**
Electricity tariff reform
Advice to the regulator of electricity tariffs in Macau on a series of potential reforms to the structure of electricity supply tariffs.
- 2001-09** **Auckland International Airport Limited, New Zealand**
Aeronautical price regulation
Advice and various expert reports in relation to: the review by the Commerce Commission of the case for introducing price control at Auckland airport; a fundamental review of airport charges implemented in 2007; and the modified provisions of Part IV of the Commerce Act concerning the economic regulation of airports and other infrastructure service providers.
- 2008** **Western Power**
Optimal treatment and application of capital contributions
Advice on the optimal regulatory treatment of capital contributions, taking into account the effect of alternative approaches on tariffs, regulatory asset values, and network connection by new customers.
- 2000-08** **TransGrid**
National electricity market and revenue cap reset
Regulatory advisor to TransGrid on a range of issues arising in the context of the national electricity market (NEM), including: the economics of transmission pricing and investment and its integration with the wholesale energy market, regulatory asset valuation, the cost of capital and TransGrid's 2004 revenue cap reset.

Valuation and contract analysis

- 2016** **SyCip Salazar Hernandez & Gatmaitan/Maynilad Water Services**
Concession contract dispute
Expert reports and testimony in arbitration proceedings concerning the application of the price review clauses in the Manila Water Concession agreements.
- 2015-16** **Clyde and Co/Apache Corporation**
Contract dispute
Expert reports submitted in the context of Supreme Court of Victoria proceedings concerning the appointment of receivers for Burrup Fertilisers Pty Ltd, in relation to the market price of gas available to supply an anhydrous ammonia plant on the Burrup Peninsula.
- 2015-16** **Raja, Darryl & Loh/Serudong Power Sdn Bhd (SPSB)**
Power purchase agreement arbitration
Expert reports submitted in the context of an international arbitration held in Kuala Lumpur concerning the interpretation of price indexation provisions in a power purchase agreement between SPSB and Sabah Electricity Sdn Bhd.
- 2015-16** **Australian Government Solicitor/Commonwealth of Australia**
Native title compensation
Expert reports and testimony before the Federal Court in relation to the native title compensation claim against the Northern Territory for certain acts extinguishing native title in the town of Timber Creek.
- 2014-15** **Minter Ellison/Foxtel Management Pty Ltd**
Assessment of reasonable licence fee
Expert reports prepared in the context of proceedings before the Copyright Tribunal concerning the appropriate valuation of the rights to be paid by Foxtel for the broadcast and communication of commercial recordings licensed by the Phonographic Performance Company of Australia.
- 2014-15** **Rahmat Lim & Partners/Port Dickson Power Berhad, Malaysia**
Power purchase agreement arbitration
Expert reports submitted in the context of an arbitration held in Kuala Lumpur concerning the interpretation of the price indexation provisions in a power purchase contract between Port Dickson Power Berhad and Tenaga Nasional Berhad.
- 2013** **Johnson Winter & Slattery/Origin**
Gas supply agreement price review
Analysis and advice on the implications of certain contract terms for the price of gas, to be determined in a potential arbitration concerning the terms of a substantial long term gas supply agreement.
- 2013** **Herbert Smith Freehills/Santos**
Gas supply agreement price review
Analysis and advice on factors influencing the market price of gas in eastern Australia, to be determined in a potential arbitration concerning the terms of a substantial long term gas supply agreement.

- 2012-13** **Herbert Smith Freehills/North West Shelf Gas**
Gas supply agreement arbitration
Expert reports on the implications of certain contract terms for the price of gas under a substantial long term gas supply agreement.
- 2012-13** **Allens/BHP Billiton-Esso**
Gas supply agreement arbitration
Analysis, advice and expert report on the implications of certain contract terms for the price of gas under a substantial long term gas supply agreement.
- 2012** **King & Wood Mallesons/Ausgrid**
Power purchase agreement arbitration
Expert report prepared and filed in an arbitration on the in relation to the effect of the government's newly introduced carbon pricing mechanism on the price to be paid under a long term power purchase and hedge agreement between an electricity generator and retailer.
- 2011** **Kelly & Co/Santos**
Wharfage dues agreement arbitration
Expert report and testimony in arbitration proceedings to determine the 'normal wharfage dues' to be paid for use of the port facility at Port Bonython for the transfer of petroleum products to tanker ships from a processing terminal in South Australia.
- 2010** **Barclays Capital/Confidential client**
Due diligence, Alinta Energy
Advice on the key industry related risks and issues facing Alinta Energy's gas and electricity assets during the due diligence process associated with its recapitalisation and sale.
- 2009** **Freehills/Santos**
Gas supply agreement price review
Analysis and advice on factors influencing the market price of gas in eastern Australia, to be determined in a potential arbitration concerning the terms of a substantial long term gas supply agreement.
- 2008-09** **Clayton Utz/Origin Energy**
Gas supply agreement arbitration
Expert reports and testimony in an arbitration concerning the market price of gas, which was determined and applied in a substantial long term gas supply agreement.
- 2008-09** **Minter Ellison/Confidential client**
Treatment of past capital contributions
Expert report and evidence given in arbitration proceedings on the extent to which a discount should apply under a long term water supply contract, in recognition of a capital contribution made at the outset of the agreement.
- 2008** **Freehills/Tenix Toll**
Logistics contract arbitration
Advice on the appropriate methodology for adjusting prices under a long term logistics contract in light of changing fuel costs.
- 2008** **BG plc**
Market analysis
Advise on economic aspects of the operation of the east Australian wholesale gas market in the context of the potential development of coal seam gas for use in LNG production and export.

- 2008** **Gilbert + Tobin/Waste Services NSW**
Damages estimation
Damages assessment in the context of a Federal Court finding of misleading and deceptive conduct in relation to the extent of environmental compliance in the provision of waste services.

Securities and finance

- 2018** **William Roberts/Representative proceeding**
Misleading and damaging conduct
Preliminary analysis on the extent of liability and potential damages arising from a shareholder class action alleging breach of disclosure obligations.
- 2017-18** **Australian Pipelines and Gas Association**
Allowed rate of return
Advice in relation to the Rate of return guideline review being undertaken by the Australian Energy Regulator, including participation in the AER's concurrent expert evidence session one.
- 2017** **Slater and Gordon/Gasmere Ltd**
Share portfolio valuation
Expert report prepared in relation to Supreme Court of Victoria proceedings brought against Shaw and Partners concerning the appropriate valuation of a share portfolio, the subject of a damages claim following the collapse of Opus Prime.
- 2017** **Portfolio Law/Representative proceeding**
Misleading and deceptive conduct
Expert report in representative proceedings in the Supreme Court of Victoria concerning the effect of certain disclosures on the price of ASX listed securities in Myer Ltd.
- 2016-17** **Allens/QBE**
Shareholder class action
Advice and analysis on the extent of liability and potential damages arising from a shareholder class action alleging breach of QBE's ASX disclosure obligations.
- 2016** **Elliot Legal/Representative proceeding**
Misleading and deceptive conduct
Expert reports in representative proceedings in the Supreme Court of Victoria concerning the effect of certain disclosures on the price of ASX listed securities in Downer EDI Ltd.
- 2015-16** **Maurice Blackburn/Representative proceeding**
Misleading and deceptive conduct
Expert reports submitted to the Federal Court assessing the effect of alleged misstatements in relation to the annual accounts and associated going concern assumption in relation to Tamaya Resources Ltd (in liquidation).
- 2013-15** **Sydney Water Corporation**
Cost of capital estimation
Prepare three expert reports for submission to the Independent Pricing and Regulatory Tribunal (IPART) on the framework for determining the weighted average cost of capital for infrastructure service providers, and on estimation of an appropriate equity beta.

- 2012-15** **HWL Ebsworth/Confidential client**
Insider trading
Expert advice and analysis in the context of criminal proceedings alleging insider trading in certain ASX-listed securities (2012-13). Subsequent expert report filed in Supreme Court of Tasmania estimating price effects of inside information in context of 'proceeds of crime' proceedings.
- 2014** **Wotton Kearney/Genesys Wealth Advisors**
Misleading and deceptive conduct
Expert report submitted to the Supreme Court of Victoria assessing the accuracy of product disclosure statements and other information in relation to two fixed interest investment funds offered by Basis Capital.
- 2014** **TransGrid**
Cost of capital estimation
Preparation of an expert report for submission to the Australian Energy Regulator (AER) estimating the weighted average cost of capital for electricity network service providers.
- 2011-13** **Slater & Gordon/Modtech**
Shareholder damages assessment
Expert reports and testimony in representative proceedings before the Federal Court alleging misstatement and/or breach of the continuous disclosure obligations of the ASX-listed entity, GPT.
- 2011-12** **Freehills/National Australia Bank**
Shareholder damages assessment
Expert advice in connection with representative proceedings before the Federal Court alleging misstatement and/or breach of the continuous disclosure obligations of an ASX-listed entity.
- 2012** **Johnson Winter & Slattery/Victorian gas distributors**
Cost of equity estimation
Expert report submitted to the AER on the appropriate methodology for estimating the cost of equity under the capital asset pricing model.
- 2009-13** **Minter Ellison/Confidential client**
Misleading and deceptive conduct
Expert report and related advice in light of investor claims and pending litigation following the freezing of withdrawals from a fixed interest investment trust that primarily held US-denominated collateralised debt obligations (CDOs), as offered by a major Australian financial institution. Analysis undertaken includes the extent to which the investment risks were adequately described in the fund documents, and the quantum of any potential damages arising.
- 2011** **Barringer Leather/Confidential client**
Market manipulation
Expert report prepared in the context of criminal proceedings brought in the Supreme Court of NSW alleging market manipulation in the trading of certain ASX-listed securities.
- 2010-11** **Wotton Kearney/Confidential client**
Misleading and deceptive conduct
Expert report and analysis in light of investor claims and pending litigation following the freezing of withdrawals from two fixed interest investment trusts that primarily held US-denominated collateralised debt obligations (CDOs).

- 2010-11** **Maurice Blackburn/Confidential client**
Shareholder damages assessment
Analysis and advice in connection with representative proceedings before the Federal Court alleging misstatement and/or breach of the continuous disclosure obligations of an ASX-listed entity.
- 2010-11** **Mallesons/ActewAGL**
Judicial review of rate of return determination
Expert report and testimony in Federal Court proceedings seeking judicial review of a decision by the Australian Energy Regulator of its determination of the risk free rate of interest in its price setting determination for electricity distribution services.
- 2009-11** **William Roberts/Clime Capital**
Shareholder damages assessment
Expert reports submitted in representative proceedings before the Federal Court alleging misstatement and/or breach of the continuous disclosure obligations of ASX-listed entity, Credit Corp.
- 2009** **Jemena Limited**
Cost of equity estimation
Co-authored an expert report on the application of a domestic Fama-French three-factor model to estimate the cost of equity for regulated gas distribution businesses.
- 2008-09** **Clayton Utz/Fortescue Metals Group**
Materiality of share price response
Expert report and testimony before the Federal Court addressing alleged breaches of the ASX continuous disclosure obligations and the associated effect on the price of FMG securities arising from statements made by it in 2004.
- 2008-09** **Energy Trade Associations – APIA, ENA and Grid Australia**
Value of tax imputation credits
Preparation of expert report on the value to investors in Australian equities of tax imputation credits, for submission to the Australian Energy Regulator.
- 2008-09** **Freehills/Centro Properties**
Shareholder damages assessment
Assistance in the estimation of potential damages arising in representative proceedings concerning accounting misstatements and/or breach of the continuous disclosure obligations of an ASX-listed entity.
- 2008** **Slater & Gordon/Boyd**
Shareholder damages assessment
Expert report for submission to a mediation on the damages arising in representative proceedings before the Federal Court alleging accounting misstatements and/or breach of the continuous disclosure obligations of EDI Downer.
- 2007-08** **Maurice Blackburn/Watson**
Shareholder damages assessment
Advice in relation to damages arising in representative proceedings before the Federal Court alleging accounting misstatements and/or breach of the continuous disclosure obligation by the ASX-listed entity, AWB Limited.

Institutional and regulatory reform

- 2008-11** **Department of Sustainability and Environment**
Management of bulk water supply
Advice on the concept and merits of establishing market based arrangements to guide both the day-to-day operation of the bulk water supply system in metropolitan Melbourne, as well as the trading of rights to water between the metropolitan water supply system and those throughout the state of Victoria.
- 2008** **Department of Treasury and Finance**
Access regime for water networks
Report on the principles that should be applied in developing a state-wide third party access regime for water supply networks.

Sworn testimony, transcribed evidence²

- 2018** **Expert evidence before the Board of the Australian Energy Regulator, on behalf of the South Australian public lighting customers, in arbitration proceedings concerning public lighting charges**
Expert reports, transcribed evidence, Melbourne, 7 May 2018
- Expert evidence before the Board of the Australian Energy Regulator, on behalf of the Australian Pipelines and Gas Association, in the Review of Rate of Return Guidelines, Concurrent expert evidence session one**
Joint expert report, transcribed evidence, Sydney, 15 March 2018
- Expert evidence before the Federal Court on behalf of Changshu Longte Grinding Ball Co Ltd, in the matter of Changshu Longte v Anti-Dumping Review Panel and others.**
Expert reports, sworn evidence, Sydney, 1 February 2018
- 2017** **Expert evidence before the Competition Tribunal on behalf of CrownBet, in the application by Tabcorp for authorisation to acquire Tatts**
Expert reports, sworn evidence, Melbourne, 30 May–1 June 2017
- 2016** **Expert evidence before the Federal Court on behalf of Generic Health, in the matter of Bayer Pharma Aktiengesellschaft v Generic Health Pty Ltd**
Expert reports, sworn evidence, Sydney, 14-15 December 2016
- Testimony before an UNCITRAL arbitral tribunal the on behalf of Maynilad Water Service Inc (MWSI), in the matter of MWSI v Republic of the Philippines**
Report, sworn evidence, Singapore, 6 December 2016
- Expert evidence on behalf of Powerco, at the Commerce Commission's Conference on the Cost of Capital matters**
Transcribed evidence, public hearings, Wellington, 7 September 2016
- Expert evidence before the Federal Court on behalf of plaintiffs, in the matter of HFPS v Tamaya**
Expert reports, sworn evidence, Sydney, 13 May 2016

² Past ten years only.

Expert evidence before an arbitral tribunal on behalf of Serudong Power Sdn Bhd (SPSB), in the matter of SPSB v Sabah Electricity Sdn Bhd (SESB)
Expert reports, sworn evidence, Kuala Lumpur, 27-28 April 2016

Expert evidence before the Federal Court on behalf of the Commonwealth of Australia, in the matter of Griffiths v Northern Territory
Expert reports, sworn evidence, Darwin, 24-25 February 2016

2015 **Expert evidence before an arbitral tribunal on behalf of Port Dickson Power Berhad (PDP), in the matter of PDP v Tenaga Nasional Berhad (TNB)**
Expert reports, sworn evidence, Kuala Lumpur, 28 January 2015

2014 **Expert evidence before a UNCITRAL arbitral tribunal on behalf of Manila Water Corporation Inc (MWCI) in the matter of MWCI v Metropolitan Waterworks and Sewerage System (MWSS)**
Expert reports, sworn evidence, Sydney (by videolink to Manila), 31 August 2014

Expert evidence before the Australian Competition Tribunal on behalf of the ACCC, in the matter of AGL Energy v ACCC
Expert reports, sworn evidence, Sydney, 10-11 June 2014

2013 **Expert evidence before the Supreme Court of Victoria on behalf of Maddingley Brown Coal in the matter of Maddingley Brown Coal v Environment Protection Agency of Victoria**
Expert reports, sworn evidence, Melbourne, 12 August 2013

Expert evidence before the Federal Court on behalf of Modtech in the matter of Modtech v GPT Management and Others
Expert reports, sworn evidence, Melbourne, 27 March 2013

2012 **Expert evidence before the Supreme Court of Queensland on behalf of Origin Energy, in the matter of Origin Energy Electricity Ltd and Others v Queensland Competition Authority and Others**
Expert reports, sworn evidence, Brisbane, 3 December 2012

2011 **Expert evidence before the Federal Court on behalf of the Australian Turf Club and Australian Racing Board, in the matter of Bruce McHugh v ATC and Others**
Expert report, sworn evidence, Sydney, 12 and 14 October 2011

Expert evidence in arbitration proceedings before J von Doussa, QC, on behalf of Santos in the matter of Santos, and Others v Government of South Australia
Expert report, sworn evidence, Adelaide, 13-15 September 2011

Expert evidence before a panel of arbitrators on behalf of UNELCO, in the matter of UNELCO v Government of Vanuatu
Expert report, sworn evidence, Melbourne, 23 March and 21 April 2011

Expert evidence before the Federal Court on behalf of ActewAGL, in the matter of ActewAGL v Australian Energy Regulator
Expert report, sworn evidence, Sydney, 17 March 2011

Deposition Testimony in Re Payment Card Interchange and Merchant Discount Litigation, in the United States District Court for the Eastern District of New York

Deposition testimony, District of Columbia, 18 January 2011

2010

Expert evidence before the Federal Court in behalf of the Australia Competition and Consumer Commission, in the matter of ACCC v Cement Australia and others

Expert report, sworn evidence, Brisbane, 19-21 October 2010

Expert evidence on behalf of Orion NZ, at the Commerce Commission's Conference on its Input Methodologies Emerging View Paper

Transcribed evidence, public hearings, Wellington, 24 February 2010

Deposition Testimony in Re Payment Card Interchange and Merchant Discount Antitrust Litigation, in the United States District Court for the Eastern District of New York

Deposition Testimony, District of Columbia, 18 February 2010

2009

Expert evidence before the Australian Competition Tribunal on behalf of Fortescue Metals Group Ltd, in the matter of Application for Review of Decision in Relation to Declaration of Services Provided by the Robe, Hamersley, Mt Newman and Goldsworthy Railways

Expert report, sworn evidence, Melbourne, 12-13 October and 5-6 November 2009

Expert evidence on behalf of Orion NZ, at the Commerce Commission's Conference on its Input Methodologies Discussion Paper

Transcribed evidence, public hearings, Wellington, 16 September 2009

Expert evidence before the Federal Court on behalf of Fortescue Metals Group Ltd, in the matter of ASIC v Fortescue Metals Group and Andrew Forrest

Expert report, sworn evidence, Perth, 29 April–1 May 2009

Expert report and evidence in arbitration proceedings before Hon Michael McHugh, AC QC, and Roger Gyles, QC, between Origin Energy and AGL

Expert report, sworn evidence, Sydney, 19-24 March 2009

2008

Expert evidence on behalf of Orion NZ, at the Commerce Commission's Conference on its Draft Decision on Authorisation for the Control of Natural Gas Pipeline Services

Transcribed evidence, public hearings, Wellington, 21 February 2008

2007

Expert report and evidence in arbitration proceedings before Sir Daryl Dawson between SteriCorp and Stericycle Inc.

Expert report, sworn evidence, 11 July 2007

Speeches and publications³

- 2017**
- IPART 25th Anniversary Conference**
Electricity and Water: Mutual Lessons
Speech, Sydney, 27 October 2017
- GCR 6th Annual Law Leaders Forum**
ACCC v Flight Centre: What was going on?
Speech, Sydney, 6 May 2017
- Association for Data-driven Marketing and Advertising**
Driving Customers to you: Insights from Location Data
Speech, Melbourne, 5 April 2017
- Global Competition Review Conference**
Roadblocks and Solutions in Cross Border Mergers
Panel discussant, Singapore, 2 March 2017
- 2016**
- NSW Planning Assessment Commission**
Economic Effects of Drayton South Mine on Upper Hunter Industry
Presentation to public hearing, Muswellbrook, 16 November 2016
- 2015**
- Electricity Networks Association Regulation Seminar, Brisbane**
Participant in Expert Plenary Panel
Speech, Brisbane, 5 August 2015
- NZ Commerce Commission Input Methodologies Review, Wellington**
'Allocation of Risk' and 'New Technologies'
Panel Discussant, Wellington, 29 July 2015
- Competition Matters Conference, Wellington**
Disruptive Technologies
Chair, Discussion Panel, Wellington, 24 July 2015
- Competition Law Conference**
The Public Interest in Private Enforcement
Speech, Sydney, 30 May 2015
- Singapore Aviation Academy, Singapore**
Private Financing of Airport Infrastructure Expansions
Speech, Singapore, 5 March 2015
- GCR 4th Annual Law Leaders Forum Asia-Pacific**
Differences in using economics in EU and Asia Pacific
Speech, Singapore, 5 March 2015
- AEMC Public Forum**
East Coast Gas Market Review
Speech, Sydney, 25 February 2015
- 2014**
- Competition and Consumer Workshop, Law Council of Australia**
An Economist's Take on Taking Advantage
Paper and Speech, Brisbane, 14 September 2014

³ Past ten years only

Energy Networks 2014

Innovation and Economic Regulation
Speech, Melbourne, 1 May 2014

The Network Industries Quarterly, *Consumer Advocacy in Australian Regulatory Decision Making – ‘Hard Choices Await’*, Vol. 16, No 1, 2014

Ecole Polytechnique Federale de Lausanne, 31 March 2014

GCR 3rd Annual Law Leaders Asia Pacific

Role of Economists in Competition Law Enforcement in Asia-Pacific
Speech, Singapore, 6 March 2014

2013**University of South Australia – Competition and Consumer Workshop**

Empirical test and collusive behaviour
Speech and participation game, Adelaide, 16 November 2013

Energy in WA Conference

Capacity Payments in the WEM – Time to Switch?
Panel Discussion, Perth, 21 August 2013

ACCC/AER Regulatory Conference

Designing Customer Engagement
Speech, Brisbane, 25 July 2013

Victorian Reinsurance Discussion Group

Australian Mining – When Opportunities and Risk Collide
Speech, Melbourne, 1 March 2013

NZ Downstream Conference

Investment and Regulation
Panel Discussion, Auckland, 25 July 2013

2012**Rising Stars Competition Law Workshop**

Expert Evidence in Competition Cases
Speech, Sydney, 24 November 2012

KPPU – Workshop on the Economics of Merger Analysis

Theories and Methods for Measuring the Competitive Effects of Mergers
Speech, Bali, 19-21 November 2012

University of South Australia – Competition and Consumer Workshop

Reflections on Part IIIA of the Competition Act
Speech, Adelaide, 12 October 2012

NZ Downstream Conference

Lines company consolidation – what are the benefits and risks?
Panel discussion, Auckland, 6-7 March 2012

2011**Law Council of Australia - Competition Workshop**

Coordinated effects in merger assessments
Speech, Gold Coast, 27 August 2011

ACCC Regulatory Conference

Adapting Energy Markets to a Low Carbon Future
Speech, Brisbane, 28 July 2011

- 2010** **IPART Efficiency and Competition in Infrastructure**
Improving Performance Incentives for GTE's
Speech, Sydney, 7 May 2010
- Law and Economics Association of New Zealand**
Shareholder Class Actions – A Rising Trend in Australia
Speeches, Auckland and Wellington, 15-16 November 2010
- 2009** **ACCC Regulatory Conference**
Substitutes and Complements for Traditional Regulation
Speech, Gold Coast, 30 July 2009
- Minter Ellison Shareholder Class Action Seminar**
Investor Class Actions – Economic Evidence
Speech, Sydney, 18 March 2009
- Competition Law and Regulation Conference**
Commerce Amendment Act: Impact on Electricity Lines Businesses
Speech, Wellington, 27 February 2009
- 2008** **Non-Executive Directors**
Shareholder Class Actions in Australia
Speech, Sydney, 28 July 2008
- Mergers & Acquisitions: Strategies 2008**
Competition Law Implications for Mergers & Acquisitions
Speech, Sydney, 27 May 2008
- Institute for Study of Competition and Regulation**
Role of Merits Review under Part 4 and Part 4A of the Commerce Act
Speech, Wellington, 20 February 2008
- 2007** **Law Council of Australia - Trade Practices Workshop**
Hypothetical breach of s46
Economic expert in mock trial, 20 October 2007
- Assessing the Merits of Early Termination Fees, *Economics of Antitrust: Complex Issues in a Dynamic Economy*, Wu, Lawrence (Ed)**
NERA Economic Consulting 2007
- Assessing the Impact of Competition Policy Reforms on Infrastructure Performance**
ACCC Regulation Conference
Speech, Gold Coast, 27 July 2007

Daniel Young

Senior Economist

HoustonKemp
Level 40, 161 Castlereagh St
Sydney NSW 2000
Tel: +61 2 8880 4826
Mobile: +61 405 170 291
E-mail: Daniel.Young@houstonkemp.com
Web: HoustonKemp.com



Overview

Daniel has thirteen years' experience in solving economic problems arising in regulatory, policy, finance and competition matters. He has a particular strength in the use of mathematical and statistical tools to inform his insights.

Daniel has advised corporations, regulators and governments across a range of industry sectors including energy, communications, water and transport. Daniel brings a deep understanding of regulatory frameworks, and particularly the application of building block models, approaches to asset valuation and tariff design.

Daniel has extensive experience advising on telecommunications matters in Australia, New Zealand and beyond. This includes the design and review of cost models for fixed line and mobile networks, advice on regulatory policy, analysis of competition issues and the calculation of damages. Daniel has a particular interest in the development of regulatory frameworks to address issues raised by the increasing penetration of fibre networks.

In the finance area, Daniel has played a significant role in advancing the regulatory debate on rate of return issues. He has advised businesses and regulators on these issues across a wide range of sectors and jurisdictions. His analysis has underpinned a series of successful Competition Tribunal appeals on the return on debt, and includes contributions to understanding the application of the capital asset pricing model in Australia and advice on using financial market data to estimate the current cost of equity.

On competition matters Daniel has assisted clients to improve the understanding complex problems through mathematical and statistical modelling. His experience includes advice on the likely effects of proposed mergers and acquisitions in relation to electricity wholesale, mining, media, petrol retailing, pharmaceuticals and metering. Daniel has advised businesses in a range of commercial litigation and arbitrations, including in relation to the renegotiation of major gas supply contracts and in the calculation of damages in international arbitrations.

Prior to joining HoustonKemp, Daniel was an Associate Director at the Competition Economists Group and an Analyst at NERA Economic Consulting. Daniel holds a Master of Commerce with first class honours majoring in Economics from the University of Auckland. He also holds a Bachelor of Commerce majoring in Economics and a Bachelor of Science majoring in Operations Research from the University of Auckland.

Qualifications

1999-2004 **University of Auckland**
Master of Commerce in Economics
(First Class Honours)
Bachelor of Commerce and Science in Economics and Operations Research

Prizes and Scholarships

2004 Senior Scholarship in Statistics

2004 Senior Prize in Economics

2004 University of Auckland Masters Scholarship

2003 University of Auckland Department of Economics Scholarship

Career Details

2015- **HoustonKemp Economists**
Senior Economist, Sydney, Australia

2008-2015 **CEG Asia Pacific**
Associate Director, Sydney, Australia

2005-2007 **NERA Economic Consulting**
Analyst, Sydney, Australia

Project Experience

Competition Analysis

- 2017-18** **DLA Piper/Dalrymple Bay Coal Terminal Management, Australia**
Application of declaration criteria
Provided advice to DLA Piper assessing the prospects of DBCT satisfying access criteria. Our advice included detailed modelling and analysis establishing whether the service provided is a natural monopoly and whether declaration would promote competition in dependent markets.
- 2017-18** **Gilbert + Tobin, Australia**
Advice on the requirements of Part 23 of the NGR
Prepared advice for a confidential gas pipeline operator advising on the nature and outcomes of workably competitive markets, reflecting the objective of the new rules, and the implications of this for pipeline revenues and prices determined in arbitration under these rules.
- 2017** **Minter Ellison/Crownet Australia**
Proposed acquisition of Tatts by Tabcorp
Contributed to the preparation of an expert report, prepared for Minter Ellison on behalf of Crownbet, examining the effects of the proposed acquisition by Tabcorp of Tatts. The report was submitted to the Australian Competition Tribunal.
- 2016-17** **Confidential Client, Australia**
Proposed merger
Prepared a report setting out the likely effect of a proposed merger in the gas pipeline sector, and provided a framework for examining the competitive effect of mergers to be used for future transactions.
- 2016** **APA Group, Australia**
Proposed auction for contracted but un-nominated gas pipeline capacity
Prepared advice for APA in relation to the AEMC's proposals to introduce a new auction for all contracted but un-nominated capacity in eastern Australia. The advice included an assessment of the economic propositions underpinning the AEMC's proposals.
- 2015** **Johnson Winter & Slattery/Confidential Client**
Substantial lessening of competition
Contributed to a report on whether certain business conduct would substantially lessen competition in the context of a potential investigation or prosecution by the ACCC.
- 2014** **Vector, New Zealand**
Electricity smart metering merger
Advised Vector on the competitive effects of its successful bid to acquire Meridian Energy's electricity smart metering provider, Arc Innovations. This required a high degree of familiarity with the market framework and the competitive dynamics, including the "market-driven" nature of the deployments to date.
- 2014** **Vector, New Zealand**
Competition in gas metering
Provided advice to Vector as part of a preliminary inquiry by the Commerce Commission into whether to regulate gas metering services.

- 2014** **Commerce Commission, New Zealand**
Mobile spectrum auction purchase
Provided modelling of the costs involved in a number of alternative potential ownership configurations of mobile spectrum in New Zealand in advice to the New Zealand Commerce Commission.
- 2013** **Australian Competition and Consumer Commission, Australia**
Advice on proposed petrol station acquisitions
Advised the ACCC on the competitive analysis provided in support of a proposed acquisition of retail petrol stations. Our advice included new econometric analysis of the effects of the proposed acquisition on price formation and leadership in the relevant markets.
- 2012** **Australian Energy Market Commission, Australia**
Market power in generation markets
Assisted in preparing a report for the AEMC on the existence of market power and barriers to entry in the markets for electricity generation within the NEM
- 2011** **Australian Competition and Consumer Commission, Australia**
Advice on proposed media acquisitions
Assisted the ACCC in developing its analysis about the competitive effects of two proposed acquisitions in the media sector
- 2010** **Gilbert + Tobin, Australia**
BHPB proposed joint venture with Rio Tinto
Assisted in the preparation of expert statements on the likely impact of the joint venture of the Pilbara iron ore assets of BHP Billiton and Rio Tinto. The legal and economic teams involved were awarded ‘Deal of the year – Asia Pacific’ by Global Competition Review.
- 2009** **Van Bael & Bellis, EU**
Proposed transaction between GSK and Astra Zeneca
Provided market modelling of the effect of a concentration between Glaxo Smith Kline and Astra Zeneca in relation to certain common pharmaceutical product lines.
- 2009** **Gilbert + Tobin, Australia**
Analysis of proposed transaction in relation to small industrial packaging
Provided expert statements and empirical analysis on the substitutability between different types of small industrial packaging.
- 2008** **Gilbert + Tobin, Australia**
BHPB proposed merger with Rio Tinto
Empirical analysis and assisted in the preparation of an expert report on the competitive effect on iron ore prices of the proposed merger between BHP Billiton and Rio Tinto.
- 2006** **Australian Competition and Consumer Commission, Australia**
Proposed merger in electricity generation
Assessed the likely competitive effect of a proposed acquisition by International Power of NRG Flinder’s electricity generation assets in Victoria and South Australia.
- 2006** **Johnson, Winter and Slattery, Australia**
Joint Services Agreement authorisation
Assisted in the finalisation of an expert report assessing the net public benefits of authorising Qantas’ JSA with British Airways in Singapore.

- 2006** **Freehills, Australia**
Access to Foxtel's set-top box
Provided drafting and analytical assistance for an expert report examining the effect of Foxtel's proposed special access undertaking on competition in the market for subscription television services
- 2005** **Economic Development and Labour Bureau, Hong Kong**
Investigation of competition in the retail auto-fuel sector
Conducted benchmarking of retailing margins on auto-fuel as part of a team examining the competitiveness of the sector in Hong Kong.
- 2005** **Australian Competition and Consumer Commission, Australia**
Proposed merger in electricity generation
Developed a modelling framework for the ACCC analysing the effect on the proposed acquisition of Singapore Power's generation assets by China Light & Power and advised on potential divestitures
- 2005** **Phillips Fox, Australia**
Alleged predatory pricing in rail carriage
Assisted in the preparation of advice to Austrac in relation to alleged breaches of section 46 of the Trade Practices Act

Regulatory Analysis and Cost Modelling

- 2017-18** **Gilbert + Tobin, Australia**
Advice on implementing the requirements of Part 23 of the NGR
Prepared advice for a confidential gas pipeline operator setting out the implications of new rules for information disclosure and binding arbitration. We advised on the outcomes of workably competitive markets, reflecting the objective of the new rules, and applied asset valuation methods using the recovered capital method prescribed by the new rules
- 2017-18** **DLA Piper, Australia**
Estimating a recovered capital method asset valuation
Advised a confidential gas pipeline operator on the calculation of a recovered capital method asset valuation complying with section 569(4)(b) of the NGR, including the appropriate approach to estimating a commercial rate of return over time.
- 2017-18** **King & Wood Mallesons, Australia**
Outcomes consistent with a workably competitive market
Prepared an expert report for a confidential gas pipeline operator to be submitted as part an arbitration under Part 23 of the NGR. The report addressed how the objective of Part 23, to reflect the outcomes of a workably competitive market, should be applied by the arbitrator in determining the terms and conditions of access.
- 2017** **Bell Gully/Auckland Transport, New Zealand**
Estimating the efficient costs of providing bus services
Prepared expert advice and testimony in the context of arbitration of the contract price for a bus route in Auckland. The advice implemented data envelopment analysis to assess the efficient rate of costs for providing the service.

- 2017** **Chorus, New Zealand**
Addressing the risks associated with the provision of fibre services
Prepared advice for Chorus examining whether the proposed regulatory frameworks for copper and fibre services address the risks faced in providing services. Our advice suggested corresponding regulatory approaches that could manage these risks.
- 2016-17** **Trustpower, New Zealand**
Electricity Authority's proposed changes to transmission pricing
Prepared two expert report reviewing the Electricity Authority's policy proposals and the cost-benefit analysis supporting them. The Authority proposed to introduce revised arrangements for transmission pricing that would set charges based on the benefits that accrue to network customers.
- 2016** **Port Authority of New South Wales, Australia**
Review of maximum fees and site occupation charges in Sydney Harbour
Assisted the Port Authority in preparing its submissions to IPART's review of maximum fees and site occupation charges for cruise ships in Sydney Harbour. This included assistance with preparing the submission and advice on building block modelling and the cost of capital.
- 2015-2016** **New South Wales Government, Australia**
Review of regulatory modelling
Conducted a peer review of regulatory modelling as part of the partial leases of Ausgrid and Endeavour Energy.
- 2015** **AEMC, Australia**
Regulatory treatment of energy storage
Advised the AEMC in relation to economic principles underpinning the regulatory treatment of both network-level energy storage and behind-the-meter storage.
- 2015** **Optus, Australia**
Benchmarking prices for the domestic transmission capacity service
Advised Optus on the process of benchmarking prices for regulated DTCS on the basis of prices for services that were deemed competitive. The advice included application of stochastic frontier analysis to the data.
- 2010-15** **Australian Amalgamated Terminals, Australia**
Regulatory model of car terminals
Prepared and presented a model of Australian Amalgamated Terminal's costs to estimate efficient cost-recovery prices as part of a regulatory process overseen by a price expert. Regularly maintaining and updating this model for this purpose.
- 2014-15** **Everything Everywhere, United Kingdom**
Estimation of annual licence fees
Assisted Everything Everywhere in relation to Ofcom's review of the annual licence fees charged for 900 MHz and 1800 MHz spectrum.
- 2014** **Australian Energy Market Commission, Australia**
Survey of regulations on bidding in good faith in international jurisdictions
Prepared an expert report for the AEMC surveying the regulations on bidding, and the ability to change bids, in a range of international electricity markets.

- 2013-15** **Chorus, New Zealand**
Modelling the UCLL and UBA prices
Assisted in the preparation of multiple expert reports for Chorus on issues relevant to estimating the TSLRIC costs of providing UCLL and UBA, including in relation to demand, depreciation and price trends.
- 2014** **Australian Broadcasting Commission, Australia**
Estimate of cost-based charge for high frequency transmission
Prepared a report for the ABC demonstrating the likely level of cost-based charges for high frequency transmission under alternative asset valuation approaches.
- 2014** **Everything Everywhere, United Kingdom**
Mobile termination
Reviewed Ofcom's model estimating the costs of mobile termination.
- 2014** **Orion, New Zealand**
WACC percentile
Provided advice to Orion as part of the Commerce Commission's review of the use of the 75th percentile of the WACC range.
- 2014** **SA Power Networks, Australia**
Materials cost escalation factors
Assisted SA Power Networks by estimating materials cost escalation factors for its operating and capital expenditure program. The report also included analysis of the performance of the modelling methodology over time.
- 2013** **Herbert Geer, Australia**
Telecommunications fixed line pricing methodology
Assessed the ACCC's methodology for setting prices for fixed line services. Assisting Herbert Geer (on behalf of iiNet) in formulating questions for the ACCC and Telstra so as to assess the size of potential errors.
- 2013** **Vector, New Zealand**
Default price-quality paths for electricity distribution and gas pipeline businesses
Advised Vector in relation to the Commerce Commission's draft decision on the application of DPPs to electricity and gas pipeline businesses. The focus of the review was on the Commission's application of econometrics in benchmarking the level of operating expenditure for the next regulatory period.
- 2012-13** **Chorus, New Zealand**
Benchmarking the UBA price
Advised Chorus New Zealand on the Commerce Commission's proposed method of determining the UBA price in New Zealand by benchmarking against prices in other jurisdictions.
- 2012-13** **NBN Co, Australia**
Special access undertaking
Assisted NBN Co in assessing aspects of its proposed SAU, including its proposed regulatory model and restrictions on its pricing behaviour. Subsequently advising NBN Co on the ACCC's draft decision in relation to these aspects and others of its undertaking.

- 2012-14** **New South Wales, ACT and Tasmanian electricity network businesses, Australia**
Materials and labour cost escalation factors
Undertook modelling of materials and labour cost escalation factors for the businesses' regulatory proposals. Subsequently providing updates and responding to issues raised by the AER in its response to proposals.
- 2012-13** **Virgin Australia, Australia**
Cost modelling of landing charges
Provided Virgin advice about modelling of landing charges proposed by a number of Australian airports.
- 2012** **T-Mobile, Netherlands**
Mobile termination review
Provided T-Mobile with preliminary advice on OPTA's modelling of mobile termination charges.
- 2012** **ElectraNet, Australia**
Materials cost escalation factors
Estimated materials cost escalation factors for ElectraNet and providing it advice on the use of labour cost escalation factors.
- 2012** **Australian Broadcasting Commission, Australia**
Building block model review
Assisted the ABC by peer reviewing a building block model that it had commissioned. The review focused on the internal consistency of the model, particularly in relation to cashflow timing and the cost of capital.
- 2012** **Everything Everywhere, United Kingdom**
Unbundled local loop appeal
Co-authored an expert witness statement assessing the basis of Ofcom's forecasting of fixed line volumes.
- 2012** **Vector, New Zealand**
Default price quality paths
Analysed the Commerce Commission's draft decisions on its starting price adjustments for electricity and gas network businesses. Preparing two expert reports for Vector responding to these decisions.
- 2011-12** **Western Power, Australia**
Materials and labour cost escalation factors
Prepared two expert reports setting out the basis for and estimating cost escalation factors for Western Power.
- 2011-12** **Chorus, New Zealand**
Benchmarking the UCLL price
Advised Chorus New Zealand on the Commerce Commission's proposed method of determining the UCLL price in New Zealand by benchmarking against prices in other jurisdictions. Testified as an expert on behalf of Chorus at the Commission's conference.

- 2011-12** **TransGrid, Australia**
Cost escalation factors
Provided cost escalation factors to TransGrid as part of its internal budgeting processes.
- 2011-12** **Everything Everywhere, United Kingdom**
Mobile termination modelling and advice
Advised Everything Everywhere UK on its submissions and appeal in respect of Ofcom's decision on mobile termination rates
- 2011** **Chorus, New Zealand**
International benchmarking of sub-national density characteristics
Conducted detailed research of sub-national density characteristics across a range of jurisdictions with potentially comparable UCLL prices.
- 2010-11** **Airservices Australia, Australia**
Pricing of air traffic control services
Assisted Airservices Australia in the development of its regulatory proposal to the ACCC
- 2010-11** **Integral Energy, Australia**
Assessment of credit metrics
Provided an internal report for Integral in relation to whether its existing dividend policy was consistent with maintenance of a credit rating.
- 2010-11** **Digicel, Tahiti**
Mobile cost modelling
Developed a mobile cost model for Digicel Tahiti.
- 2009** **Digicel, Vanuatu and Tonga**
Benchmarking mobile termination charges
Estimated benchmarks for mobile termination prices using econometric analysis on overseas benchmark for Digicel in Vanuatu and Tonga
- 2010-11** **Digicel, Vanuatu and Tonga**
Benchmarking mobile termination charges
Estimated benchmarks for mobile termination prices using econometric analysis on overseas benchmark for Digicel in Vanuatu and Tonga
- 2010** **Digicel, Papua New Guinea**
Mobile cost modelling
Developed a mobile cost model for Digicel PNG.
- 2010** **Integral Energy, Australia**
Indexing ODRC valuation
Estimated of a current ODRC value for Integral Energy's assets on the basis of roll-forward and escalation of previous bottom-up estimate
- 2010** **Optus, Australia**
Fixed line pricing principles
Advised Optus on appropriate principles for fixed line pricing and the formation of a roll-forward regulatory regime. Identifying and responding to a critical error in the proposed pricing principles

- 2009** **Digicel, Samoa**
Mobile cost modelling
Developed a mobile cost model for Digicel Samoa in the context of regulatory proceedings on mobile termination rates. Assisting Digicel in responding to the regulator's model and presenting findings in Apia.
- 2009** **Confidential, Australia**
Telecommunications cost modelling
Produced a high level cost assessment of an Australian telecommunications network on behalf of a confidential client.
- 2009** **Jemena Gas Networks, Australia**
Material and labour escalation factors
Estimated cost escalation factors, including carbon effects, for JGN's regulatory access arrangement.
- 2009** **Competitive Carriers Coalition, Australia**
Steiner improvements to minimum spanning trees
Estimated the potential cost improvements that could be achieved within the ACCC's fixed line cost model by the use of Steiner trees rather than minimum spanning trees on behalf of the Competition Carriers' Coalition
- 2008** **Optus, Australia**
Replacement cost estimate for a FTTP
Undertook adjustments to the ACCC's fixed line cost model to estimate the cost of a fibre to the premise roll out in Australia for Optus
- 2008-09** **New South Wales and Tasmanian electricity network businesses, Australia**
Material and labour escalation factors
Estimated cost escalation factors for the businesses initial and revised regulatory proposals.
- 2008-09** **ETSA, Australia**
Prices for public lighting
Provided ETSA with advice in relation to a dispute with ESCOSA over its proposed prices for public lighting.
- 2008** **Confidential, Australia**
Telecommunications cost modelling
Developed a network model for an Australian telecommunications company, estimating the cost associated with a regulated service.
- 2008** **ElectraNet, Australia**
Material and labour escalation factors
Estimated cost escalation factors for ElectraNet's revised regulatory proposal.
- 2007** **MultiNet, Australia**
Efficient margins on outsourced operating expenditure
Assisted in the preparation of an expert report on the prudence of MultiNet's outsourcing contracts in the context of the National Gas Code

- 2006-07** **GDSE, Macau**
Efficient tariff design
Advised the electricity regulator in Macau about efficient tariff reform using modelling of the short run and long run marginal cost of supply in Macau
- 2006** **Telecom New Zealand, New Zealand**
Universal service obligation replacement cost modelling
Assisted in the preparation of expert reports for Telecom New Zealand on the correct methodology for calculating the cost of providing the TSO (universal service obligation) using new entrant costs
- 2005** **Integral Energy, Australia**
Estimating long run marginal cost
Advised Integral Energy on its LRMC of meeting growing network demand and how to reflect this in efficient tariff design (including design of critical peak pricing)

Cost of Capital and Finance

- 2016** **Powerco, New Zealand**
Review of asset beta and debt raising costs
Prepared expert reports, submitted to the Commerce Commission, assessing whether an asset beta uplift is required for gas distribution businesses relative to electricity network businesses. Further advised on efficient debt raising costs, including estimating the new issue premium and the costs of meeting ratings agencies requirements for debt raising practices.
- 2016** **New South Wales Government, Australia**
Implications of cost of capital litigation
Drafted sections of vendor due diligence document summarising recent developments in the regulatory cost of capital. In particular, the drafting reviewed the implications of the Tribunal's decisions on the return on equity, return on debt and the value of imputation credits
- 2016** **Perth Airport, Australia**
Estimating the weighted average cost of capital
Prepared an expert report estimating the cost of equity, cost of debt and the weighted average cost of capital for Perth Airport in the context of its commercial negotiations with airlines.
- 2015-16** **Australian Government Solicitor / Commonwealth of Australia**
Native title compensation claim
In the context of a claim for compensation for extinguished native title in the Federal Court of Australia, contributed to the calculation of the compensation for the time value of money under a number of scenarios.
- 2015** **Tuas Power Generation, Singapore**
Changes to forward sales contract scheme
Prepared an expert report for submission to the EMA advising on potential changes to the forward sales contract scheme, which underpins the electricity futures market in Singapore.

- 2015** **Jemena Gas Networks and the Victorian electricity distribution businesses, Australia**
Cost of debt
Prepared an expert report providing analysis of the AER's draft determination and recommending approaches for estimating the cost of debt.
- 2014-15** **New South Wales and ACT electricity distribution businesses, Australia**
Advice on the weighted average cost of capital
Preparing expert reports responding to the AER's draft decision and undertaking new analysis of indications of the cost of equity and the cost of debt for regulated electricity network businesses.
- 2014** **ATCO, Australia**
Estimating the debt risk premium
Assisted in the preparation of an expert report for ATCO advising of issues in the estimation of the debt risk premium. Further assistance in response to the ERA's draft decision.
- 2014** **Victorian and South Australian electricity distribution businesses, Australia**
Estimating the new issue premium
Performed analysis of a large sample of bond issues made by Australian domiciled businesses in Australia and overseas to estimate the difference between primary yields and secondary market yields at the time of issue.
- 2013-15** **Chorus, New Zealand**
Providing advice on the WACC
Provided Chorus advice on the WACC, including expert reports, in the context of its Final Pricing Principle for the UCLL and the UBA. This included general WACC advice in relation to estimating the cost of debt and the cost of equity, and also assistance in estimating the optimal mark-up to the cost of capital associated with asymmetric costs to society from mispricing regulated services.
- 2013** **Jemena, Australia**
Replicating the RBA's cost of debt benchmark
Undertook analysis aimed at understanding and replicating the analysis performed by the Reserve Bank of Australia in producing estimates of yields on corporate bonds.
- 2013** **United Energy, Australia**
Cost of debt statistics
Co-authored a report investigating the statistical properties of alternative yield curve estimates for estimating the cost of debt.
- 2013** **Victorian electricity distribution businesses, Australia**
Cost of debt
Estimated the cost of debt for use in the regulation of Victoria's advanced metering infrastructure. The analysis involved collection of bond data and analysis of the Bloomberg fair value curve as well as estimation of alternative yield curves.
- 2013** **Dampier to Bunbury Pipeline, Australia**
Estimating the benchmark credit rating
Assisted in the preparation of an expert report addressing the benchmark credit rating for the purpose of determining the debt risk premium. The report conducted econometric benchmarking of credit ratings against business characteristics.

- 2012-13** **Victorian gas network businesses, Australia**
Debt risk premium
Prepared expert reports estimating the regulatory debt risk premium for four Victorian gas distribution businesses. Assisting these businesses in their appeal of the AER's decision.
- 2012-13** **Victorian gas network businesses, Australia**
Internal consistency in estimating the cost of equity
Prepared expert reports reviewing the internal consistency of the AER's application of the Sharpe-Lintner CAPM for estimating the cost of equity. Advising of alternative and consistent means to estimate the cost of equity.
- 2012** **Western Power, Australia**
Regulatory cost of capital for electricity distribution
Prepared three expert reports for Western Power addressing issues in respect of the estimation of the equity beta, the calculation of debt risk premium and consistency of between CAPM parameters in estimating the cost of equity
- 2012** **Vector, New Zealand**
Appeal of input methodologies WACC decision
Assisted Vector in its appeal of the New Zealand Commerce Commission's WACC input methodology.
- 2011-12** **Vector, New Zealand**
Development of input methodologies
Prepared expert reports for Vector responding to the New Zealand Commerce Commission's proposed input methodologies for estimating the cost of capital
- 2011-12** **Energy Network Association, Australian Pipeline Industry Association, AusGrid, Australia**
AER rule change proposal
Advised the ENA and APIA in relation to the AER's proposed change to the National Electricity Rules and National Gas Rules.
- 2011** **AusGrid, Australia**
Effect of government ownership on the cost of debt
Produced an expert report assessing a rule change proposal based on a claim that government ownership should lower the benchmark cost of debt used for regulated electricity and gas network businesses.
- 2011** **APA, Australia**
Debt risk premium analysis
Prepared expert reports for APA in relation to debt risk premium for APT Allgas and APTPPL. Assisted APA in its successful appeal of the AER's APT Allgas debt risk premium decision.
- 2011** **Vanuatu Government, Vanuatu**
Country risk premium
Provided expert advice to the Vanuatu government in respect of the correct country risk premium to apply in the context of a dispute and arbitration to determine the cost of capital for UNELCO
- 2010-11** **Envestra Queensland and South Australia, Australia**
Cost of capital for gas distribution
Prepared expert reports advising Envestra of the risk-free rate, debt risk premium and equity beta to be used in its original and revised access arrangement proposals. Assisting on the appeal in relation to debt risk premium.

- 2010** **Commercial Radio Australia, Australia**
Cost of capital for multiplexer access
Assisted in the preparation of a report to Commercial Radio Australia advising it of the cost of capital in the context of regulation of access to its multiplexers in capital cities.
- 2010** **Victorian electricity network businesses, Australia**
Debt risk premium estimation and appeal
Advised the Victorian electricity network businesses on estimating the debt risk premium and in the successful appeals of the AER's decision. Responded to expert statistical analysis prepared by the AER's witness in these proceedings.
- 2010** **Jemena Gas Network, Australia**
Debt risk premium estimation and appeal
Advised the Jemena Gas Networks on estimating the debt risk premium and in its successful appeals of the AER's decision.
- 2010** **South East Queensland Water Businesses, Australia**
Cost of capital for water distribution access
Advised the South East Queensland Water Businesses on the risk-free rate, debt premium and equity beta applicable to their regulation by the Queensland Competition Authority
- 2010** **ActewAGL, Australia**
Debt risk premium estimation and appeal
Advised ActewAGL on the AER's methodology for estimating the cost of debt and debt risk premium. Assisted in the subsequently successful appeal on the same issue.
- 2008-09** **Energy Networks Association, Australia**
AER's review of cost of capital parameters
Advised on the appropriate estimation of the cost of capital associated with capital assets used to provide electricity networks services in the context of a five yearly review performed by the Australian Energy Regulator
- 2008-09** **New South Wales and Tasmania electricity network businesses, Australia**
Risk free rate and debt risk premium estimation and appeal
Advised on the appropriate estimation of the regulated cost of capital for distribution and transmission electricity network businesses in New South Wales and Tasmania and assisted in their subsequent appeal to the Australian Competition Tribunal.
- 2008** **ElectraNet and ActewAGL, Australia**
Calculating the real risk free rate
Assisted in the preparation of expert reports for ElectraNet and ActewAGL describing the correct method for deriving a real risk free rate in the CAPM.
- 2005-07** **Rismark, Australia**
Financial products
Assessed the economic assumptions underlying an innovative mortgage product proposed by Rismark.

Market Design and Damages

- 2013** **CEZ Shperndarje, Albania**
Economic damages for breach of contract
Estimated economic damages due to alleged conduct of the Albanian government in respect of CEZ's electricity distribution and supply businesses.
- 2013** **Confidential, Australia**
Commercial negotiation of wholesale agreement
Assisted a telecommunications business in its negotiations with a wholesale provider.
- 2012** **Clayton Utz, Australia**
Commercial damages in Australian iron ore
Assessed the potential costs of alternative uses of specific Pilbara iron ore deposits held by Hancock Prospecting and Wright Prospecting.
- 2012** **Australian Government Solicitor, Australia**
Plain packaging of tobacco products
Assisted the government solicitor in understanding the tobacco market in Australia in advance of international litigation due to the government's plain packaging legislation.
- 2011** **Telecom New Zealand, New Zealand**
Estimation of damages
Estimated damages to access seekers caused by non-availability of a service. Assisted Telecom in assessing Commerce Commission modelling and in settling the claim.
- 2010-11** **Mallesons, Australia**
Financial assumptions in tax disputes
Assisted Malleson's to analyse a paper by Giffnock estimating a reasonable level of fees paid by CKI companies to the parent company for credit support.
- 2009** **Commercial Radio Australia, Australia**
Reserve price at auction
Estimated a reserve price in Commercial Radio Australia's auction of unallocated multiplexer capacity
- 2007** **Meerkin & Apel, Australia**
Commercial damages in medical waste disposal
Prepared an expert report and response for Meerkin & Apel examining the reasonableness of economic assumptions underlying the estimation of damages in a commercial arbitration
- 2007** **Freehills, Australia**
Class action damages estimates
Prepared estimates of the potential damages faced by Telstra under a class action lawsuit from its shareholders.
- 2007** **Santos, Australia**
Arbitration of a gas supply contract
Assisted in determining the market gas price on behalf of Santos in arbitration for a major gas supply contract between the Cooper Basin producers and AGL.
- 2006** **Santos, Australia**
Arbitration of a gas supply contract
Assisted in determining the market gas price on behalf of Santos in arbitration for a major gas supply contract between the South West Queensland gas producers and Xstrata.

Policy Analysis

- 2017** **Transport for New South Wales, Australia**
Reviewing the contribution of the cruise industry and implications for pricing
Advised Transpower for New South Wales on the extent of the economic contribution of the cruise industry in New South Wales and the size of subsidies provided. The advice included implications of our findings for prices and price structures.
- 2017** **Infrastructure Australia, Australia**
Assessing projects for inclusion on the infrastructure priority list
Assisted Infrastructure Australia by assessing initiatives for inclusions in the infrastructure priority list. The task includes analysing the economic, social and environmental impacts of the proposed initiatives.
- 2016** **Visy, Australia**
Negotiations in relation to a commercial contract
Advised Visy on assessing potential options in relation to negotiations it was conducting over a commercial contract with a supplier of inputs. Our analysis included reviewing the benefits and costs that the options would have for Visy.
- 2016** **AEMC, Australia**
Arrangements for ensuring reliability of electricity supply
Prepared an internal report for the AEMC that summarised the various arrangements across the electricity supply chain for ensuring the continuity of supply to end-use customers.
- 2015-16** **Climate Change Authority, Australia**
Peer review of modelling of emissions reductions policies
Prepared a peer review for the Climate Change Authority assessing Jacob's modelling of the effects of seven alternative approaches to meeting Australia's emissions reductions commitments. The review included a rigorous evaluation of the assumptions used and approaches adopted by Jacob's analysis.
- 2015** **New South Wales Government, Australia**
Assessment of new business opportunities
Prepared an expert report investigating regulatory barriers to the ability of the New South Wales distribution network businesses to engage in new areas of unregulated activities, as part of the partial lease of these businesses.
- 2007** **Ministerial Council on Energy, Australia**
Demand response of electricity users to smart metering
Estimated the likely response in the demand for electricity to the increased proliferation of time of day and critical peak tariffs as part of the MCE's cost/benefit analysis of the introduction of smart meters
- 2007** **Independent Pricing and Regulatory Authority, Australia**
Household survey analysis
Analysed the results of the 2006 household survey of electricity, gas and water consumption in the Sydney region and preparing a report summarising these on behalf of IPART

- 2006** **Australian Railway Association, Australia**
Comparative charging regimes for road and rail
Assisted in the preparation of reports for the Australian Railway Association on the efficiency of methods for charging for use of road and rail networks. Prepared a critique of an econometric analysis on the benefits of changing the charging methodology
- 2004** **University of Auckland, New Zealand**
Analysis of healthcare outcomes
Conducted statistical modelling of the relationships between socioeconomic variables and healthcare outcomes using census data

Bronwyn McDonald

Economist

HoustonKemp
Level 40, 161 Castlereagh St
Sydney NSW 2000
Tel: +61 2 8880 4814
Mob: +61 452 631 529
E-mail: Bronwyn.McDonald@houstonkemp.com
Web: HoustonKemp.com



Overview

Bronwyn joined HoustonKemp as an economist in February 2018. Bronwyn has expertise in applying economic theory to a broad range of complex competition, regulatory access and policy matters.

Bronwyn has a focus on competition economics. Her experience includes analysing the economic implications of mergers and acquisitions and strategic market behaviour in a range of sectors including finance, media, agriculture, digital platforms, retail, energy and health. She has a particular interest in issues relating to market dynamics and exclusionary conduct.

On matters of economic regulation, Bronwyn has experience in infrastructure access regulation matters across rail, ports, electricity and post networks. She also has a wealth of experience in public policy and economic impact evaluations, through her work for the UK development bank, specialising in addressing market failures in finance markets.

Bronwyn couples her deep experience in economics with an academic background in industrial organisation and commercial law to provide clear, robust analysis to clients. With an undergraduate degree in Psychology, Bronwyn is also passionate about behavioural economics.

Prior to joining HoustonKemp, Bronwyn was an economics manager at British Business Bank and, before that, an Economic Analyst at NERA Economic Consulting. Before joining NERA, Bronwyn was a Senior Consultant at Deloitte. Bronwyn holds a Bachelor of Commerce with First Class Honours in Economics, and undergraduate degrees in Commerce (Commercial Law) and Arts (Psychology), from the University of Auckland.

Qualifications

- | | |
|-------------|--|
| 2014 | University of Auckland
First Class Honours in Economics |
| 2012 | Bachelor of Arts and Commerce
Majors in Commercial Law, Psychology and Economics |

Prizes and scholarships

2011 - 2014 Senior Prize, Economics
Flying Officer Alfred P Fogerty Memorial Scholarship 2014
Bonded Merit Scholarship 2012
Lifetime membership – International Honour Society Beta Gamma Sigma

Career details

2018- **HoustonKemp Economists**
Economist, Sydney, Australia

2016-2017 **British Business Bank**
Economics Manager, London, United Kingdom

2014-2016 **NERA Economic Consulting**
Economic Analyst, Auckland, New Zealand

2011 - 2014 **Deloitte**
Senior Consultant, Auckland, New Zealand

Project experience

Competition, access and mergers

2018 **Queensland Rail**
Access to facilities
Advice in relation to the Queensland Competition Authority's review of the presently declared status of services provided by QR's five rail networks.

2018 **DLA Piper/DBCT Management**
Access to facilities
Advice in relation to the Queensland Competition Authority's review of the presently declared status of services provided by the Dalrymple Bay Coal Terminal.

2018 **Westpac Banking Corporation**
Competition analysis
Expert report prepared for the Productivity Commission in response to the draft finding in its banking competition inquiry that each of Australia's banks holds substantial market power.

2018 **King & Wood Mallesons**
Competition analysis
Advice to a digital platform service provider on potential competition concerns arising in the ACCC's digital platforms inquiry.

2016 **Kiwibank**
Competition analysis
Competition issues arising as part of its dispute with E-Trans International Finance on matters relating to the Anti-Money Laundering and Countering Financing of Terrorism Act

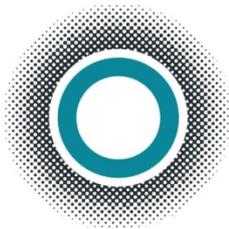
- 2015-16** **New Zealand Post**
Access to facilities
Economic advice in relation to setting New Zealand Post's downstream access prices and other regulatory issues.
- 2014-16** **Cavalier Wool Holdings**
Merger analysis
Economic advice in respect of its proposed acquisition of New Zealand Wool Services International
- 2015-16** **Fonterra**
Competition analysis
Economic advice in respect of the Commerce Commission's "Review of the state of competition in the New Zealand dairy industry"
- 2014-16** **Meridian Energy**
Regulatory analysis
Economic advice in relation to the New Zealand Electricity Authority's Transmission Pricing Review.
- 2015** **Staples**
Merger analysis
Economic advice in respect of its proposed acquisition of OfficeMax, in both Australia and New Zealand
- 2015** **Z Energy**
Merger analysis
Economic advice in respect of its proposed acquisition of Chevron New Zealand
- 2014** **Austron and Evolution**
Merger analysis
Economic advice in respect of their proposed acquisition and privatisation of Acurity, a transaction relating to the private hospital market in Wellington

Regulatory analysis

- 2014-2016** **Meridian Energy**
Economic advice in relation to the Electricity Authority's Transmission Pricing Review.

As an economics manager at British Business Bank**2016-2017*****Key projects:***

- Economic research for HM Treasury in relation to the Patient Capital Review, which covered all aspects of the financial system affecting the provision of long-term finance to growing innovative firms;
- Partnering with the UK Business Angels Association to investigate trends in the distribution of angel investors and investments across the UK;
- Economic impact evaluation of the Start Up Loans Company, to assess the programme's impact and value for money to the UK government;
- Economic research on marketplace lending including peer-to-peer business lending, invoice finance and equity crowdfunding, and in particular whether the increased diversity of supply for finance has a positive impact on small businesses in the UK;
- Primary research and analysis on aspects of small business demand for external finance, working with Bank of England, commercial banks, the British Bankers Association, HM Treasury and other stakeholders.



HOUSTONKEMP

Economists

Sydney

Level 40
161 Castlereagh Street
Sydney NSW 2000

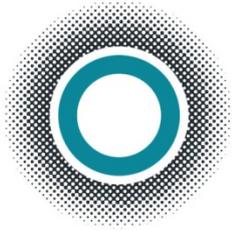
Phone: +61 2 8880 4800

Singapore

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

Phone: +65 6817 5010

Appendix 2 HoustonKemp review of issues raised on criterion (b)



HOUSTONKEMP
Economists

A review of the economic issues raised in relation to criterion (b)

A report for DLA Piper

13 July 2018

Report authors

Greg Houston

Daniel Young

Contact Us

Sydney

Level 40
161 Castlereagh Street
Sydney NSW 2000

Phone: +61 2 8880 4800

Singapore

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

Phone: +65 6817 5010

Disclaimer

This report is for the exclusive use of the HoustonKemp client named herein. There are no third party beneficiaries with respect to this report, and HoustonKemp does not accept any liability to any third party. Information furnished by others, upon which all or portions of this report are based, is believed to be reliable but has not been independently verified, unless otherwise expressly indicated. Public information and industry and statistical data are from sources we deem to be reliable; however, we make no representation as to the accuracy or completeness of such information. The opinions expressed in this report are valid only for the purpose stated herein and as of the date of this report. No obligation is assumed to revise this report to reflect changes, events or conditions, which occur subsequent to the date hereof. All decisions in connection with the implementation or use of advice or recommendations contained in this report are the sole responsibility of the client.

Contents

Executive summary	i
1. Introduction	1
1.1 Scope of this report	1
1.2 Framework for advice	2
1.3 Structure of this report	2
2. Definition of the service	3
3. Market definition	5
3.1 PwC does not apply any framework for defining a market	5
3.2 Product dimension of the market	7
3.3 Geographic dimension of the market	11
3.4 Time dimension of the market	14
4. Total foreseeable demand in the market	17
4.1 PwC estimates supply at DBCT, not foreseeable demand	17
4.2 Volumes served at DBCT is inconsistent with the purpose of criterion (b)	18
4.3 Empirical estimates of total foreseeable demand	19
5. Meeting foreseeable demand at least cost	29
5.1 Options to serve total foreseeable demand in the market	29
5.2 Costs captured in the assessment of least cost	30
6. Declaration	36
A1. Comparison of alternative cost pathways	37

Figure

Figure 3.1: Rail infrastructure configuration at Peak Downs mine site	9
Figure 3.2: Rail infrastructure configuration at Lake Vermont mine site	10
Figure 3.3: PwC's calculation of alternative cost pathways for existing DBCT users	13
Figure 3.4: Location of mines with contracts at each port	14
Figure 5.1: Alternative cost pathways for Capcoal mine using charges	33
Figure 5.2: Alternative cost pathways for Capcoal mine using incremental costs	34
Figure A.1: Alternative cost pathways for Moranbah North mine	39
Figure A.2: Alternative cost pathways for Clermont mine	40
Figure A.3: Alternative cost pathways for Capcoal mine	41
Figure A.4: Alternative cost pathways for Kestrel mine	42

Tables

Table 4.1: Total foreseeable demand for throughput in the market by mine (AME forecast production)	23
Table 4.2: Total foreseeable demand for throughput in the market by mine (Wood Mackenzie February 2018 forecast production)	25
Table 4.3: Total foreseeable demand for throughput in the market by mine (Wood Mackenzie June 2018 forecast production)	27

Executive summary

We have been asked by DLA Piper (DLA), on behalf of DBCT Management Pty Limited (DBCTM), to revisit our earlier conclusions that the coal handling service supplied at Dalrymple Bay Coal Terminal (DBCT) does not satisfy criterion (b).¹

The DBCT User Group and Peabody Energy have made submissions to the Queensland Competition Authority (QCA) which conclude that the coal handling service at DBCT (DBCT service) satisfies criterion (b).² These conclusions are primarily based on economic modelling conducted by PricewaterhouseCoopers (PwC), that:³

- estimates total foreseeable demand in the market by reference to forecasts of coal throughput at DBCT; and
- assesses that this throughput can be served at least cost by existing or expanded capacity at DBCT, as compared to existing or expanded capacity at other terminals.

A number of critical differences in underlying assumptions drive the differing findings of our assessment of criterion (b) and that of PwC. These are:

- the approach to the definition of the service:
 - > we define the service as the coal handling service at DBCT, consistent with the definition set out at section 250(1)(c) of the QCA Act; whereas
 - > PwC commences with an underlying assumption that the coal handling services at DBCT are differentiated from those provided at HPCT because it is a common-user facility;
- the approach to definition of the market for the service:
 - > we assess the boundaries of the relevant market using a conventional framework in which the area of close competition between firms is analysed by reference to the different dimensions of the market; whereas
 - > PwC does not establish the boundaries of the market and instead emphasises points of differentiation between the DBCT service and coal handling services at other terminals, which it contends affects substitutability between these services;
- the approach to estimating total foreseeable demand in the market:
 - > we estimate this by reference to the forecast production of mines which we assess as being in the market, using forecasts sourced from AME; whereas
 - > PwC estimates total foreseeable demand in the market by reference to forecasts of the throughput at DBCT, using forecasts sourced from Wood Mackenzie;
- the approach to assessing the least cost means of meeting total foreseeable demand in the market:
 - > we find that the incremental costs to society (or 'resource costs') of meeting demand at existing facilities other than DBCT are lower than the resource costs of expanding DBCT to meet demand that exceeds its existing capacity; whereas

¹ HoustonKemp, *Does DBCT's coal handling service satisfy criterion (b)?*, 28 May 2018, pp 58-59.

² See: Dalrymple Bay Coal Terminal User Group, *Declaration review regarding Dalrymple Bay Coal Terminal: Submission to the Queensland Competition Authority*, 30 May 2018, p 71; and Peabody Energy Australia, *Response to QCA staff paper*, 30 May 2018, p 12.

³ PricewaterhouseCoopers, *Dalrymple Bay Coal Terminal User Group: 2018 access declaration review*, 29 May 2018.

- > PwC compares the costs of expanding DBCT to meet total foreseeable demand to the charges associated with meeting this demand at existing facilities.

Each of these differences represents a material divergence between the economic approach that we and PwC respectively have adopted in assessing criterion (b).

Our analysis of these differences confirms that PwC's report provides no information that would cause us to revise our earlier assessment that the DBCT service does not satisfy criterion (b). We set out below four dimensions that cause PwC's approach to conclude incorrectly that criterion (b) is satisfied.

First, PwC commences its assessment of criterion (b) on a presumption that the coal handling service provided at DBCT may be differentiated from other coal handling services on the basis that it handles 'common-user coal'. The 'common-user' designation applied by PwC does not appear to change any of the fundamental characteristics of the service, and sets PwC's entire, subsequent analysis of criterion (b) down the wrong path.

Second, the approach to defining the relevant market proposed by PwC contains significant shortcomings and is not capable of being used reliably to define the market within which the DBCT service is provided. A fundamental difficulty with PwC's approach to market definition is that it does not apply the conventional framework developed for that purpose. Rather, the focus of PwC's analysis is limited to the degree of substitutability between DBCT and other coal terminals without first having established the boundaries of the relevant market. In so doing, PwC's approach to market definition:

- focuses on supporting its implicit assumption (drawn from its definition of the service) that DBCT is the only terminal that provides services in the relevant market; and
- does not use any framework to identify the customers that are in the relevant market.

Third, PwC estimates total foreseeable demand in the market by reference to the volume of coal handling services that are forecast to be supplied at DBCT, instead of by reference to the demand of customers in the market. This approach:

- conflates the concepts of 'supply' and 'demand', such that it will not generally give rise to an estimate of total foreseeable demand in the market; and
- is at odds with the purpose of estimating total foreseeable demand in the market, which is to assess whether DBCT is a natural monopoly.

Fourth, PwC's assessment of the costs of meeting foreseeable demand using available capacity at existing terminals is based on *charges*, which reflect *average* costs rather than *incremental* costs. The effect of this incorrect use of average costs is that PwC significantly overstates the relative cost of meeting foreseeable demand using available capacity at existing terminals.

In light of these observations, our earlier conclusion that the coal handling service provided at DBCT does not satisfy criterion (b) under Part 5, Division 2 of the QCA Act remains unchanged.

1. Introduction

The Queensland Competition Authority (QCA) is reviewing whether the declared services specified in section 250 of the *Queensland Competition Authority Act 1997* (QCA Act) should be declared following the expiry of the existing declarations on 8 September 2020.

1.1 Scope of this report

We⁴ have been asked by DLA Piper (DLA), on behalf of DBCT Management Pty Limited (DBCTM), to review whether the coal handling service supplied at Dalrymple Bay Coal Terminal (DBCT) satisfies criterion (b) of section 76(2) of the QCA Act, being:

that the facility for the service could meet the total foreseeable demand in the market—

- (i) over the period for which the service would be declared; and
- (ii) at the least cost compared to any 2 or more facilities (which could include the facility for the service);

An earlier report we prepared addressing this question (our earlier report) was provided to the QCA as part of DBCTM's submission. In that report we concluded that the coal handling service supplied at DBCT (the DBCT service) does not satisfy criterion (b).⁵ We drew this conclusion because our analysis showed that:

- total foreseeable demand in the market in which the DBCT service is provided cannot be met at least cost by DBCT alone over the period for which the service would be declared; and
- at least some of this demand is met at least cost by Hay Point Coal Terminal (HPCT), Adani Abbot Point Coal Terminal (AAPT) or RG Tanna Coal Terminal (RGCT).

The DBCT User Group and Peabody Energy have made submissions to the QCA which conclude that the DBCT service satisfies criterion (b) and that total foreseeable demand in the market is met at least cost by DBCT rather than any two or more facilities.⁶ These conclusions are based on modelling conducted by PricewaterhouseCoopers (PwC).⁷

The DBCT User Group also engaged Castalia to advise on criterion (a) issues.⁸ Some of Castalia's advice is relevant to an assessment of criterion (b) and draws upon similar analysis.

DLA has asked us to revisit our earlier conclusions in relation to whether the DBCT service satisfies criterion (b), or otherwise, in light of the submissions made by the DBCT User Group and Peabody Energy, and the expert advice upon which they rely.

⁴ The authors of this report are Greg Houston and Daniel Young. Copies of our respective curricula vitae are attached as annexure 1 to this report.

⁵ HoustonKemp, *Does DBCT's coal handling service satisfy criterion (b)?*, 28 May 2018, pp 58-59.

⁶ See: Dalrymple Bay Coal Terminal User Group, *Declaration review regarding Dalrymple Bay Coal Terminal: Submission to the Queensland Competition Authority*, 30 May 2018, p 71; and Peabody Energy Australia, *Response to QCA staff paper*, 30 May 2018, p 12.

⁷ PricewaterhouseCoopers, *Dalrymple Bay Coal Terminal User Group: 2018 access declaration review*, 29 May 2018.

⁸ Castalia, *Dalrymple Bay Coal Terminal: Economic analysis of declaration criteria*, May 2018.

1.2 Framework for advice

In our earlier report, we noted that the economic and analytical framework that should be applied in the assessment of criterion (b) to the DBCT service rested on five cornerstones:⁹

- the 'service' which is to be assessed;
- the 'facility' for the service;
- the 'market' for the service;
- the 'foreseeable demand in the market'; and
- the assessment of 'least cost'.

There are a number of critical differences in underlying assumptions that drive the different findings of our assessment of criterion (b) and that of PwC. Although it is uncontroversial that the *facility* that provides the service is DBCT, there are substantive disagreements in the way that we each approach other aspects of the assessment, including the specification of the *service* provided by the DBCT facility.

1.3 Structure of this report

The remainder of this report is set out as follows:

- section 2 describes why PwC's approach to defining a service for the handling of 'common-user' coal has the effect of setting its analysis of criterion (b) down the wrong path;
- section 3 explains that PwC's approach to market definition contains significant shortcomings and is not capable of being used reliably to define the market within which the DBCT service is provided;
- section 4 shows how PwC's approach to market definition means that it is unable to estimate correctly the total foreseeable demand in the market and, instead, estimates the volumes expected to be supplied by DBCT;
- section 5 demonstrates that PwC overstates the costs of meeting demand using available capacity at existing terminals and incorrectly concludes that it would be least cost to meet total foreseeable demand using expanded capacity at DBCT in preference to using available capacity at existing terminals; and
- section 6 contains our declaration as to the basis on which we have prepared this report.

⁹ HoustonKemp, *Does DBCT's coal handling service satisfy criterion (b)?*, 28 May 2018, p 16.

2. Definition of the service

In our earlier report, we described the service to be assessed for the purposes of criterion (b) as:

...the coal handling service at DBCT, being the service that is currently declared and regulated by the QCA.¹⁰

Our understanding is that the specification of the DBCT service is uncontroversial, not least since the QCA Act states at section 250(1)(c) that the presently declared service is:

...the handling of coal at Dalrymple Bay Coal Terminal by the terminal operator.

In contrast, PwC adopts a definition of services at DBCT that includes:¹¹

... all services provided by the rail receiving stations through to the offshore wharves and outloading systems as required to handle *common-user* coal at the Terminal... [emphasis added]

PwC's definition of the service is functionally similar to that described by us and specified in the QCA Act, but for the insertion of a reference to the service handling 'common-user coal'.

PwC does not elaborate on what it means 'to handle common-user coal'. Nevertheless, we take this to be a reference to the fact that the DBCT facility handles coal sourced from different mines, with each or many of these mines having different ownership interests.

By adopting this definition, PwC commences its assessment of criterion (b) on a presumption that the coal handling service provided at DBCT may be differentiated from other coal handling services on the basis that it handles 'common-user coal'. In our opinion, this distinction sets PwC's entire, subsequent analysis of criterion (b) down the wrong path.

The 'common-user' designation applied by PwC does not appear to change any of the fundamental characteristics of the service, the essence of which involves:¹²

- the receipt and unloading of coal transported by rail from various mines;
- stockyard and coal blending facilities, one purpose of which is to manage the receipt and temporary storage of different grades and types of coal, from different mines; and
- wharves, jetties, berths and ship loading systems, for transferring coal onto ships, including both the blending and keeping separate the different grades and types of coal at each stage so that any ship may transport more than one grade and/or type of coal.

The fact that the DBCT facility handles coal from differently owned mines appears to be of little or no consequence for the service it provides. By way of illustration, if each of the mines served by DBCT was owned by the same entity (or, say, by just two entities), it is unclear how any the essential characteristics of the service described above would change. For example, if all the mines served at DBCT or any other coal terminal were under common ownership, there would still be a need:

- to receive and unload separately coal transported by rail from the various mines;
- to stockpile and keep separate different grades and types of coal according to the mine from which it emanated; and

¹⁰ HoustonKemp, *Does DBCT's coal handling service satisfy criterion (b)?*, 28 May 2018, p 16.

¹¹ PricewaterhouseCoopers, *Dalrymple Bay Coal Terminal User Group: 2018 access declaration review*, 29 May 2018, p 8.

¹² See: HoustonKemp, *Does DBCT's coal handling service satisfy criterion (b)?*, 28 May 2018, p 8, for a summary of these functions.

- to transfer coal onto ships in such manner that kept separate the different grades and types of coal at each stage so that any ship may transport more than one grade and/or type of coal.

In short, the common-user designation applied by PwC is not a meaningful characteristic of the service provided at DBCT. Rather, it amounts to a description of the range of customers to whom the facility provides that service, but with no clear implications for the service itself. In defining the service as it does, PwC extends the ordinary meaning of the term 'service' to incorporate considerations that are not characteristics of the service.

The effect of this apparently manufactured definition of the service is to constrain the subsequent market definition process to the consideration of common-user facilities. PwC thereby excludes at the outset mines served by and services provided by HPCT from:

- its definition of the market;
- its assessment of foreseeable demand in the market; and
- its assessment of the least cost means of meeting that foreseeable demand.

The imposition of such a constraint has no analytical basis and is inappropriate because it is the function of the market definition process to determine the area of close competition between firms, and therefore to assess the extent to which the common-user nature of the DBCT facility affects the boundaries of the market in which the DBCT service is supplied.

3. Market definition

In this section we describe the essential differences between our approach to market definition and the analysis of the market undertaken by PwC.

The approach to defining the relevant market proposed by PwC contains significant shortcomings and is not capable of being used reliably to define the market within which the DBCT service is provided.

A fundamental difficulty with PwC's approach to market definition is that it does not apply the conventional framework developed for that purpose. Rather, the focus of PwC's analysis is limited to the degree of substitutability between DBCT and other coal terminals without first having established the boundaries of the relevant market. In so doing, PwC's approach to market definition:

- focuses on supporting its implicit assumption (drawn from its definition of the service) that DBCT is the only terminal that provides services in the relevant market; and
- does not use any framework to identify the customers that are in the relevant market.

PwC's approach to market definition is narrowly concerned with the characteristics of potential suppliers. However, for the assessment of criterion (b), we define a market for the purpose of estimating total foreseeable demand in the market. Without an understanding of the customers that are in the relevant market, PwC's approach to defining the market is not capable of estimating foreseeable demand in the market. We discuss this in more detail at section 4 below.

We explain in our earlier report¹³ that the process of defining a market requires:

- first, the identification of the products and geographic regions actually or potentially supplied, and over which customers would be willing or able to find substitutes for the goods or services in question;
- second, an evaluation of whether it would be profitable for a hypothetical monopolist controlling all relevant suppliers in the candidate market to impose a small but significant, non-transitory increase in price (SSNIP) on the customers served by those suppliers; and
- third, in the event the SSNIP hypothesised at step two was not profitable, the expansion of the candidate market identified in the first step to include the area or product from which the competitive constraint came.

In organising below our analysis of PwC's approach, we consider in turn the various factors raised by PwC in the context of the market dimension to which they are relevant, that is, the product, geographic and temporal dimensions.¹⁴ Once properly considered within a conventional, competition economics framework for market definition, there is no aspect of PwC's analysis that causes us to revise our conclusions as regards the appropriate boundaries for the market in each of these dimensions.

3.1 PwC does not apply any framework for defining a market

PwC's approach to defining the market does not apply any conventional framework developed for that purpose, and so does not clearly define the market within which the DBCT service is supplied. Rather, PwC's analysis can more accurately be described as a qualitative assessment of factors that may limit the substitutability between DBCT and other coal terminals. This approach is not capable of establishing the

¹³ HoustonKemp, *Does DBCT's coal handling service satisfy criterion (b)?*, 28 May 2018, pp 16-19

¹⁴ We do not address the functional dimension of the market because it does not appear to be a point of disagreement between ourselves and PwC.

boundaries of the relevant market – even though this is an important prerequisite for the subsequent step of estimating total foreseeable demand in that market.

In defining the market in which the DBCT service is supplied, it is important to start with a clear concept of what a ‘market’ is. We explain in our earlier report that the Trade Practices Tribunal has described a market as the area of close competition between firms.¹⁵ This area is conventionally determined by reference to four dimensions:¹⁶

- the products or services supplied – the product dimension;
- the geographic area over which the products are supplied – the geographic dimension;
- the level in the supply chain at which the parties operate – the functional dimension; and
- the period within which the market operates – the time dimension.

Defining the scope of the market within which the DBCT service is supplied is fundamental to estimating total foreseeable demand in that market. It requires an understanding of the customers that are in the market and will be expected to be in the market over the period for which the service would be declared. To do this requires establishing the boundaries of the market in each of the relevant dimensions.

However, PwC’s framework for analysis does not establish those boundaries. Rather, PwC cites various factors that it contends as weighing qualitatively on the extent of substitutability between DBCT and other coal terminals. These factors include:¹⁷

- limited capacity on existing infrastructure in other rail systems, such that these systems may need to be expanded to accommodate additional volumes exported from terminals on these systems;
- limited capacity at other terminals, with little or no available capacity at AAPT and RGTCT;
- existing take-or-pay contracts with terminals and for rail access and haulage, meaning that substitutability is limited to ‘infrequent opportunities to switch’;
- higher charges that would be incurred by miners located in the Goonyella system to export coal from terminals in other systems;
- differences in the reference train size on each system, with Goonyella having reference train sizes of 10,000 tonnes, compared to 6,800 for Newlands and 8,500 for Blackwater, such that sending coal to other terminals will involve higher haulage costs;
- physical difficulties with miners using their existing rail spur to send coal to other terminals, which may give rise to increased costs;
- HPCT being unavailable for miners other than BMA and BMC, with this arrangement argued to be efficient;
- co-shipping opportunities offered at DBCT but not elsewhere, so that customers are more likely to value coal acquired at DBCT; and
- stockpile trading offered at DBCT which are not offered at other terminals.

Noting these factors, PwC contends that the relevant market is ‘*the market for the provision of common user coal handling services at the port of Hay Point*’.¹⁸ Impliedly, DBCT is the only supplier in this presumed market.

¹⁵ Re Queensland Co-Op Milling Association Limited and Defiance Holdings Limited (1976) 8 ALR 481 at 22

¹⁶ HoustonKemp, *Does DBCT’s coal handling service satisfy criterion (b)?*, 28 May 2018, p 17.

¹⁷ PricewaterhouseCoopers, *Dalrymple Bay Coal Terminal User Group: 2018 access declaration review*, 29 May 2018, pp 8-19.

¹⁸ PricewaterhouseCoopers, *Dalrymple Bay Coal Terminal User Group: 2018 access declaration review*, 29 May 2018, p 18.

It is important to emphasise the distinction between PwC's analysis and the conventional framework and approach to market definition, as developed in the competition economics literature. We state above that a market is the area of close competition between firms. PwC's analysis does not establish any such area. Rather, PwC's analysis can be more accurately described as a qualitative assessment of factors that may limit the substitutability between DBCT and other coal terminals. This is not an approach capable of identifying the boundaries of a market.

A market within which a service is supplied may include regions within which there are close substitutes to that service and regions within which there are no close substitutes. The boundaries of the market are defined by reference to the former.

By way of example, at Appendix B of the Staff Issues Paper, the QCA notes that facility V operates *'in the market for processing widgets within approximately 100km of V'*.¹⁹ If this is the market in which the service provided by facility V is provided, and there are costs associated with the transporting widgets to V, then it appears likely that:

- customers of facility V located at or near the boundaries to this market (that is, 100km from V) can be expected to have access to one or more close substitutes for the service provided by facility V – since otherwise, the market would be wider still; and
- customers of facility V located close to the facility may not necessarily have access to close substitutes for the service provided by facility V.

Several of the factors cited by PwC may individually be relevant to estimating the scope of various dimensions of the relevant market – notably the geographic, product and temporal dimensions. However, PwC does not assess any those factors in this way and so does not establish the boundaries that define the market in each of its dimensions.

Demand for a good or service arises from the preferences of its potential customers. With its narrow focus on the characteristics of potential suppliers, and without having established the boundaries of the relevant market and thereby identifying the customers that are in the market, PwC's approach to market definition does not put it in a position to estimate demand in the market. We discuss this concern in more detail at section 4 below.

3.2 Product dimension of the market

In our earlier report, we assessed the product dimension of the market as being the coal handling service. We did not identify any reason to adopt a narrower approach to this dimension of the market.

In its analysis of substitutability between DBCT and other coal terminals, PwC identifies a number of factors that may be said to be relevant to the scope of the product dimension of the market, that is:

- HPCT being unavailable for miners other than BMA and BMC, with this arrangement argued by BHP to be efficient;
- physical difficulties with miners using their existing rail spur to send coal to other terminals, which may give rise to increased costs;
- co-shipping opportunities offered by DBCT which other terminals cannot match, so that customers are more likely to value coal acquired at DBCT; and
- stockpile trading offered at DBCT which is not offered at other terminals.

¹⁹ QCA, *Staff issues paper | Declaration reviews: applying the access criteria*, April 2018, p 31.

None of these factors provides a sufficient reason to distinguish the coal handling service at one terminal from another to a sufficient extent that they may be supplied in different markets. We discuss the relevance of each of these factors to the market definition process below.

3.2.1 Substitution between DBCT and HPCT

PwC claims that the coal handling service provided by HPCT is not a close substitute for the DBCT service, because of the 'asymmetric' nature of the substitution:²⁰

HPCT is not a viable substitute for the coal handling services offered by DBCT. BHP/BMA have never made available HPCT capacity to any other user other than BMA, BHP Mitsui Coal or their predecessors and, for efficiency reasons, BHP has advised that it would not make available capacity at HPCT to third parties. The fact that BMA/BHP affiliated user can take up capacity at DBCT does not demonstrate substitutability for all other users. This type of asymmetric substitution should not result in a wider market definition, which includes services that non-BMA/BHP affiliated cannot switch to.

The reasoning disclosed above by PwC makes clear that it approaches market definition on the basis that services supplied by HPCT are only in the relevant market if they represent a viable option for 'all' customers in that market. This is not consistent with any generally accepted framework for market definition.

Consistent with our observations at section 3.1, it is entirely possible that there may be a significant number of customers in the relevant market for which the DBCT service is the only viable coal handling service. However, this observation does not establish that other coal handling services (and mines that use them) should be excluded from the relevant market.

In particular, we note that the coal handling service supplied by HPCT:

- is supplied at the same location as DBCT at the Port of Hay Point – such that that the costs and constraints associated with the transport of coal to these terminals are likely to be identical; and
- is used by BMA and BMC mines to export up to 55 mtpa of coal, using essentially the same service characteristics²¹ as those adopted at DBCT.

Put another way, a significant volume of coal is exported through HPCT by miners who could otherwise seek to export through DBCT at similar overall cost. Furthermore, the majority of mines that are presumed to regularly export coal from HPCT have exported substantial volumes of coal through DBCT in the past, are currently exporting through DBCT and are expected to continue to do so in the future.²² The substitution possibilities available to these mines represent a substantial proportion of the potential demand for the DBCT service and so cannot be overlooked in considering the boundaries of the product dimension of the market.

3.2.2 Mine site rail infrastructure

Rail infrastructure at each mine site may be configured so as to be used most cost effectively in conjunction with export from a particular terminal or location. By way of example, the rail infrastructure at Peak Downs mine site, located in the southern part of the Goonyella system, is shown in figure 3.1 below.

Peak Downs' rail infrastructure is configured to send coal north on the Goonyella system, towards Hay Point. In addition to these terminals, coal could also be sent to Abbot Point via the GAPE and Newlands systems, albeit that this would incur greater rail access and haulage charges than exporting coal from the Hay Point terminals.

²⁰ PricewaterhouseCoopers, *Dalrymple Bay Coal Terminal User Group: 2018 access declaration review*, 29 May 2018, p 18.

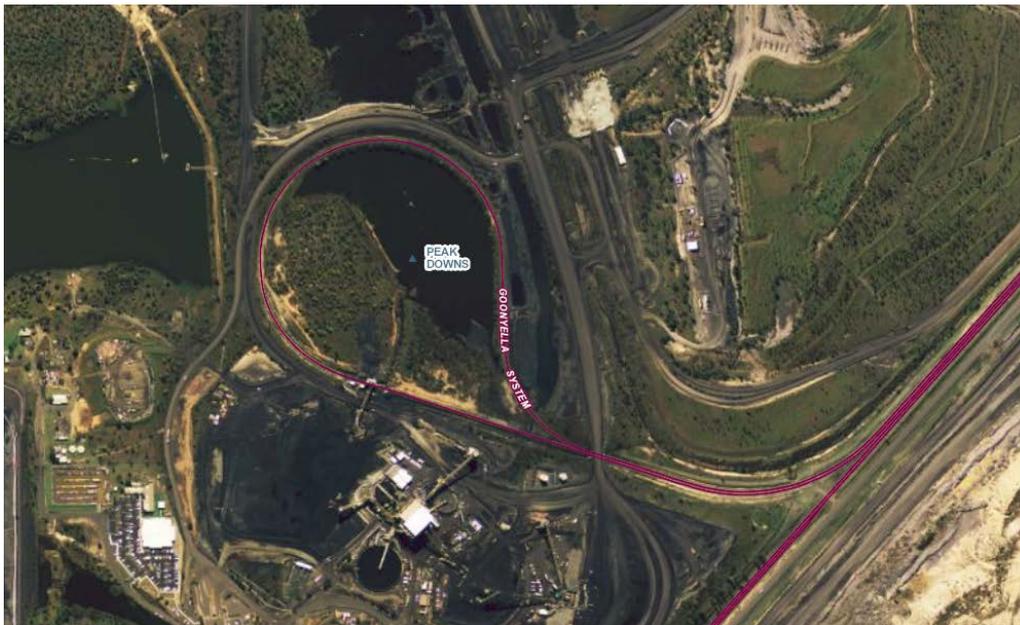
²¹ We describe these service characteristics at section 3.

²² HoustonKemp, *Does DBCT's coal handling service satisfy criterion (b)?*, 28 May 2018, p 28.

Alternatively, sending coal from Peak Downs south to Gladstone would require either investment in mine site rail infrastructure to facilitate this, or higher rail access and haulage costs. For example, PwC states that:²³

While a train can alter its direction of travel to an alternative rail network and port terminal, there would be disruption in the existing service standards as a train was being manoeuvred to enable its access to the alternative path. This could also lead to impacts on the available capacity on the main line.

Figure 3.1: Rail infrastructure configuration at Peak Downs mine site



Source: Queensland Globe

However, not all mine sites have rail infrastructure that affects substitution in this way. For example, the rail infrastructure at Lake Vermont mine site, located south of Peak Downs, is shown in Figure 3.2 below. This configuration allows coal from Lake Vermont to be sent either north to Hay Point or Abbot Point, or south to Gladstone.

²³ PricewaterhouseCoopers, *Dalrymple Bay Coal Terminal User Group: 2018 access declaration review*, 29 May 2018, p 17.

3.2.3 Co-shipping opportunities and stockpile trading

PwC cites co-shipping opportunities and stockpile trading as examples of factors that differentiate the DBCT service and other coal handling services, making them less substitutable.²⁶

We understand that, because many miners choose to ship coal from DBCT, there are a wide range of coal types exported from the terminal. This may make DBCT a more attractive destination for customers who wish to buy parcels of discrete coal types, so that a single vessel can be loaded with more than one type of coal – known as ‘co-shipping’.

The availability of co-shipping opportunities is not an intrinsic property of the DBCT service. Rather, it is an advantage conferred on miners who use DBCT as a result of the mix of miners that use the terminal. It would equally be available at other terminals should those miners use alternative coal handling services.

Nevertheless, setting aside this observation and accepting co-shipping opportunities and stockpile trading as features of the DBCT service (as opposed to features of DBCT’s customer mix), they can best be described as features that differentiate the quality of the coal handling service at DBCT as being greater than that provided at other terminals.

However, the existence of a higher quality service does not provide a sufficient basis to conclude that there is a materially higher willingness to pay for the DBCT service and so it cannot be substituted with other services. In particular, any higher quality linked to these factors does not appear to be material, because:

- some mines proximately located to DBCT send their coal to other terminals despite the apparently greater quality of the DBCT service – thereby indicating that this distinction is not itself determinative in miners’ decisions as to the choice of coal terminal;
- we understand that about 38 per cent of coal exported through DBCT in financial year 2017-18 was shipped on multi-cargo vessels; and
- other coal terminals could adopt similar practices to stockpile trading if these were considered to be of significant value to users.

To the extent that there is a distinction in quality, however material, it follows that the boundaries of the market within which the DBCT service is provided must be *greater* than they would be if stockpile trading and co-shipping opportunities did not exist. Since these factors make DBCT preferable to a wider range of mines, their effect will be to expand the area from which its potential customers may be drawn, across all dimensions of the market. Such expansion of the reach of mines for which DBCT is an attractive alternative must draw demand from potential customers away from other terminals that – although in the same market – are said not to offer those services.

This conclusion underlines the distinction between the process of establishing the boundaries of a market definition and the analysis of substitutability conducted by PwC. Properly considered, the factors that PwC cites as suggesting a *narrower* market in fact indicate a *broader* market.

3.3 Geographic dimension of the market

Our approach to identifying the boundaries of the geographic dimension of the market focused on the region from which potential customers of the DBCT service are (or are likely to be) drawn. We apply this approach:

- at the current time, by reference to current and recent customers of the DBCT service; and
- over the period for which the service would be declared, by reference to the customers who would incur the lowest charges to use coal handling services supplied at Hay Point as compared to other, differently located coal handling services.

²⁶ PricewaterhouseCoopers, *Dalrymple Bay Coal Terminal User Group: 2018 access declaration review*, 29 May 2018, p 17.

This is a conventional approach to estimating the geographic scope of a market. For example:

- the Australian Competition Tribunal described the geographic dimension of the market in the following terms:²⁷

The geographic area of the market (ie whether it is local, regional, national or international) takes into account, principally, the area within which buyers choose to purchase their goods (ie actual buying patterns) and the areas within which sellers traditionally supply (or could easily supply in response to changed market conditions) their goods.

- similarly, the QCA's example assessment of criterion (b) for 'the use of the widget processing facility provided at V' adopts a geographic dimension as being 'the market for processing widgets within approximately 100km of V', for the reason that:²⁸

...users up to 100km away use, or have previously used, V to process widgets.

Our approach gives rise to a list of mines that are within the geographic dimension of the market, both at the current time and over the period for which the service would be declared – see for example, figure 4.1, table 4.2, figure 4.3 and figure 4.4 of our previous report.

Such a process is also consistent with the geographic scope of the 'Hay Point Catchment' identified by Castalia for the DBCT User Group, in which:²⁹

...the Port of Hay Point via either DBCT or the Hay Point Loader for BMA mines, is the lowest cost logistics chain.

By contrast, PwC does not form a view about the region from which potential customers of the DBCT service would be drawn. Instead, PwC suggests that the opportunities for customers of DBCT to export coal from terminals in other geographic locations are limited because higher charges would be incurred by miners located in the Goonyella system to export coal from terminals in other systems.³⁰

We explain at section 3.1 above that this observation does not, by itself, establish which mines are in or out of the relevant market. Furthermore, higher charges required to access other terminals are explicitly accounted for in a conventional approach to geographic market definition that examines the location of existing and potential customers, and considers the costs involved in switching between more or less distant suppliers.

PwC compares the relative charges for a representative DBCT user of exporting coal using existing capacity at DBCT as against available capacity at other terminals. The diagram at figure 7 of PwC's report purports to show these relative charges. We replicate this diagram at figure 3.3 below, indicating that the relative charges associated with exporting coal through DBCT are much lower than those for exporting coal through other terminals.

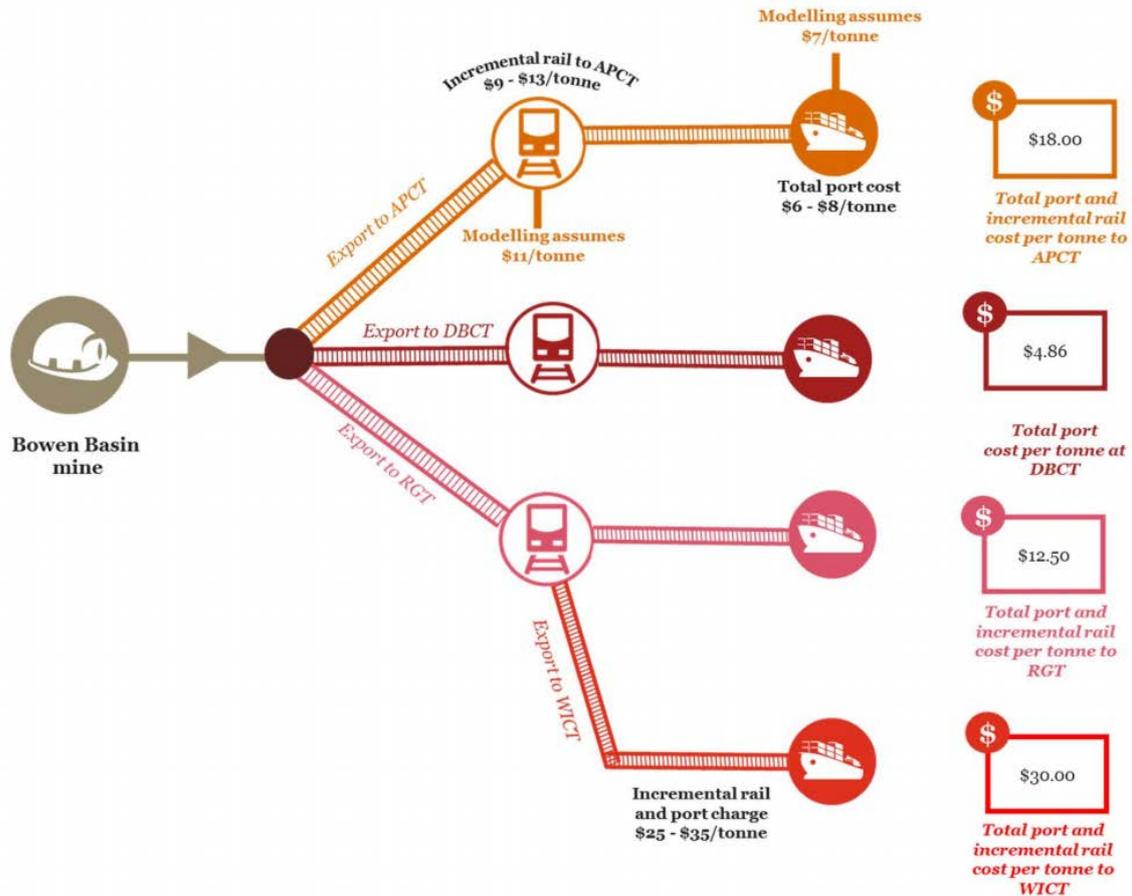
²⁷ Application by Chime Communications Pty Ltd (No 2) [2009] ACompT 2 (27 May 2009), para 21.

²⁸ QCA, *Staff issues paper | Declaration reviews: applying the access criteria*, April 2018, p 31.

²⁹ Castalia, *Dalrymple Bay Coal Terminal: Economic analysis of declaration criteria*, May 2018, p 7.

³⁰ PricewaterhouseCoopers, *Dalrymple Bay Coal Terminal User Group: 2018 access declaration review*, 29 May 2018, pp. 16-18.

Figure 3.3: PwC’s calculation of alternative cost pathways for existing DBCT users

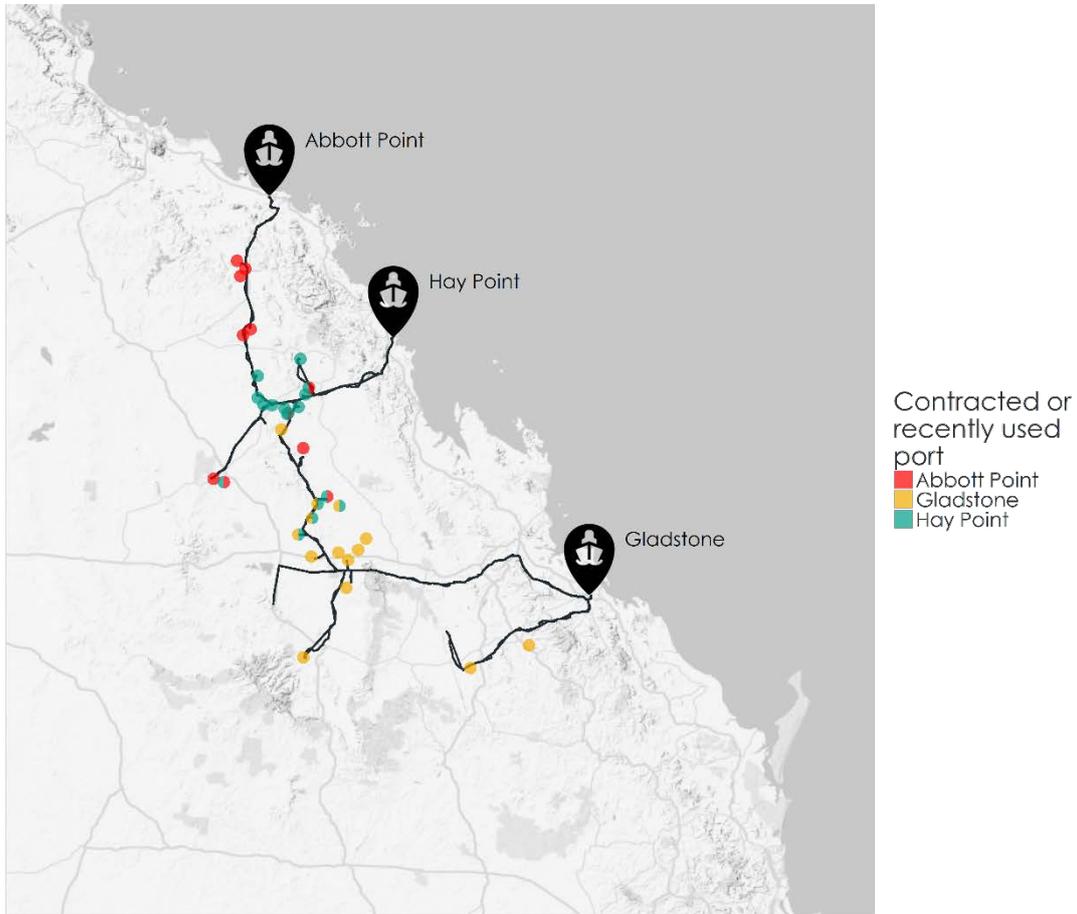


PwC does not explicitly use the information presented in figure 3.3 above as part of its approach to market definition. Nevertheless, as we explain above, the principles underpinning the comparison drawn by PwC are important to the market definition process.

In particular, if the comparison of alternative cost pathways drawn by PwC is an accurate snapshot of the relative charges for current users of DBCT, it represents strong evidence that current demand in the market in which the DBCT service is provided is greater than the volumes currently served at the terminal. If the choice between DBCT and alternative coal handling facilities is as stark for existing users as PwC suggests, then it is reasonable to suppose that there is a further set of coal mines that would also use the coal handling service at DBCT in preference to those at other facilities. That further set of mines not served by DBCT can then reasonably be said to represent demand for the DBCT service.

Figure 2.10 in our earlier report showed the location of mines with contracts at each coal terminal, and is reproduced at figure 3.4 below. Figure 3.4 demonstrates that the mines with contracts at DBCT are located within a broad geographic region that contains numerous mines that utilise other coal handling services. On PwC’s evidence, these mines (and potentially others that are located slightly outside this region) represent demand for DBCT’s services that is currently not met by DBCT.

Figure 3.4: Location of mines with contracts at each port



Source: AME, DBCTM, Google Maps

However, there are important caveats to the comparison of relative terminal and rail charges that is presented by PwC. We explore these potential issues in greater detail at appendix A1 to this report.

3.4 Time dimension of the market

PwC notes that mines hold take-or-pay contracts with terminals and for rail access and haulage, so that substitutability is limited to ‘infrequent opportunities to switch’.³¹

PwC also highlights the importance of capacity constraints in limiting the ability of mines to switch, because:³²

- there is limited capacity on existing rail infrastructure to export coal from other terminals, citing available capacity of 2.3 mtpa on the Newlands and GAPE systems and 17.9 mtpa on the Blackwater systems, such that these systems may need to be expanded to accommodate additional volumes; and
- there is limited capacity at other terminals, with little or no available capacity at AAPT and RGTCT.

³¹ PricewaterhouseCoopers, *Dalrymple Bay Coal Terminal User Group: 2018 access declaration review*, 29 May 2018, p 18.

³² PricewaterhouseCoopers, *Dalrymple Bay Coal Terminal User Group: 2018 access declaration review*, 29 May 2018, p 18.

This analysis focuses on the constraints to substitutability between terminals over a short term horizon – the period within which mines are bound by existing contractual commitments and limited by existing infrastructure constraints.

The appropriate time dimension of the market is the period over which the market operates – that is, the period over which transactions are normally conducted. A normal transaction for a coal handling service is a long term contract, and the time dimension of the market should be consistent with this practice.

Recent transactions entered by DBCT have been for a term of ten years and this is consistent with what is known about contracts made with AAPT. Substitutability must be assessed over a timeframe that is consistent with the term of these transactions.

Long term contracting is consistent with competitive outcomes in markets in which both suppliers and customers are making significant investments in sunk costs, with long term contracts being important in underwriting investment in new capacity to relieve infrastructure constraints.

It follows that the effects of long term contracts and capacity constraints on the ability and incentive of mines to switch providers of coal handling services in the short term would not be expected to affect market definition. Rather, the boundaries of the market must be determined over a long timeframe in which new contracts may be entered, potentially underwriting expansions.

Reinforcing the long term perspective that should be brought to the time dimension of the market, we note that criterion (b) is to be assessed over the period for which the service would be declared. In our earlier report, we assumed that this was ten years. PwC assesses the relevant period as ten to fifteen years,³³ but does not draw any linkage between this and its observations as to the limitations of contracts and capacity for mines' switching between terminals.

By contrast, this period does not constrain our assessment of criterion (b). We stated in our earlier report that:³⁴

No contract to use coal handling services at DBCT extends to 2030, and nor are we aware of any contract exceeding this duration to use coal handling services at any other coal terminal

DBCTM's submission states that 91 per cent of contracted tonnage is the subject of agreements that are set to expire within the three and a half years from the expiry of declaration, if not extended.³⁵

The DBCT User Group raises the prospect that long term contracts may act to constrain a user from being in a position to switch terminals, even in the long term, because of the effect of overlapping rail haulage, rail access and terminal contracts:³⁶

Rail haulage and rail access agreements are typically entered on at least a 10 year take or pay basis – such that switching terminals is a choice that can only ever arise at the point of re-contracting (and where that time for re-contracting can be aligned with the term of the DBCT User Agreements which are also typically 10 year take or pay contracts initially with 5 year 'evergreen' renewal options thereafter).

The implicit suggestion made by the DBCT User Group is that, without alignment of their various obligations, users might never face an effective choice between terminals.

³³ PricewaterhouseCoopers, *Dalrymple Bay Coal Terminal User Group: 2018 access declaration review*, 29 May 2018, pp 19-21.

³⁴ HoustonKemp, *Does DBCT's coal handling service satisfy criterion (b)?*, 28 May 2018, p 17.

³⁵ DBCTM, *DBCT Management submission to the QCA*, 30 May 2018, para 374.

³⁶ Dalrymple Bay Coal Terminal User Group, *Declaration review regarding Dalrymple Bay Coal Terminal: Submission to the Queensland Competition Authority*, 30 May 2018, p 29.

This prospect does not deserve serious consideration. To the extent that users actually enter contracts such that the terms of their obligations to various providers are not aligned, then it is reasonable to assume that they would do so with the expectation that they could trade these obligations in a secondary market transaction. By way of example, Castalia notes that this type of trading for contracted capacity at DBCT exists, is efficient and is material, with 23 million tonnes of DBCT capacity assigned in this way over the past three years.³⁷ Without the availability of secondary trading of capacity, it would be irrational for miners to enter into contractual terms that would limit their ability to secure the lowest possible prices from suppliers of rail haulage or coal handling services.

³⁷ Castalia, *Dalrymple Bay Coal Terminal: Economic analysis of declaration criteria*, May 2018, pp 19-20.

4. Total foreseeable demand in the market

This section identifies the essential differences between our approach to estimating total foreseeable demand in the market and that adopted by PwC.

Demand for a product is derived from the preferences of customers. In our earlier report we estimate total foreseeable demand in the relevant market by reference to the total forecast production of mines that we assess to be in that market over the period for which the DBCT service would be declared.

In contrast, PwC is unable to estimate total foreseeable demand in the relevant market because it does not define that market. In other words, it is not possible to say what demand arises in PwC's presumed market because it does not specify the boundaries within which the customers in that market are located. Instead, PwC estimates total foreseeable demand in the market by reference to the volume of coal handling services that are forecast to be supplied at DBCT. This approach:

- conflates the concepts of 'supply' and 'demand', such that it will not generally give rise to an estimate of total foreseeable demand in the market; and
- is at odds with the purpose of estimating total foreseeable demand in the market, which is to assess whether DBCT is a natural monopoly.

Beyond the conceptual difference between our estimates of foreseeable demand and those developed by PwC, there are also empirical differences. We rely on forecasts of mine production provided by AME to estimate demand in the relevant market, whereas PwC relies on forecasts of terminal throughput sourced from Wood Mackenzie. In the analysis we set out below, we show that the difference in data supplier is not determinative and that, once estimated consistent with a conventional approach to market definition, total foreseeable demand in the market exceeds the existing capacity of DBCT over the period for which the service would be declared.

4.1 PwC estimates supply at DBCT, not foreseeable demand

The purpose of establishing the boundaries of the relevant market in the assessment of criterion (b) is to estimate total foreseeable demand in that market. We explain in section 3.1 that PwC's approach to the market does not define a market by reference to its boundaries. This raises challenges for estimating total foreseeable demand in the market, since the customers that form one side of the market are not defined.

The nature of this challenge is posed by the description of the relevant market proposed by PwC being:³⁸

...the market for the provision of common user coal handling services at the port of Hay Point.

An atypical feature of this proposed market is that it is implicitly defined by reference to one supplier, DBCT (being the only common-user coal handling facility at the port of Hay Point), rather than by reference to the customers in the market. Since this market definition does not contain information that would identify the customers in the market, it follows that it is not possible to estimate total foreseeable demand in this market.

However, PwC does not attempt to estimate total foreseeable demand in the market. Instead, it estimates coal handling volumes that are expected to be supplied at DBCT, by reference to:

- existing contract cover at DBCT;
- forecasts of contracts and throughput at DBCT; and

³⁸ PricewaterhouseCoopers, *Dalrymple Bay Coal Terminal User Group: 2018 access declaration review*, 29 May 2018, p 18.

- the DBCT access queue.

Although PwC refers to this approach as an estimate of ‘total foreseeable demand in the market’, there is a strong conceptual difference between estimates of the expected output of one supplier in a market and estimates of the expected demand of customers in a market. This distinction is of fundamental significance, even if there is only a single supplier in the market. Specifically, the approach applied by PwC assumes that that demand in the market is limited to the volumes that are served at DBCT, rather than assessing whether demand in the market could potentially exceed this. This has important consequences for the assessment of criterion (b) – for reasons that we explain further at section 4.2 below.

By contrast, when an appropriate approach to market definition is adopted, then estimating total foreseeable demand in the market is a relatively simple task of summing the expected demand from each of the customers identified as being in the market.

Our proposed approach describes the market as:³⁹

...the market for coal handling services for mines that are proximate to the Port of Hay Point.

This description includes a statement of the customers who are in the market, by reference to their proximity – based on the analytical framework that we use to assess this, which we explain at section 4 of our previous report. It follows that total foreseeable demand in this market is the total expected demand for coal handling services from each of these customers.

4.2 Volumes served at DBCT is inconsistent with the purpose of criterion (b)

PwC estimates total foreseeable demand ‘in the market’ by reference to the volumes served (or expected to be served) at DBCT. By construction, this approach constrains total foreseeable demand to be no more than the capacity of DBCT.

In our previous report, we stated this approach to estimating total foreseeable demand in the market would not be an appropriate basis for the assessment of criterion (b). We explained that:⁴⁰

Foreseeable demand in the market encompasses coal volumes that, by preference, would be served by coal handling services at the Port of Hay Point. In principle, this volume is not constrained by the capacity of DBCT – either at present or in the future.

If foreseeable demand in the market is estimated so as to be constrained by the capacity of DBCT, then the assessment of criterion (b) would be predisposed to identify the service provided by that terminal as a natural monopoly in circumstances where this was not the case.

A facility that involves significant fixed or sunk costs is likely to be able to meet total foreseeable demand in the market at least cost if demand is constrained to be less than its capacity – because the costs of using capacity, once built, are very low. It follows that any approach that limits foreseeable demand in the market to that served by the facility of interest will typically find that the facility satisfies criterion (b), irrespective of the degree of substitution between any two facilities.

To demonstrate the circumstances to which we refer in principle above, we developed a simple example in which

...coal mine production in a region near terminal A grows by 40 mtpa, and:

- 10 mtpa of this additional production is handled using available capacity at terminal A, which is costless; and

³⁹ HoustonKemp, *Does DBCT’s coal handling service satisfy criterion (b)?*, 28 May 2018, p 26.

⁴⁰ HoustonKemp, *Does DBCT’s coal handling service satisfy criterion (b)?*, 28 May 2018, p 34.

- 30 mtpa of this additional production is handled at another terminal B, because the cost of expanding terminal A is greater than the cost of sending these volumes to terminal B.

Terminal A is not a natural monopoly, because foreseeable demand in the market for coal handling services in the region near terminal A cannot be met by that terminal.

Despite this, PwC's approach to estimating total foreseeable demand, applied to terminal A, would find that the 30 mtpa served at terminal B (because of the lack of availability of terminal A) is not part of total foreseeable demand in the market since it is not served at terminal A. From this incorrect conclusion, it is straightforward to draw the similarly incorrect corollary, that terminal A is a natural monopoly because it can serve total foreseeable demand in the market at least cost.

4.3 Empirical estimates of total foreseeable demand

A critical question in the assessment of criterion (b) for the DBCT service is whether total foreseeable demand in the market can be served within the existing capacity of the terminal or whether it exceeds the existing capacity of the terminal. We explain in our earlier report that:⁴¹

The evaluation of the resource costs of meeting foreseeable demand is likely to be significantly affected by the fact that the provision of rail and terminal infrastructure is capital intensive. It follows that the resource costs of meeting foreseeable demand using existing infrastructure (which does not require new capital investment) are likely to be significantly lower than the resource costs associated with the construction and use of new infrastructure.

Put another way, since the capital costs of the existing capacity at DBCT are sunk and many of the operating costs are likely to be fixed, if total foreseeable demand in the market can be met within the existing capacity of DBCT, the costs that may be avoided by meeting foreseeable demand elsewhere will be relatively low.

Conversely, if total foreseeable demand in the market exceeds the existing capacity of DBCT, then the incremental costs of meeting foreseeable demand above this capacity will be relatively high since they will reflect the capital costs of a capacity expansion. We show in section 5.2.1 below that the incremental costs of serving foreseeable demand using capacity expansions at DBCT are considerably higher than the incremental costs of serving foreseeable demand using existing capacity at other terminals.

PwC estimates total foreseeable demand in the market by reference to forecasts of throughput at DBCT, including forecasts developed by Wood Mackenzie. The DBCT User Group submission notes that this forecast is for throughput at DBCT to increase to a maximum of 69 mtpa over 2024 and 2025, before sharply falling away to 43 mtpa by 2030.

By contrast, we estimate total foreseeable demand in the market by reference to forecasts of the total production of customers within the relevant market based on forecasts developed by AME. In this section, we use the same methodology to estimate total foreseeable demand in the market using forecasts of production developed by Wood Mackenzie. We find that:

- total foreseeable demand in the market calculated using Wood Mackenzie's forecasts substantially exceeds the existing capacity of DBCT – and exceeds even the capacity of DBCT with all expansion options implemented – including the 9X expansion; and
- even if total foreseeable demand in the market is calculated so as to exclude volumes supplied at HPCT – an approach we consider to be inappropriate – it still significantly exceeds the existing capacity of DBCT.

We explain below how we have reached these conclusions.

⁴¹ HoustonKemp, *Does DBCT's coal handling service satisfy criterion (b)?*, 28 May 2018, p 21.

4.3.1 Production forecasts provided by Wood Mackenzie

DLA has provided us with two forecasts of throughput at DBCT prepared by Wood Mackenzie, that is, those developed:

- contemporaneously to the estimates that were supplied to the DBCT User Group and its advisors in February 2018; and
- those developed more recently, in June 2018.

We note that the February 2018 forecasts provided by Wood Mackenzie for throughput at DBCT are higher than those reported by the DBCT User Group. The former forecast is for throughput at DBCT to increase to a maximum of 75.4 mtpa in 2024, sharply declining to 54.2 mtpa by 2030. We understand that Wood Mackenzie has advised DLA that the DBCT User Group amended its forecast of throughput at DBCT by moving some throughput from DBCT to HPCT.

As of June 2018, Wood Mackenzie's forecasts of throughput at DBCT have increased yet further to a maximum of 83.6 mtpa by 2026, with a much more gradual drop-off – to 79.0 mtpa by 2030.

The Wood Mackenzie forecasts identify the mines from which production is assumed to be handled at DBCT and those from which production is assumed to be handled at other terminals. This information indicates that Wood Mackenzie forecasts of throughput at AAPT, HPCT, RGTCT and Wiggins Island Coal Export Terminal (WICET) include production from mines that we assess as being in the market in which the DBCT service is supplied. These mines include all of those operated by BMA and BMC, and also:

- Lake Vermont, which Wood Mackenzie assumes exports coal through AAPT, DBCT and RGTCT;
- Middlemount, which Wood Mackenzie assumes exports coal through AAPT and DBCT;
- Kestrel, which Wood Mackenzie assumes exports coal through RGTCT; and
- Oaky Creek, which Wood Mackenzie assumes exports coal through RGTCT.

We use this information to prepare estimates of total foreseeable demand in the market by reference to the forecast production of customers in the market, rather than the forecast throughput at DBCT.

4.3.2 Estimates of total foreseeable demand in the market

At appendix A1 of our earlier report, we provided a table including each mine that we assessed as being in the market, and the forecasts of production from those mines over the period from 2021 to 2030. We reproduce this at table 4.1 below. For clarification, we observe the production forecasts embodied at table 4.1 are sourced from AME, and Wood Mackenzie transport data is used to determine the list of mines that we assess as being in the market.

We have used the February 2018 and June 2018 Wood Mackenzie forecasts to construct alternative estimates of total foreseeable demand in the market. These estimates are shown at table 4.2 and table 4.3 below.⁴²

Wood Mackenzie provides production forecasts for most but not all of the mines that we assess to be in the market. It does not provide production forecasts for Talwood, Grosvenor West, Saraji East, Denham, Winchester South (in February 2018), Hillalong and Teresa. However, Wood Mackenzie prepares forecasts

⁴² Wood Mackenzie and AME use different naming conventions for some mines. In comparing production forecasts, we assume that: AME's Capcoal mine is equivalent to Wood Mackenzie's German Creek Grasstree and Lake Lindsay mines; AME's Oaky Creek mine is equivalent to Wood Mackenzie's Oaky North mine; AME's Moorvale West mine is equivalent to Wood Mackenzie's Moorvale mine; and AME's Goonyella mine is equivalent to Wood Mackenzie's Goonyella Riverside and Broadmeadow mines.

for two mines within the geographic scope of the market that are not captured within the AME dataset – namely, Rockwood and Carborough Downs.

Total foreseeable demand in the market assessed on the basis of coal handling throughput over the period for which the service would be declared is:

- between 123.7 mtpa and 147.6 mtpa using Wood Mackenzie's February 2018 forecasts; and
- between 132.2 mtpa and 151.7 mtpa using Wood Mackenzie's June 2018 forecasts.

We explained in our earlier report why we expect that the demand for throughput would be, on average, 90 per cent of the demand for contracted capacity.⁴³ Taking into account this difference, total foreseeable demand in the market assessed on the basis of coal handling contract capacity over the period for which the service would be declared is:

- between 137.4 mtpa and 163.9 mtpa using Wood Mackenzie's February 2018 forecasts; and
- between 146.9 mtpa and 167.7 mtpa using Wood Mackenzie's June 2018 forecasts.

All these estimates of total foreseeable demand materially exceed existing capacity at DBCT and, in fact, exceed the capacity of DBCT with all expansion options implemented – including the 9X expansion, which is subject to significant uncertainty as to its feasibility.

4.3.3 Estimates of total foreseeable demand in the market excluding volumes supplied at HPCT

These estimates of total foreseeable demand include production from mines operated by BMA and BMC. We set out at section 3.2.1 that this inclusion is appropriate because all of these mines are either current, recent or potential customers of DBCT and prefer to use coal handling services at the Port of Hay Point.

However, we note at section 2 above that PwC distinguishes the coal handling service provided at HPCT from that provided at other coal terminals by reference to the fact that it is not a common-user facility. We understand that PwC contends that the coal handling service at HPCT is therefore not supplied in the relevant market.

Notwithstanding our disagreement with this contention, we also examine the effect of preparing an alternative estimate of total foreseeable demand in the market, using Wood Mackenzie data, which excludes 55 mtpa on the basis that this represents the volume of coal handling services supplied at HPCT.⁴⁴ This assumes that the 'overflow' of BMA and BMC volumes served at common-user terminals, such as DBCT, remain in the relevant market and are included in total foreseeable demand in the market.⁴⁵

Assessed on this basis, total foreseeable demand in the market for coal handling throughput over the period for which the service would be declared is:

- between 68.7 mtpa and 92.6 mtpa using Wood Mackenzie's February 2018 forecasts; and
- between 77.2 mtpa and 96.7 mtpa using Wood Mackenzie's June 2018 forecasts.

Total foreseeable demand in the market assessed on the basis of coal handling contract capacity over the period for which the service would be declared is therefore:

⁴³ HoustonKemp, *Does DBCT's coal handling service satisfy criterion (b)?*, 28 May 2018, p 37.

⁴⁴ We assume for this purpose that the contract utilisation at HPCT is 100 per cent.

⁴⁵ We note that it is unlikely to be appropriate to assume that HPCT could economically be expanded. We understand that the total capital expenditure associated with expanding HPCT from 44 mtpa to 55 mtpa was approximately \$3 billion – see BHP's website, <https://www.bhp.com/media-and-insights/news-releases/2015/12/new-bma-hay-point-coal-terminal-boosts-queenslands-coal-exports>, accessed 10 July 2018. . This substantially exceeds estimates of the unit costs of expanding DBCT, as set out at HoustonKemp, *Does DBCT's coal handling service satisfy criterion (b)?*, 28 May 2018, p 41.

- between 76.3 mtpa and 102.8 mtpa using Wood Mackenzie's February 2018 forecasts; and
- between 85.8 mtpa and 107.5 mtpa using Wood Mackenzie's June 2018 forecasts.

All these estimates of total foreseeable demand materially exceed existing capacity at DBCT, and the total foreseeable demand for contracted capacity also exceeds the capacity of DBCT with the Zone 4 and 8X expansions implemented.

Table 4.1: Total foreseeable demand for throughput in the market by mine (AME forecast production)

Operator	Mine	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Anglo American	Capcoal	7.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9
	Grosvenor	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
	Moranbah North	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
	Moranbah South	1.8	5.0	9.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0
Aquila	Eagle Downs	3.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
	Talwood	0.0	0.0	0.0	0.9	1.6	3.6	3.6	3.6	3.6	3.6
BHP Mitsubishi Alliance	Caval Ridge	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
	Daunia	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
	Goonyella	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8
	Grosvenor West	1.5	2.6	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
	Peak Downs	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
	Saraji	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5
	Saraji East	0.0	0.0	0.0	1.0	2.5	4.0	5.5	7.0	7.0	7.0
BHP Mitsui Coal	Poitrel	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
	South Walker Creek	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
Fitzroy Resources	Ironbark No. 1	1.7	2.6	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
Glencore	Clermont	13.0	13.0	13.0	13.0	13.0	13.0	0.0	0.0	0.0	0.0
	Oaky Creek	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
Jellinbah Group	Lake Vermont	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3
Middlemount Coal	Middlemount	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
New Hope	New Lenton	1.3	1.3	1.3	3.2	3.2	3.2	3.2	3.2	3.2	3.2
Peabody	Codrilla	0.0	0.0	0.0	0.0	0.9	1.8	3.2	3.2	3.2	3.2
	Coppabella	4.0	4.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Denham	0.0	0.0	0.0	0.0	0.7	2.9	3.5	4.5	5.5	6.0
	Moorvale West	0.0	0.0	0.4	1.0	1.0	1.0	1.0	1.0	1.0	1.0

Operator	Mine	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
	North Goonyella	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
	Olive Downs North	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	Vermont East/Willunga	0.0	0.0	0.6	1.3	2.0	3.1	3.1	3.1	3.1	3.1
	West/North Burton	0.0	0.0	0.0	0.4	1.0	1.0	1.0	1.0	1.0	1.0
Realm Resources	Foxleigh	3.3	3.3	3.3	3.3	3.3	0.0	0.0	0.0	0.0	0.0
Rio Tinto	Hail Creek	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
	Kestrel	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7
	Winchester South	0.0	0.0	0.0	0.0	0.0	1.8	3.6	4.0	4.0	4.0
Shandong Energy Group	Hillalong	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.5	3.5
Stanmore Coal	Isaac Plains	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	0.0	0.0
Terracom	Blair Athol	2.0	2.0	2.0	2.0	2.0	0.0	0.0	0.0	0.0	0.0
United Mining Group	Teresa	0.0	2.0	2.9	3.3	6.4	6.4	6.4	6.4	6.4	6.4
Yanzhou	Harrybrandt	0.0	0.0	0.0	1.0	2.5	2.5	2.5	2.5	2.5	2.5
Total foreseeable demand		150.9	156.1	164.8	172.7	182.4	186.7	179.0	181.9	181.6	182.1
Less capacity of HPCT		55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
Total foreseeable demand (excluding HPCT capacity)		95.9	101.1	109.8	117.7	127.4	131.7	124.0	126.9	126.6	127.1

Source: AME terminal charge and production volumes data, Wood Mackenzie transport charge data, HoustonKemp analysis

Table 4.2: Total foreseeable demand for throughput in the market by mine (Wood Mackenzie February 2018 forecast production)

Operator	Mine	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Anglo American	Capcoal	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
	Grosvenor	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8
	Moranbah North	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7
	Moranbah South	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5
Aquila	Eagle Downs	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BHP Mitsubishi Alliance	Caval Ridge	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
	Daunia	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2
	Goonyella	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
	Peak Downs	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.9
	Saraji	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
BHP Mitsui Coal	Poitrel	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
	South Walker Creek	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Fitzroy Resources	Carborough Downs	1.8	1.8	1.8	1.8	1.8	0.9	0.0	0.0	0.0	0.0
	Ironbark No. 1	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Glencore	Clermont	13.0	13.0	13.0	13.0	13.0	2.0	0.0	0.0	0.0	0.0
	Oaky Creek	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Jellinbah Group	Lake Vermont	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8
Middlemount Coal	Middlemount	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	3.7	0.0
New Hope	New Lenton	0.5	1.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Peabody	Codrilla	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Coppabella	4.0	4.0	4.0	4.0	4.0	4.0	1.6	0.0	0.0	0.0
	Moorvale West	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	North Goonyella	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
	Olive Downs North	0.0	0.0	0.0	0.0	0.0	0.4	0.8	0.8	0.8	0.8
	Vermont East/Willunga	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	2.0

Operator	Mine	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
	West/North Burton	1.5	1.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Realm Resources	Foxleigh	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	2.9	0.0
Rio Tinto	Hail Creek	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
	Kestrel	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Stanmore Coal	Isaac Plains	1.8	1.8	1.8	1.8	1.8	1.8	0.1	0.0	0.0	0.0
Terracom	Blair Athol	1.6	1.6	1.6	1.2	0.0	0.0	0.0	0.0	0.0	0.0
U & D Coal	Rockwood	0.0	0.0	1.0	2.0	3.0	3.0	3.0	3.0	3.0	3.0
Yanzhou	Harrybrandt	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total foreseeable demand		146.9	146.0	147.2	147.6	147.4	135.9	129.3	127.6	127.9	123.7
Less capacity of HPCT		55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
Total foreseeable demand (excluding HPCT capacity)		91.9	91.0	92.2	92.6	92.4	80.9	74.3	72.6	72.9	68.7

Source: AME terminal charge data, Wood Mackenzie production volumes and transport costs data, HoustonKemp analysis.

Table 4.3: Total foreseeable demand for throughput in the market by mine (Wood Mackenzie June 2018 forecast production)

Operator	Mine	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Anglo American	Capcoal	9.5	9.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
	Grosvenor	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
	Moranbah North	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2
	Moranbah South	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Aquila	Eagle Downs	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BHP Mitsubishi Alliance	Caval Ridge	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
	Daunia	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2
	Goonyella	17.5	18.5	18.5	18.5	18.5	18.5	18.5	18.5	18.5	18.5
	Peak Downs	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0
	Saraji	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
BHP Mitsui Coal	Poitrel	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
	South Walker Creek	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Fitzroy Resources	Carborough Downs	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	2.0	3.0
	Ironbark No. 1	0.4	1.2	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Glencore	Clermont	12.5	12.5	12.5	12.5	12.5	12.5	1.5	0.0	0.0	0.0
	Oaky Creek	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Jellinbah Group	Lake Vermont	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2
Middlemount Coal	Middlemount	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	1.3	0.0
New Hope	New Lenton	0.5	1.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Peabody	Codrilla	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Coppabella	4.0	4.0	4.0	4.0	0.9	0.0	0.0	0.0	0.0	0.0
	Moorvale West	2.5	2.5	2.5	2.5	0.7	0.0	0.0	0.0	0.0	0.0
	North Goonyella	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
	Olive Downs North	0.0	0.0	0.0	0.0	0.0	0.4	0.8	0.8	0.8	0.8
	Vermont East/Willunga	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	2.0

Operator	Mine	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
	West/North Burton	1.5	1.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Realm Resources	Foxleigh	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Rio Tinto	Hail Creek	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
	Kestrel	5.3	5.3	5.3	5.4	5.5	5.5	5.5	5.5	5.5	5.5
	Winchester South	0.0	0.0	0.0	1.5	3.0	4.5	6.0	6.5	6.5	6.5
Stanmore Coal	Isaac Plains	2.1	1.9	1.8	1.8	1.8	1.6	1.6	1.5	0.0	0.0
Terracom	Blair Athol	1.7	1.7	1.7	1.7	1.7	1.5	0.0	0.0	0.0	0.0
U & D Coal	Rockwood	2.5	2.5	2.5	2.5	2.3	2.0	2.0	1.7	0.0	0.0
Total foreseeable demand		150.6	151.7	149.6	151.0	147.3	147.1	136.5	136.1	132.2	132.9
Less capacity of HPCT		55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
Total foreseeable demand (excluding HPCT capacity)		95.6	96.7	94.6	96.0	92.3	92.1	81.5	81.1	77.2	77.9

Source: AME terminal charge data, Wood Mackenzie production volumes and transport costs data, HoustonKemp analysis

5. Meeting foreseeable demand at least cost

This section describes our approach to assessing the least cost means of meeting total foreseeable demand in the market and compares it with the approach adopted by PwC.

There are three key features of the assessment of least cost:

- the range of options that are considered as being potentially available to serve total foreseeable demand in the market;
- the scope of costs that are captured in the assessment of least cost; and
- the measure of costs that are captured in the assessment of least cost.

Our approach and that proposed by PwC are relatively closely aligned in respect of the first two features. We both consider that it is relevant to:

- assess the costs of meeting foreseeable demand using available capacity at existing terminals and using newly constructed capacity at expanded terminals (or new developments); and
- take into account the costs relating to both coal handling at the terminal and rail transport to the terminal.

However, there are significant differences in our approaches in relation to the measure of costs that are to be captured in the assessment of least cost. Whereas we identify that the relevant costs are *incremental costs to society* (or resource) costs, PwC's assessment of the costs of meeting foreseeable demand using available capacity at existing terminals is based on *charges*, which reflect *average* costs rather than *incremental costs*.

The effect of this incorrect use of average costs is that PwC significantly overstates the relative cost of meeting foreseeable demand using available capacity at existing terminals. We show that when PwC's comparison is reframed to use incremental costs, its analytical framework confirms that meeting total foreseeable demand in excess of DBCT's current capacity will be achieved at least cost using available capacity at existing terminals other than DBCT, including AAPT and RGTCT.

5.1 Options to serve total foreseeable demand in the market

PwC explains that to assess whether the single terminal at DBCT is the least cost option to serve total foreseeable demand in the market requires consideration of:

- the cost of existing capacity at the existing terminal,
- the cost of the incremental expansions to the existing terminal infrastructure, or alternative (non-DBCT) terminal options, in various combinations as might be necessary to service total foreseeable demand, and
- the cost of alternative export pathways outside of the market for DBCT's services, including the costs of transporting coal using existing rail networks to export coal at the ports of Abbot Point and Gladstone.

Setting aside differences between us and PwC in respect of the scope of the market and the level of total foreseeable demand in the market, we agree with this basic framework for consideration of the least cost

means of meeting demand. PwC's approach is consistent with the approach we set out in our earlier report.⁴⁶

We also agree with PwC's stated approach to considering the costs of meeting foreseeable demand, even from terminals that do not currently provide services in the market.⁴⁷ This is particularly important when demand is forecast to be increasing over time, potentially driving expansions of terminal capacity. Since terminal expansions may be very costly, it is likely that the prospect of these costs may make it less costly to serve demand that exceeds capacity using available capacity at other terminals.

This contrasts with the view expressed by the DBCT User Group that:⁴⁸

The issue of the costs of meeting demand from existing terminals does not actually arise based on the appropriate market definition – as there is, and will continue to be for the proposed declaration period, no other operating terminal in the Hay Point common user coal handling services market.

This statement is founded on an assumption that the focus of the assessment of criterion (b) should be made only by reference to those facilities that are considered to be in the market. However, there is no basis for this contention. An assessment of the least cost means by which to serve foreseeable demand can objectively be made by reference to the option of any facility whether inside or outside the market.

5.2 Costs captured in the assessment of least cost

We explain in our previous report that the appropriate costs to analyse in the assessment of least cost are the incremental costs to society associated with rail access and rail haulage as well as terminal infrastructure and handling. We describe these as 'resource costs'.

Our focus on incremental costs to society (or resource costs) is appropriate because:⁴⁹

- the sunk costs of existing rail and terminal infrastructure have already been incurred and will not be incurred again over the period for which the service would be declared; and
- even if the sunk costs of existing rail and terminal infrastructure were to be taken into account in an assessment of least cost, these costs would be captured under all scenarios in which total foreseeable demand in the market is met and are therefore not relevant to determining whether the facility for the service can meet this demand at least cost.

PwC is in broad alignment with our perspective on the scope of costs to be included in the assessment – it also examines both rail and terminal costs. However, its approach to estimating the costs associated with meeting foreseeable demand varies depending on the nature of the costs. In our view, this inconsistency gives rise to some significant difficulties in PwC's assessment of least cost.

PwC's conclusions on least cost are summarised in figure 8 of its report in which it assesses the costs of alternative means of meeting foreseeable demand as:⁵⁰

- \$4.86 per tonne, using existing capacity at DBCT;
- \$8.02 per tonne, using expanded capacity at DBCT with the Zone 4 and 8X expansions;

⁴⁶ HoustonKemp, *Does DBCT's coal handling service satisfy criterion (b)?*, 28 May 2018, p 20.

⁴⁷ While PwC state that it includes this for 'completeness only', for the reasons we set out above there may be some circumstances in which facilities that are not in the market may contribute to serving total foreseeable demand in the market at least cost.

⁴⁸ Dalrymple Bay Coal Terminal User Group, *Declaration review regarding Dalrymple Bay Coal Terminal: Submission to the Queensland Competition Authority*, 30 May 2018, p 71.

⁴⁹ HoustonKemp, *Does DBCT's coal handling service satisfy criterion (b)?*, 28 May 2018, p 21.

⁵⁰ PricewaterhouseCoopers, *Dalrymple Bay Coal Terminal User Group: 2018 access declaration review*, 29 May 2018, p 34.

- \$12.50 per tonne, using existing capacity at RGTCT;
- \$18.00 per tonne, using existing capacity at AAPT;
- \$28.46 per tonne, using new capacity at Dudgeon Point (stage 1);
- \$30.00 per tonne, using existing capacity at WICET; and
- \$32.47 per tonne, using expanded capacity at DBCT with the Zone 4, 8X and 9X expansions.

We understand that these estimates are produced by reference to an assessment of the least cost option to serve 95 mtpa.

We explain in section 4.2 that there is an important difference between an assessment of whether DBCT can meet total foreseeable demand at least cost depending on whether this demand:

- exceeds the existing capacity of the terminal, thereby requiring significant capital investment in new capacity so as to meet this demand at DBCT; or
- does not exceed the existing capacity of the terminal, such that demand can be met at the terminal without new capital expenditure.

As a matter of principle, we agree with the approach used by PwC to estimate the cost of using *new or expanded capacity* to meet foreseeable demand. In particular, the approach is based on the incremental costs of the expansions, spread over the demand that would be served by the increased capacity. This is consistent with our own approach to capturing these costs.⁵¹

However, there are important deficiencies with PwC's approach to estimating the costs associated with meeting foreseeable demand using *existing capacity*, whether at DBCT or at alternative coal terminals. In particular, PwC's estimates of these costs:

- represent an incorrect basis for assessing the cost of meeting total foreseeable demand in the market because they reflect *average costs* rather than *incremental costs*; and
- may reflect an 'apples' with 'oranges' comparison because it appears to include only the terminal cost in respect of DBCT, but both the terminal and rail costs for other terminals.

5.2.1 PwC does not measure incremental costs

PwC's estimates of the costs of using existing terminal capacity to meet foreseeable demand are based primarily on *charges* for rail and terminal services, which are in turn based on *average costs*, rather than *incremental costs*. This causes PwC to overstate significantly the costs associated with meeting foreseeable demand at existing facilities.

Costs that are not incremental will be incurred regardless of whether they are used to meet demand or not. Critically, this means that they cannot be *avoided* if foreseeable demand is met elsewhere. PwC's framework for assessing least cost does not take this into account.

The costs associated with the construction of existing coal terminals are sunk. These costs were incurred in the past and now cannot be avoided, regardless of whether, prospectively, the terminal is used or not. Similarly, many of the costs associated with the operation of existing coal terminals are fixed and do not change based on the utilisation of the terminal.

⁵¹ We note that PwC uses lower capital costs for DBCT expansions and a lower cost of capital than our assumptions, meaning that its assessment of the unit cost of an expansion of DBCT is somewhat lower than how we would estimate it on the same basis.

Box 5.1: Only incremental costs are relevant to the assessment of least cost

The importance of costs that are unavoidable to the assessment of least cost can be demonstrated by reference to a simple example. Suppose that there are two means of meeting total foreseeable demand, using either:

- available capacity at terminal A, which is currently in operation; or
- new capacity at terminal B, which is yet to be constructed.

Suppose further that the capacities of terminal A and terminal B are each sufficiently great to meet total foreseeable demand on a standalone basis.

In these circumstances, the cost of meeting total foreseeable demand at terminal B would be expected to be considerably higher than the cost of meeting total foreseeable demand at terminal A because:

- to meet the demand at terminal B would necessitate the construction and operation of an entirely new terminal; whereas
- to meet the demand at terminal A would require only modestly higher operating costs at terminal A.

The sunk and fixed costs at terminal A do not factor into this assessment. This is because these costs are incurred whether total foreseeable demand is met at terminal A or terminal B. They do not change an assessment of which option is the least cost means to meet total foreseeable demand.

Using the example in Appendix B of the QCA staff issues paper, facility V processes 180 widgets per year at a cost of \$1 per widget, whereas total foreseeable demand in the market is 200 widgets per year. To meet total foreseeable demand in the market:

- facility V may be expanded to process an additional 20 widgets at an incremental cost of \$24; or
- facility W may process an additional 20 widgets at an incremental cost of \$22.

For facility V to satisfy total foreseeable demand in the market would give rise to total costs of \$204 per year. However, if facility W were to meet 20 widgets of this demand, then the costs of meeting total foreseeable demand would be \$202 per year.

In this example, the cost of meeting total foreseeable demand at facility V is greater than the cost of meeting total foreseeable demand across facility V and facility W. That is, total foreseeable demand in the market cannot be met by the facility for the service at least cost.

Most of the costs cited by PwC as being relevant to the use of existing capacity at terminals are not incremental costs and would be incurred whether or not this capacity is used to meet foreseeable demand. PwC should therefore either:

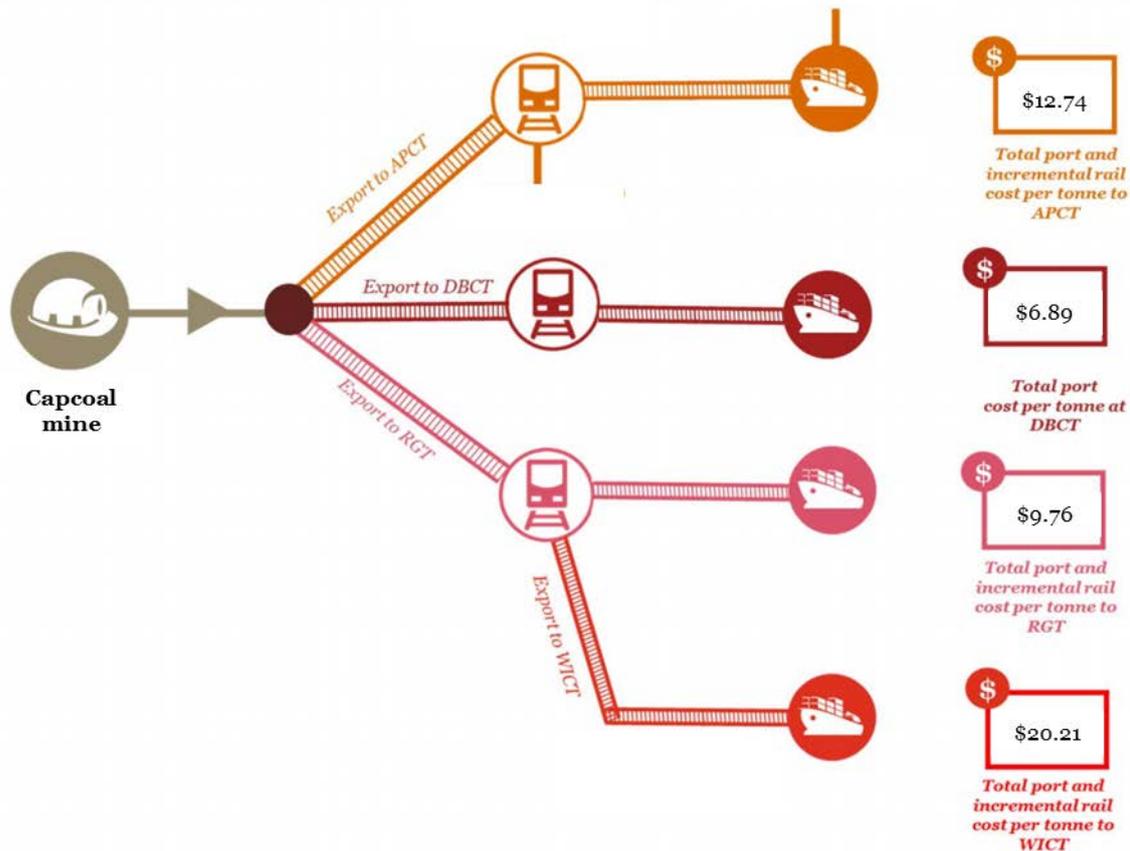
- ignore these non-incremental costs from its assessment of the cost of meeting foreseeable demand using existing capacity; or
- factor these non-incremental costs into its assessment of the cost of meeting foreseeable demand from all alternatives, including alternatives using existing capacity and those using expanded or new capacity.

The effect of these options is the same. We demonstrate their effect below, by reference to the example of Capcoal mine.

Figure 5.1 below illustrates our calculation of the alternative charges for Capcoal mine to export coal through DBCT and alternative coal terminals. Figure 5.1 shows that the charges associated with using the DBCT

service are lower than the charges associated with other terminals, which is consistent with Capcoal being located within the relevant market in which the DBCT service is supplied.

Figure 5.1: Alternative cost pathways for Capcoal mine using charges



Source: AME terminal charges, Wood Mackenzie rail charges

Figure 5.2 below demonstrates this comparison using only incremental costs, where we estimate incremental costs as:

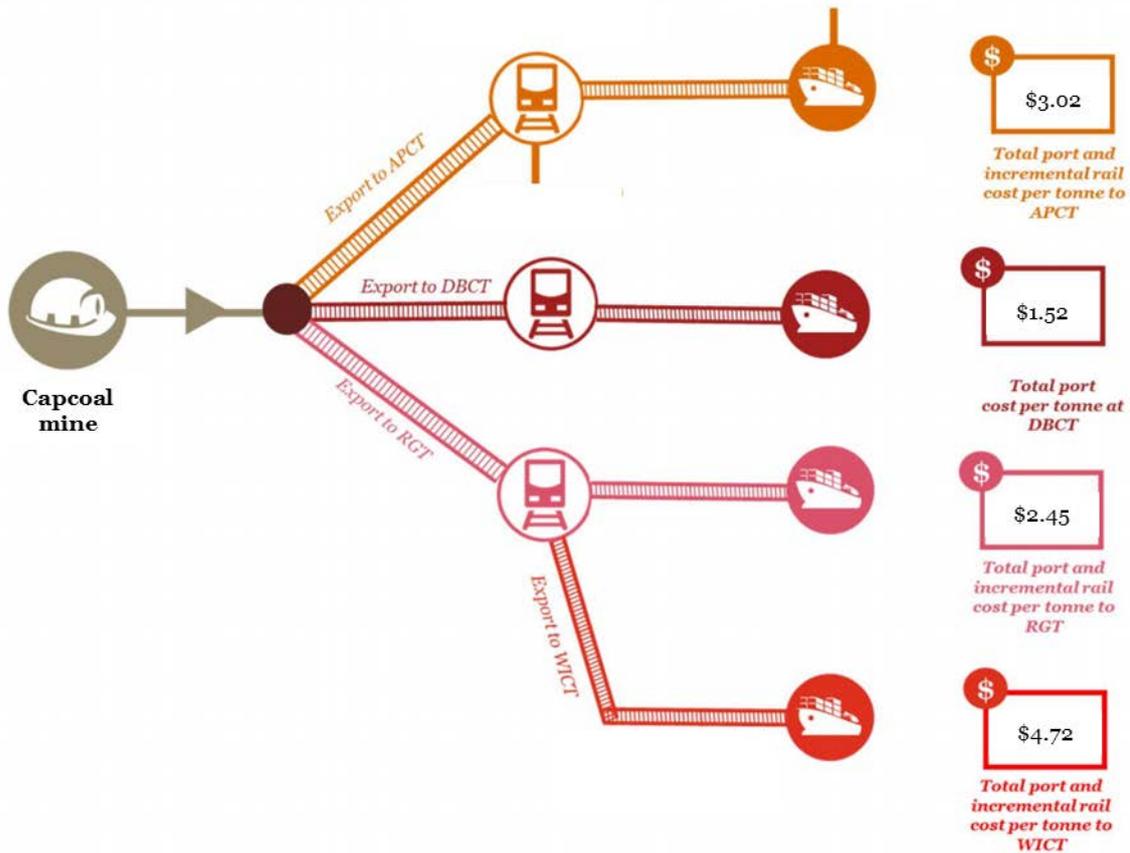
- 22 per cent of coal handling charges, based on the relative share of DBCT's Handling Charge Variable as against total coal handling charges that apply from 1 April 2018;⁵²
- 17 per cent of rail access charges, based on access undertakings for Aurizon's rail network;⁵³ and
- 50 per cent of rail haulage charges.⁵⁴

⁵² HoustonKemp, *Does DBCT's coal handling service satisfy criterion (b)?*, 28 May 2018, p 65. The HCV for DBCT effective from 1 April 2018 is \$1.0953 per tonne while the total port handling charges were \$4.9467 per tonne.

⁵³ HoustonKemp, *Does DBCT's coal handling service satisfy criterion (b)?*, 28 May 2018, p 69. The QCA's draft decision for Aurizon's draft access undertaking in December 2017 allowed \$1,560 million of operating and maintenance expenditure over the control period, representing 40.1 per cent of total costs which are included as allowable revenue – see QCA, *Draft decision: Aurizon Networks' 2017 draft access undertaking*, December 2017, p 4. Separately, the QCA found that, for the West Moreton network operated by Queensland Rail, the proportion of variable maintenance costs was 42.7 per cent – see QCA, *Decision: Queensland Rail's draft access undertaking*, June 2016, pp 128-129. We estimate the proportion of rail access charges that are variable costs as the product of these two values.

⁵⁴ HoustonKemp, *Does DBCT's coal handling service satisfy criterion (b)?*, 28 May 2018, *Does DBCT's coal handling service satisfy criterion (b)?*, 28 May 2018, p 69. There is limited information upon which to estimate the proportion of rail haulage charges that reflect

Figure 5.2: Alternative cost pathways for Capcoal mine using incremental costs



Source: AME terminal charges, Wood Mackenzie rail charges

Figure 5.2 shows that the incremental costs of using available capacity at existing terminals are:

- much lower than the charges associated with using available capacity at existing terminals; and
- much lower than any of the DBCT expansion scenarios costed by PwC.

Although existing capacity at DBCT remains the lowest cost option for meeting foreseeable demand, if total foreseeable demand in the market exceeds the existing capacity of DBCT then the least costly alternative will be for coal mined at Capcoal to be served using available capacity at RGTCT – rather than using expanded capacity at DBCT. Similarly, utilising available capacity at AAPT and WICET are all lower cost means of meeting foreseeable demand than expanding DBCT.

5.2.2 PwC’s comparison of costs may not be on a like-for-like basis

PwC does not fully explain the basis for its comparison between charges for exporting coal from DBCT as against from alternative coal terminals. It compares the ‘total port cost per tonne at DBCT’ as against the ‘total port and incremental rail cost per tonne’ to other terminals but does not explain the calculation of the ‘incremental rail cost’.

incremental costs. Reflecting that these charges are likely to rely to be less capital intensive than those for rail access and coal handling charges.

Setting aside the issues that we note at section 5.2.1 above, this comparison will be appropriately specified if the 'total port and incremental rail cost per tonne' refers to:

- the alternative terminal charge; plus
- the rail charges to the alternative terminal; less
- the rail charges to DBCT.

This specification makes no assumptions about existing contracts that have been entered into with any terminal or rail transport provider and is equivalent to a direct comparison of the total terminal and rail costs to each terminal.

However, it is not clear that this is the basis for the comparison drawn by PwC. It appears possible that it may have adopted estimates of the 'total port and incremental rail cost per tonne' without deducting the rail charges to DBCT, on the assumption that these rail charges will be incurred in any case due to take-or-pay transport arrangements.

This second basis for comparing costs is not a reasonable basis for assessing the costs of meeting foreseeable demand. Existing contractual relationships do not affect costs to society and are not relevant to the assessment of least cost. This approach to assessing least cost overestimates the relative cost of meeting foreseeable demand using available capacity at other terminals.

Although we are unable to ascertain whether PwC's comparisons are affected by this issue, the comparisons that we develop at appendix A1 below and in figure 5.2 above use the 'apples with apples' specification that we describe above.

6. Declaration

We are pleased to confirm that in relation to the analysis presented and the conclusions drawn in our report:

- the factual matters set out in our report are, as far as the we know, true:
- in preparing this report, we have made all enquiries we consider appropriate; and
- that the opinions stated in our report are genuinely held by us and that our report contains reference to all matters the we consider significant.

Greg Houston/Daniel Young
13 July 2018

A1. Comparison of alternative cost pathways

PwC compares the relative charges for a representative DBCT user to export coal as against the charges for using available capacity at other terminals. The diagram at figure 7 of PwC's report purports to show these relative charges. Figure 7 is reproduced in this report at figure 3.3 above.

It is important at the outset to distinguish this comparison from an analysis of least cost. For the reasons we explain in section 5.2 above, a comparison of the charges associated with accessing existing capacity at different terminals is not an appropriate basis for an assessment of least cost. An assessment of least cost would properly include:

- consideration of only the incremental costs associated with meeting foreseeable demand, rather than charges; and
- the costs of expanding capacity at DBCT in circumstances in which total foreseeable demand in the market exceeds the existing capacity at DBCT.

Subject to the reservations we state below, the analytical framework used by PwC to compare the charges for miners to access existing capacity at different terminals is better suited for use in the market definition step. Indeed, it bears some similarities to the approach that we applied in our earlier report for defining the market in which the DBCT service is supplied.⁵⁵

However, a threshold issue is that it is not clear whether the comparison drawn at figure 7 of PwC's report is on an 'apples with apples' basis. PwC does not describe exactly what it means by 'incremental rail cost per tonne' and whether this calculation deducts the rail costs that would be saved from transporting coal to DBCT. We described this concern in more detail, in terms of its relevance to PwC's assessment of least cost, at section 5.2.2 above. The remainder of this appendix proceeds on the assumption that this concern does not arise, and that PwC's comparison is drawn on an 'apples with apples' basis.

Beyond this threshold issue, there are three fundamental difficulties with the comparison drawn by PwC in terms of its usefulness for market definition:

- PwC's comparison represents all users with a single snapshot of transport charges – an approach that glosses over the geographic variety in transport charges that is important to understanding the bounds of the geographic dimension of the market within which the DBCT service is supplied;
- PwC's comparison is based on data sourced from users rather than an independent body, and it finds a much greater difference between the charges associated with exporting coal through DBCT as compared to exporting coal at other locations, as compared with our calculations based on data sourced from Wood Mackenzie and AME; and
- PwC's comparison ignores the option for BHP-affiliated miners to choose between handling their coal at DBCT or at HPCT, which means that this comparison does not identify the substitution opportunities that are available to these miners.

Mines within the market in which the DBCT service is supplied vary according to their location. This means that the relative rail charges associated with transporting coal to DBCT as compared with potential alternative facilities for handling coal will also vary.

PwC's approach to representing the relative charges for coal transport and handling does not capture the richness of this variation – reducing it to a single comparison in which it appears that there is a stark contrast between the charges associated with using DBCT and the charges associated with using alternatives, with

⁵⁵ HoustonKemp, *Does DBCT's coal handling service satisfy criterion (b)?*, 28 May 2018, pp 23-35.

the charges to use DBCT being much lower than the alternatives. A more appropriate comparison would be to look at the choices faced by miners at different locations.

Furthermore, because PwC's comparison is based on data sourced from users, it is not possible to verify its estimates of rail and terminal charges or amend the comparison to a more appropriate basis.

We show below examples of the comparison that we have constructed using data from AME (for terminal charges) and Wood Mackenzie (for transport charges) for:

- Goonyella mine;
- Clermont mine;
- Capcoal mine; and
- Kestrel mine.

All of these mines are in the relevant market and would therefore be expected to face lower charges to use existing capacity at DBCT as compared to terminals in locations other than Hay Point. This is borne out in our example calculations, presented below.

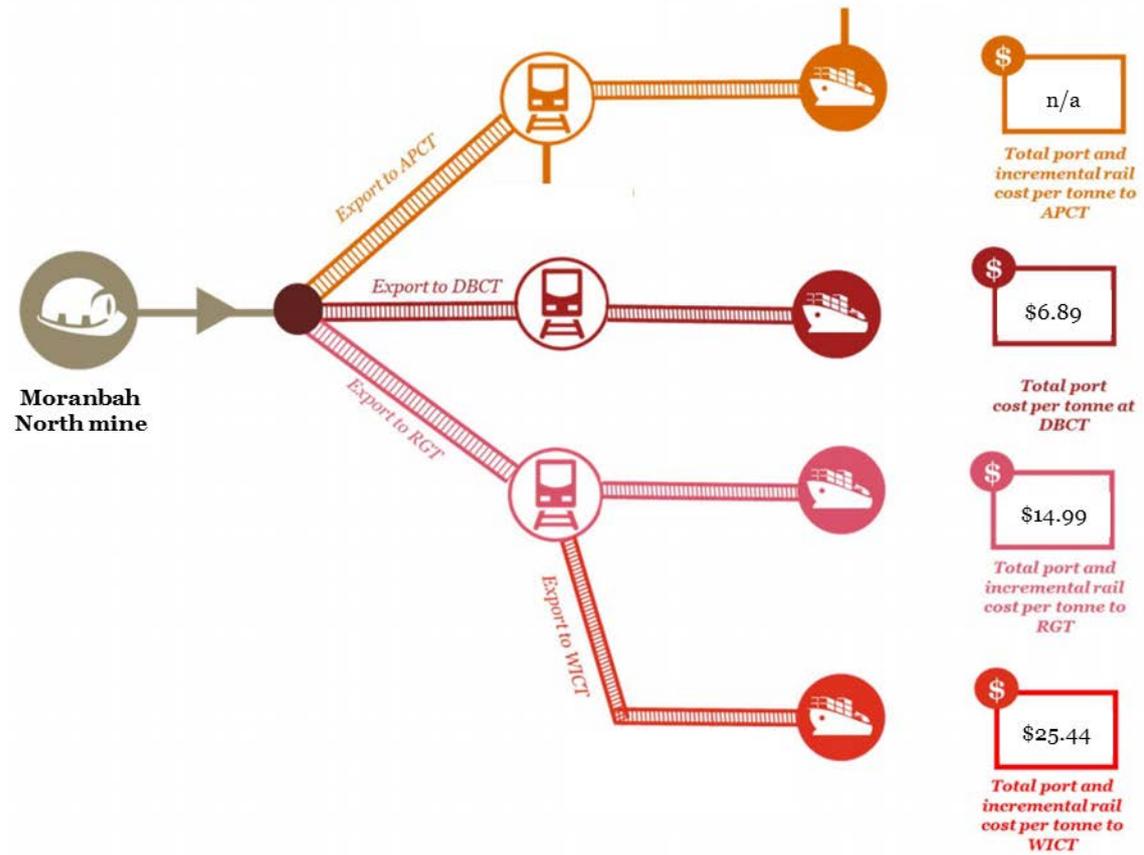
These examples demonstrate that the comparison between the costs of exporting coal from DBCT and from other terminals varies depending on the location of the mine and the rail infrastructure at the mine. In particular, they suggest that:

- while PwC's calculations present AAPT as being a distinctly inferior option to DBCT, by \$13.14 per tonne, for Clermont and Capcoal the incremental charges for accessing AAPT are only \$4.47 per tonne and \$5.85 per tonne more expensive respectively; and
- while PwC's calculations present RGTCT as being a distinctly inferior option to DBCT, by \$7.64 per tonne, for Capcoal and Kestrel the incremental charges for accessing RGTCT are only \$2.87 per tonne and \$1.82 per tonne more expensive respectively.

Figure A.1 shows this comparison for Moranbah North mine, owned by Anglo American and located in the northern part of the Goonyella system. Despite its location close to the GAPE, the rail infrastructure at the mine is not optimised to send coal north towards AAPT and so we assume that this option is not available to it.

Consistent with PwC's presentation, we compare the coal handling charges at DBCT compared to the coal handling charges and incremental cost of transporting coal to alternative terminals. This comparison establishes that, for Moranbah North, it would be around \$8.10 per tonne more expensive to export coal from RGTCT than from DBCT.

Figure A.1: Alternative cost pathways for Moranbah North mine

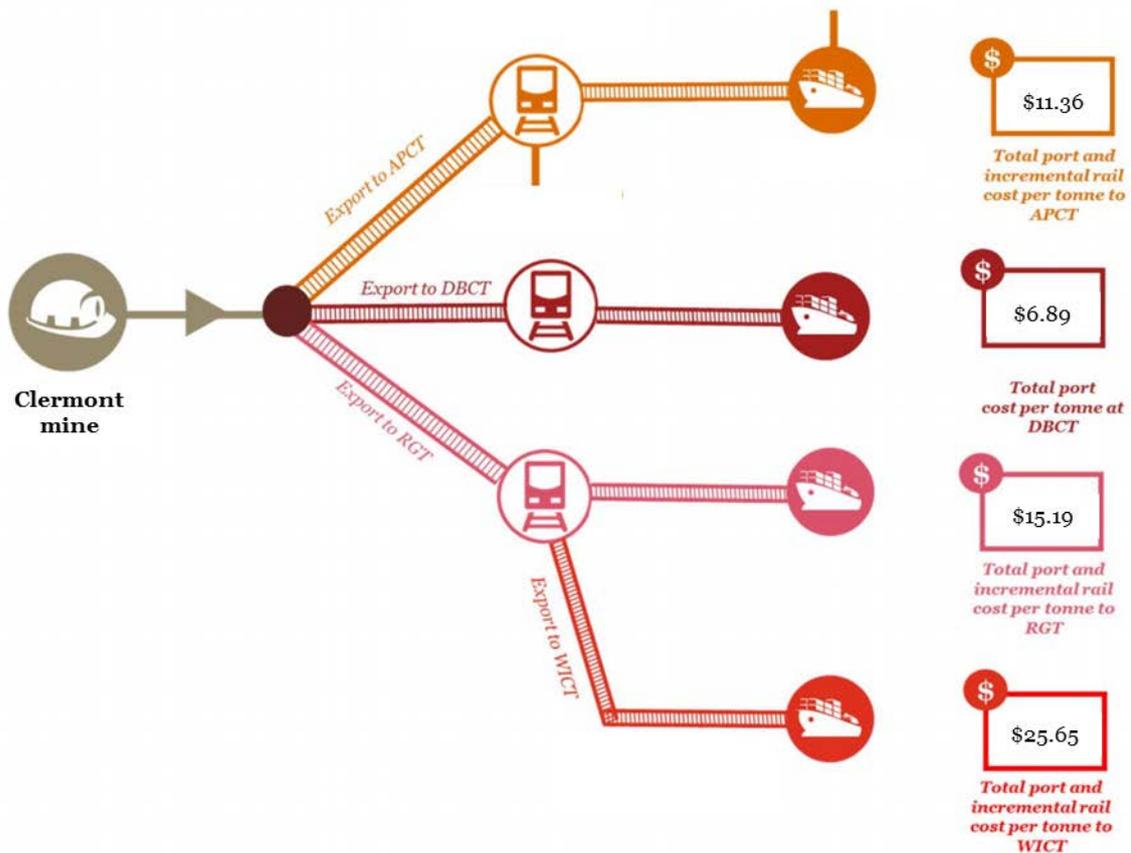


Source: AME terminal charges, Wood Mackenzie rail charges

Figure A.2 shows the equivalent comparison for Clermont mine, owned by Glencore and located in the south-west of the Goonyella system on the Blair Athol spur. Coal from this mine could feasibly be sent to AAPT, DBCT, RGTCT or WICET.

This comparison establishes that, for Clermont mine, it would be around \$4.47 per tonne more expensive to export coal from AAPT than from DBCT, and \$8.30 per tonne more expensive to export coal from RGTCT than from DBCT.

Figure A.2: Alternative cost pathways for Clermont mine

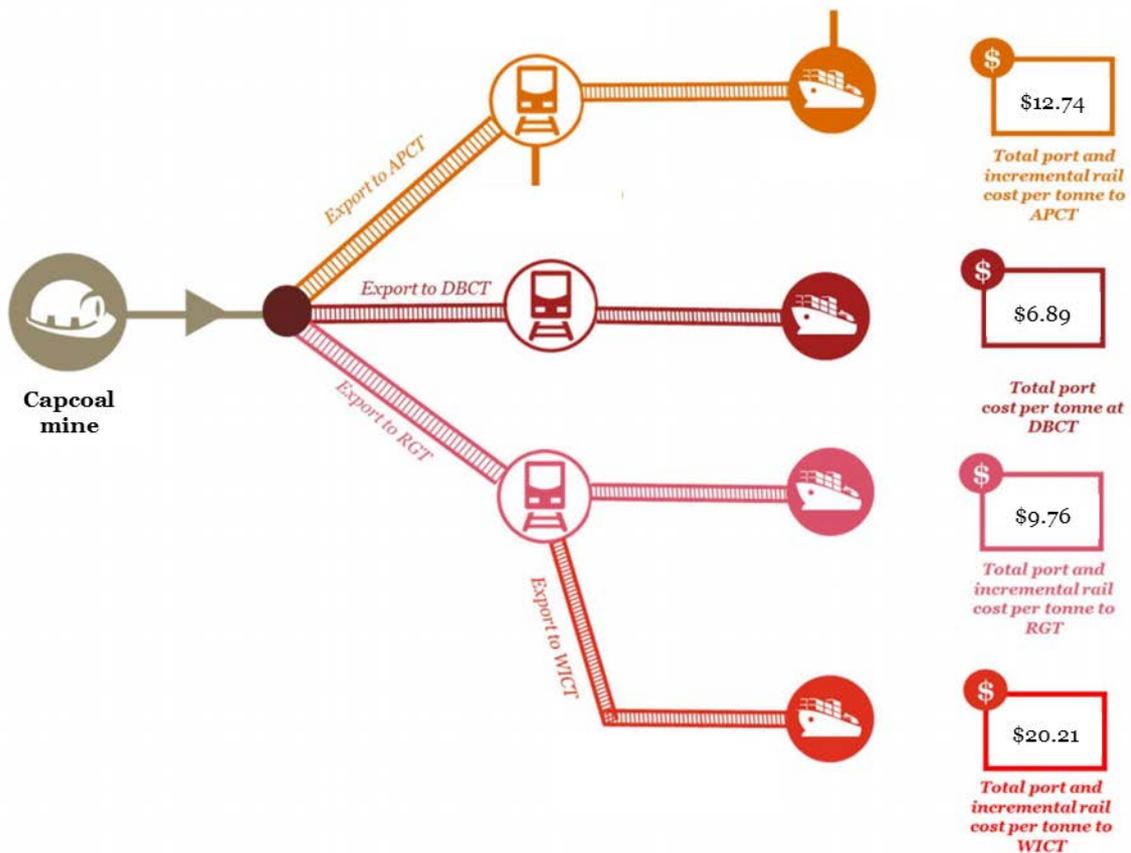


Source: AME terminal charges, Wood Mackenzie rail charges

Figure A.3 shows the equivalent comparison for Capcoal mine, owned by Anglo American and located in the southern part of the Goonyella system. Coal from this mine could feasibly be sent to any of AAPT, DBCT, RGTCT or WICET.

This comparison establishes that, for Capcoal mine, it would be around \$5.85 per tonne more expensive to export coal from AAPT than from DBCT, and \$2.87 per tonne more expensive to export coal from RGTCT than from DBCT.

Figure A.3: Alternative cost pathways for Capcoal mine

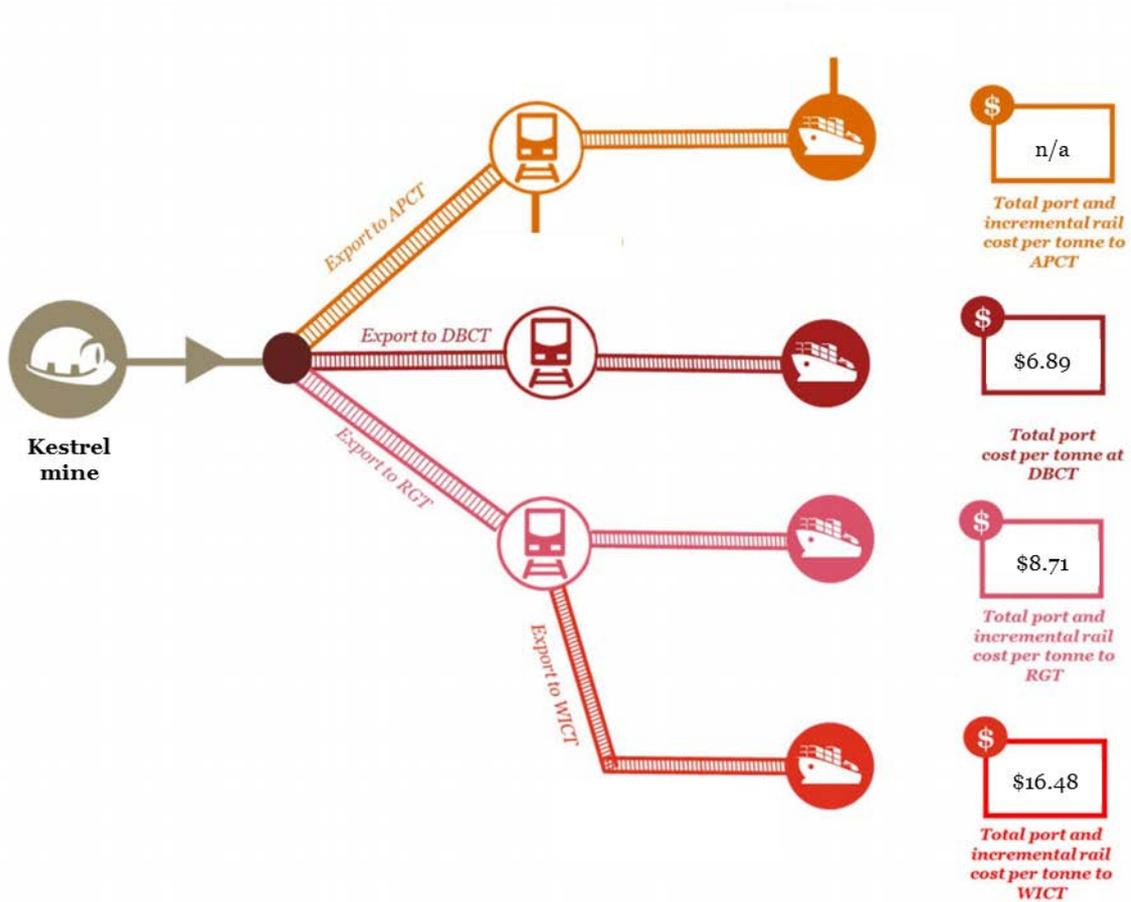


Source: AME terminal charges, Wood Mackenzie rail charges

Figure A.4 shows the equivalent comparison for Kestrel mine, owned by Rio Tinto and located in the northern part of the Blackwater system. Coal from this mine can be sent to DBCT, RGTCT and WICET.

This comparison establishes that, for Kestrel mine, it would be around \$1.82 per tonne more expensive to export coal from RGTCT than from DBCT.

Figure A.4: Alternative cost pathways for Kestrel mine



Source: AME terminal charges, Wood Mackenzie rail charges

Annexure 1 Curricula vitae



Greg Houston

Partner

HoustonKemp
Level 40, 161 Castlereagh St
Sydney NSW 2000
Tel: +61 2 8880 4810
Mob: +61 417 237 563
E-mail: Greg.Houston@houstonkemp.com
Web: HoustonKemp.com



Overview

Greg Houston is a founding partner of the firm of expert economists, HoustonKemp. He has twenty five years' experience in the economic analysis of markets and the provision of expert advice in litigation, business strategy, and policy contexts. His career as a consulting economist was preceded by periods working in a financial institution and for government.

Greg has directed a wide range of financial, competition and regulatory economics assignments during this consulting career. His work in the Asia Pacific region principally revolves around the activities of the enforcement and regulatory agencies responsible for these areas, many of whom also number amongst his clients. On competition and antitrust matters he has advised clients on merger clearance processes, competition proceedings involving allegations of anticompetitive conduct ranging from predatory pricing, anti-competitive agreements, anti-competitive bundling and price fixing. Greg also has deep experience of infrastructure access regulation matters, and intellectual property and damages valuation. In his securities and finance work Greg has advised clients on a large number of securities class actions, as well as market manipulation and insider trading proceedings, and on cost of capital estimation.

Greg's industry experience spans the aviation, beverages, building products, cement, e-commerce, electricity and gas, forest products, grains, medical waste, mining, payments networks, office products, petroleum, ports, rail transport, retailing, scrap metal, securities markets, steel, telecommunications, thoroughbred racing, waste processing and water sectors.

Greg has acted as expert witness in valuation, antitrust and regulatory proceedings before the courts, in various arbitration and mediation processes, and before regulatory and judicial bodies in Australia, Fiji, Malaysia, New Zealand, the Philippines, Singapore, the United Kingdom and the United States.

Prior to the formation of HoustonKemp in April 2014, Greg was a Director of the global firm of consulting economists, NERA Economic Consulting, where for twelve years he served on its United States' Board of Directors, for five years on its global Management Committee and for sixteen years as head of its Australian operations.

Greg also serves on the Competition and Consumer Committee of the Law Council of Australia.

Qualifications

1982 **University of Canterbury, New Zealand**
B.Sc. (First Class Honours) in Economics

Prizes and scholarships

1980 University Junior Scholarship, New Zealand

Career details

2014- **HoustonKemp Economists**
Partner, Sydney, Australia

1989-2014 **NERA Economic Consulting**
Director (1998-2014)
London, United Kingdom (1989-1997)
Sydney, Australia (1998-2014)

1987-89 **Hambros Bank, Treasury and capital markets**
Financial Economist, London, United Kingdom

1983-86 **The Treasury, Finance sector policy**
Investigating Officer, Wellington, New Zealand

Project experience¹

Competition, access and mergers

2018 **Queensland Rail**
Access to facilities
Advice in relation to the Queensland Competition Authority's review of the presently declared status of services provided by QR's five rail networks.

2018 **Westpac Banking Corporation**
Competition analysis
Expert report prepared for the Productivity Commission in response to the draft finding in its banking competition inquiry that each of Australia's banks holds substantial market power.

2017-18 **Ashurst/Confidential client**
Anti-competitive bundling
Advice in relation to an ACCC investigation of bundled discounts that are alleged to have had an anti-competitive effect.

2018 **DLA Piper/DBCT Management**
Access to facilities
Expert reports submitted to the Queensland Competition Authority's review of the presently declared status of services provided by the Dalrymple Bay Coal Terminal.

2017-18 **Gilbert + Tobin/Confidential client**
Alleged cartel conduct
Advice in relation to an ACCC investigation of alleged cartel conduct.

¹ Past ten years only.

- 2017-18** **Wilson Harle/Confidential client**
Competitive effects of merger
Advice in relation to a Commerce Commission investigation of an already completed merger transaction.
- 2017-18** **King & Wood Mallesons**
Competition analysis
Advice to a major digital platform service provider on potential competition concerns arising in the ACCC's digital platforms inquiry.
- 2017** **Minter Ellison Rudd Watts/Complete Office Supplies**
Competitive effects of merger
Expert reports submitted in High Court of New Zealand proceedings concerning the proposed acquisition of OfficeMax by Platinum Equity injunction.
- 2017** **Minter Ellison/CrownBet**
Merger authorisation
Expert reports and testimony in Competition Tribunal proceedings concerning the proposed acquisition of Tatts by Tabcorp.
- 2016** **Bird & Bird/Generic Health**
Competitive effects of patent infringement
Expert reports and testimony in Federal Court proceedings concerning the damages arising from infringement of a pharmaceutical patent.
- 2016** **Manildra Group**
Competition analysis
Advice and preparation of an expert report assessing competitive constraints in the supply of fuel grade ethanol.
- 2016** **Clayton Utz/Anglo American**
Competitive effects analysis
Expert reports assessing the economic impact on the equine critical industry cluster if certain thoroughbred breeding operations were to leave the Upper Hunter.
- 2014-16** **Ashurst and Gilbert + Tobin/Confidential client**
Competitive effects of agreements
Analysis and advice prepared in context of an ACCC investigation of agreements between a supplier and its major customers that are alleged to harm competition.
- 2015-16** **King & Wood Mallesons/Confidential client**
Competition analysis
Analysis and advice in the context of the ACCC's inquiry into eastern and southern Australia wholesale gas prices.
- 2015** **Port of Newcastle Operations**
Access to facilities
Expert report submitted to the National Competition Council on matters arising in the applying the criteria for declaration under Part IIIA, in the context of the application by Glencore for declaration of services provided by the Port of Newcastle.
- 2015** **Corrs/Confidential client**
Merger clearance
Analysis, advice and expert report submitted to the ACCC in the context of a proposed acquisition in the office products sector.

- 2014-15** **Australian Government Solicitor/Commonwealth of Australia**
Competition and trade analysis
Expert report on competition and trade in tobacco products, prepared in the context of the World Trade Organisation dispute settlement proceedings concerning Australia's tobacco plain packaging legislation.
- 2014-15** **King & Wood Mallesons/Confidential client**
Competitive effects of agreement
Analysis and advice prepared in context of an ACCC investigation of agreements between a supplier and its major customers that are alleged to harm competition.
- 2013-14** **Corrs/Australian Competition and Consumer Commission**
Effect of cartel conduct
Expert report on the price effects of an alleged market sharing arrangement in relation to the supply of forklift gas, prepared in the context of Federal Court proceedings brought against Renegade Gas (Supagas).
- 2013-14** **Australian Competition and Consumer Commission**
Merger clearance
Expert report and testimony before the Competition Tribunal in the context of the ACCC's decision to oppose the acquisition of Macquarie Generation by AGL Energy.
- 2013-14** **Ashurst/BlueScope**
Merger clearance
Expert reports submitted to the ACCC in the context of the clearance of three approved transactions in the domestic steel industry.
- 2013-14** **Australian Government Solicitor/ACCC**
Merger clearance
Analysis and advice prepared in the context of the ACCC's review of the proposed acquisition of petrol retailing sites in South Australia.
- 2013** **Corrs/Generic Health**
Patent damages estimation
Expert report on the nature and extent of the analysis necessary to estimate damages in a patent infringement proceeding.
- 2012-13** **Minter Ellison/Confidential client**
Merger clearance
Expert reports submitted to the ACCC in the context of a confidential application for clearance of a proposed acquisition in the industrial gases industry.
- 2011-12** **Gilbert + Tobin/Pact Group**
Merger clearance
Expert reports submitted to the ACCC on the competitive implications of the proposed acquisition of plastic packaging manufacturer Viscount Plastics by Pact Group.
- 2011** **Gilbert + Tobin/Caltex**
Access to facilities
Expert report submitted to the National Competition Council on matters arising in the applying the criteria for declaration under Part IIIA, in the context of the application by the Board of Airline Representatives of Australia (BARA) for the declaration of services provided by the Caltex jet fuel pipeline serving Sydney airport.

- 2010-12** **Mallesons/APA**
Merger clearance
Expert reports submitted to the ACCC on the competitive implications of the proposed acquisition of the gas pipeline assets of Hastings Diversified Utilities Fund by APA Group.
- 2010-11** **Johnson Winter & Slattery/ATC and ARB**
Competitive effects of agreement
Expert reports and testimony in Federal Court proceedings concerning the competitive effects of restrictions on the use of artificial techniques in the breeding of thoroughbred horses for racing.
- 2010-11** **Victorian Government Solicitor/State of Victoria**
Competitive effects of agreement
Expert report prepared for the State of Victoria on the effects of certain restrictions applying to the trading of water rights on inter-state trade in the context of a constitutional challenge brought against the state of Victoria by the state of South Australia.
- 2009-11** **Arnold + Porter/Visa Inc, Mastercard Inc and others**
Payment card markets
Expert reports and deposition testimony on behalf of defendants in the United States Re Payment Card Interchange Fee and Merchant Discount Antitrust Litigation, on the effects of regulatory interventions in the Australian payment cards sector.
- 2010** **Australian Competition and Consumer Commission**
NBN Points of Interconnection
Report and advice on the competition implications in the markets for both telecommunications backhaul and retail broadband services of different choices as to the number of 'points of interconnection' in the proposed architecture of the national broadband network.
- 2010** **JWS, Gilbert & Tobin/Jetset Travelworld, Stella Travel Services**
Merger clearance
Advice on the competitive implications of the merger between Jetset Travelworld and Stella Travel Services.
- 2009-10** **Australian Government Solicitor/ACCC**
Misuse of market power
Expert report and testimony in the context of Federal Court proceedings brought by the ACCC against Cement Australia in relation to conduct alleged to have breached sections 45, 46 and 47 of the Trade Practices Act.
- 2008-10** **Gilbert & Tobin/Confidential client**
Merger assessment
Advice on the competitive implications of the then proposed merger and then subsequently the proposed iron ore production joint venture between BHP Billiton and Rio Tinto.
- 2008-10** **Allens/Amcor**
Cartel damages assessment
Advice and preparation of an expert report on the approach to and quantification of economic loss in the context of two separate actions seeking damages arising from alleged cartel conduct.

- 2009** **State Solicitor’s Office/Forest Products Commission**
Alleged breach of s46
Expert advice in the context of Federal Court proceedings alleging breaches of section 46 of the Trade Practices Act.
- 2009** **Clayton Utz/Confidential client**
Joint venture arrangement
Reviewed the competitive implications under s50 of the Trade Practices Act of a proposed joint venture transaction in the rail industry.
- 2009** **Blake Dawson Waldron/Airservices**
Effect of potential industrial action by Air Traffic Controllers
Expert report in the context of a potential application to the Australian Industrial Relations Commission for termination or suspension of a bargaining period addressing the economic effect that certain forms of industrial action by Air Traffic Controllers would be likely to have on passengers, businesses, and the Australian economy.
- 2005-06, 08-09** **Phillips Fox/Fortescue Metals Group**
Access to facilities
Expert report and testimony in the Federal Court proceedings concerning whether or not access to the BHP Billiton and Rio Tinto rail lines, serving iron ore export markets in the Pilbara, amounted to use of a production process. Subsequently, prepared expert reports on matters arising in interpreting the criteria for declaration under Part IIIA, and testified before the Competition Tribunal in late 2009.
- 2009** **Clayton Utz/Confidential client**
Competitive implications of agreement
Advice on the competitive effects of a joint venture arrangement in the port terminal sector, in the context of Federal Court proceedings brought by the ACCC under section 45 of the Trade Practices Act.
- 2009** **Australian Competition and Consumer Commission**
Competitive effects of buy-sell agreements
Advice to the ACCC on the extent to which buy-sell arrangements between the four major refiner-marketers of petroleum products in Australia may be inhibiting competition in a relevant market.
- 2008-09** **Watson Mangioni/ICS Global**
Alleged misuse of market power
Expert report prepared in the context of Federal Court proceedings alleging breaches of section 46 of the Trade Practices Act.
- 2008-09** **Australian Competition and Consumer Commission**
Competitive effects of various agreements
Expert advice on potential theories of competitive harm arising from agreements between competitors in the oil and gas, and petroleum retailing industry sectors.
- 2008** **Johnson Winter & Slattery/Pepsico**
Merger analysis
Advice on the competitive implications certain potential transactions in the soft drinks sector.

- 2008** **Australian Competition and Consumer Commission**
Exemption from access undertaking
'Peer review' report of the ACCC's draft decision on applications by Telstra for exemption from its standard access obligations (SAOs) for the supply by resale of the local carriage service (LCS) and wholesale line rental (WLR) in 387 exchange service areas in metropolitan Australia.
- 2008** **Deacons/eBay**
Exclusive dealing notification
Expert report submitted to the ACCC analysing the competitive effects of eBay's proposal that users of its online marketplace be required to settle transactions using eBay's associated entity, PayPal
- 2007-08** **Australian Energy Market Commission**
Wholesale market implications for retail competition
Provided an overview of the operation and structure of the wholesale gas and electricity markets within the National Electricity Market (NEM) jurisdictions and identified issues the AEMC should consider when assessing the influence of the wholesale markets on competition within retail gas markets.

Regulatory analysis

- 2017-18** **King & Wood Mallesons/Tasmania Gas Pipeline**
Gas pipeline arbitration arrangements
Expert reports on economic aspects of the Part 23 regime arbitration with Hydro Tasmania on the terms of access to the Tasmanian Gas Pipeline.
- 2017-18** **Victorian and South Australian electricity distribution networks**
Productivity adjustments
Expert report on the conceptual and empirical basis for pre-emptive productivity adjustments to DNSPs' projected operating expenditure.
- 2017-18** **Jemena**
Gas pipeline arbitration arrangements
Advice and analysis in relation to the new rules for arbitration of prices for services provided by non-scheme gas pipelines.
- 2016-2018** **APA Group**
Gas market reform
Expert reports submitted to the Gas Market Reform Group in the context of its review of the gas pipeline coverage criteria, and the proposal to introduce the compulsory auction of contracted but un-nominated gas pipeline capacity.
- 2016-2017** **Minter Ellison Rudd Watts/Trustpower, New Zealand**
Transmission pricing methodology
Expert reports submitted to the Electricity Authority and to the High Court of New Zealand in relation to proposed reforms to the transmission pricing methodology and the distributed generation pricing principles.
- 2016** **Johnson Winter & Slattery/Australian Gas Networks**
Materially preferable decision
Expert report reviewing whether aspects of the Australian Energy Regulator's (AER's) draft access arrangement decision would be likely to result in a materially preferable decision in terms of achievement of the national gas objective.

- 2015-17** **Government of New South Wales**
Economic regulation for privatisation
Advisor to government of New South Wales on all economic regulatory aspects of the proposed partial lease the electricity transmission and distribution entities, TransGrid, AusGrid and Endeavour Energy.
- 2014-16** **Powerco**
Input methodologies review
Advice and several expert reports prepared in the context of the Commerce Commission's reviews of cost of capital and others aspects of the Input Methodologies governing the determination of maximum prices for New Zealand electricity and gas distribution networks.
- 2015** **ActewAGL**
Regulatory price review
Expert report on the economic interpretation of provisions in the national electricity law and rules in relation to the application of the national electricity objective to the entire price determination of the Australian Energy Regulator.
- 2014-16** **Atco Gas**
Access price review
Expert reports on the economic interpretation of provisions in the national gas law and rules in relation to depreciation and the application of the national gas objective to the entire draft decision, submitted to the Economic Regulation Authority of WA.
- 2014-16** **Government of Victoria**
Economic regulation for privatisation
Advisor to government of Victoria on the design, development and application of the framework for economic regulation of the Port of Melbourne Corporation in the context of the privatisation of the port by way of long term lease.
- 2013** **Actew Corporation**
Interpretation of economic terms
Advice on economic aspects of the decision of the Independent Competition and Regulatory Commission in relation to the price controls applying to Actew.
- 2012-13** **Gilbert + Tobin/Rio Tinto Coal Australia**
Price review arbitration
Analysis and expert reports prepared in the context of an arbitration concerning the price to be charged for use of the coal loading facilities at Abbott Point Coal Terminal.
- 2012-13** **Ashurst/Brisbane Airport Corporation**
Draft access undertaking
Advice, analysis and expert reports in the context of the preparation of a draft access undertaking specifying the basis for determining a ten year price path for landing charges necessary to finance a new parallel runway at Brisbane airport.
- 2012** **King & Wood Mallesons/Origin Energy**
Interpretation of economic terms
Expert reports and testimony in the context of judicial review proceedings before the Supreme Court of Queensland on the electricity retail price determination of the Queensland Competition Authority.

- 2012** **Contact Energy, New Zealand**
Transmission pricing methodology
Advice on reforms to the Transmission Pricing Methodology proposed by Electricity Authority.
- 2011-12** **Energy Networks Association**
Network pricing rules
Advice and expert reports submitted to the Australian Energy Market Commission on wide-ranging reforms to the network pricing rules applying to electricity and gas transmission and distribution businesses, as proposed by the Australian Energy Regulator.
- 2010-12** **QR National**
Regulatory and competition matters
Advisor on the competition and regulatory matters, including: a range of potential structural options arising in the context of the privatisation of QR National's coal and freight haulage businesses, particularly those arising in the context of a 'club ownership model' proposed by a group of major coal mine owners; and an assessment of competitive implications of proposed reforms to access charges for use of the electrified network.
- 2002-12** **Orion New Zealand Ltd, New Zealand**
Electricity lines regulation
Advisor on regulatory and economic aspects of the implementation by the Commerce Commission of the evolving regimes for the regulation of New Zealand electricity lines businesses. This role has included assistance with the drafting submissions, the provision of expert reports, and the giving of expert evidence before the Commission.
- 2011** **Meridian Energy, New Zealand**
Undesirable trading situation
Advice on the economic interpretation and implications of the New Zealand electricity rule provisions that define an 'undesirable trading situation' in the wholesale electricity market.
- 2011** **Ausgrid**
Demand side management
Prepared a report on incentives, constraints and options for reform of the regulatory arrangements governing the role of demand side management in electricity markets.
- 2010-11** **Transnet Corporation, South Africa**
Regulatory and competition policy
Advised on the preparation of a white paper on future policy and institutional reforms to the competitive and regulatory environment applying to the ports, rail and oil and gas pipeline sectors of South Africa.
- 2010-11** **Minter Ellison/UNELCO, Vanuatu**
Arbitral review of decision by the Vanuatu regulator
Expert report and evidence before arbitrators on a range of matters arising from the Vanuatu regulator's decision on the base price to apply under four electricity concession contracts entered into by UNELCO and the Vanuatu government, including country risk component of the allowed rate of return and bringing to account events from the prior regulatory period.

- 2007-11** **Powerco/CitiPower**
Regulatory advice
Wide ranging advice on matters arising under the national electricity law and rules, such as the framework for reviewing electricity distribution price caps, the treatment of related party outsourcing arrangements, an expert report on application of the AER's efficiency benefit sharing scheme, the potential application of total factor productivity measures in CPI-X regulation, and arrangements for the state-wide roll out of advanced metering infrastructure.
- 1999-2004,** **Sydney Airports Corporation**
2010-11 **Aeronautical pricing notification**
Wide ranging advice and expert reports on regulatory matters, including advice and expert reports in relation to SACL's notification to the ACCC of substantial reforms to aeronautical charges at Sydney Airport in 2001. This involved the analysis and presentation of pricing principles and their detailed application, through to discussion of such matters at SACL's board, with the ACCC, and in public consultation forums. Subsequent advice on two Productivity Commission reviews of airport charging, and notifications to the ACCC on revised charges for regional airlines.
- 2010** **Industry Funds Management/Queensland Investment Corporation**
Due diligence, Port of Brisbane
Retained to advise on regulatory and competition matters likely to affect the future financial and business performance of the Port of Brisbane, in the context of its sale by the Queensland government.
- 2009-10** **New Zealand Electricity Industry Working Group, New Zealand**
Transmission pricing project
Advice to a working group comprising representatives from lines companies, generators, major users and Transpower on potential improvements to the efficiency of New Zealand's electricity transmission pricing arrangements.
- 2007-09** **GDSE, Macau**
Electricity tariff reform
Advice to the regulator of electricity tariffs in Macau on a series of potential reforms to the structure of electricity supply tariffs.
- 2001-09** **Auckland International Airport Limited, New Zealand**
Aeronautical price regulation
Advice and various expert reports in relation to: the review by the Commerce Commission of the case for introducing price control at Auckland airport; a fundamental review of airport charges implemented in 2007; and the modified provisions of Part IV of the Commerce Act concerning the economic regulation of airports and other infrastructure service providers.
- 2008** **Western Power**
Optimal treatment and application of capital contributions
Advice on the optimal regulatory treatment of capital contributions, taking into account the effect of alternative approaches on tariffs, regulatory asset values, and network connection by new customers.
- 2000-08** **TransGrid**
National electricity market and revenue cap reset
Regulatory advisor to TransGrid on a range of issues arising in the context of the national electricity market (NEM), including: the economics of transmission pricing and investment and its integration with the wholesale energy market, regulatory asset valuation, the cost of capital and TransGrid's 2004 revenue cap reset.

Valuation and contract analysis

- 2016** **SyCip Salazar Hernandez & Gatmaitan/Maynilad Water Services**
Concession contract dispute
Expert reports and testimony in arbitration proceedings concerning the application of the price review clauses in the Manila Water Concession agreements.
- 2015-16** **Clyde and Co/Apache Corporation**
Contract dispute
Expert reports submitted in the context of Supreme Court of Victoria proceedings concerning the appointment of receivers for Burrup Fertilisers Pty Ltd, in relation to the market price of gas available to supply an anhydrous ammonia plant on the Burrup Peninsula.
- 2015-16** **Raja, Darryl & Loh/Serudong Power Sdn Bhd (SPSB)**
Power purchase agreement arbitration
Expert reports submitted in the context of an international arbitration held in Kuala Lumpur concerning the interpretation of price indexation provisions in a power purchase agreement between SPSB and Sabah Electricity Sdn Bhd.
- 2015-16** **Australian Government Solicitor/Commonwealth of Australia**
Native title compensation
Expert reports and testimony before the Federal Court in relation to the native title compensation claim against the Northern Territory for certain acts extinguishing native title in the town of Timber Creek.
- 2014-15** **Minter Ellison/Foxtel Management Pty Ltd**
Assessment of reasonable licence fee
Expert reports prepared in the context of proceedings before the Copyright Tribunal concerning the appropriate valuation of the rights to be paid by Foxtel for the broadcast and communication of commercial recordings licensed by the Phonographic Performance Company of Australia.
- 2014-15** **Rahmat Lim & Partners/Port Dickson Power Berhad, Malaysia**
Power purchase agreement arbitration
Expert reports submitted in the context of an arbitration held in Kuala Lumpur concerning the interpretation of the price indexation provisions in a power purchase contract between Port Dickson Power Berhad and Tenaga Nasional Berhad.
- 2013** **Johnson Winter & Slattery/Origin**
Gas supply agreement price review
Analysis and advice on the implications of certain contract terms for the price of gas, to be determined in a potential arbitration concerning the terms of a substantial long term gas supply agreement.
- 2013** **Herbert Smith Freehills/Santos**
Gas supply agreement price review
Analysis and advice on factors influencing the market price of gas in eastern Australia, to be determined in a potential arbitration concerning the terms of a substantial long term gas supply agreement.

- 2012-13** **Herbert Smith Freehills/North West Shelf Gas**
Gas supply agreement arbitration
Expert reports on the implications of certain contract terms for the price of gas under a substantial long term gas supply agreement.
- 2012-13** **Allens/BHP Billiton-Esso**
Gas supply agreement arbitration
Analysis, advice and expert report on the implications of certain contract terms for the price of gas under a substantial long term gas supply agreement.
- 2012** **King & Wood Mallesons/Ausgrid**
Power purchase agreement arbitration
Expert report prepared and filed in an arbitration on the in relation to the effect of the government's newly introduced carbon pricing mechanism on the price to be paid under a long term power purchase and hedge agreement between an electricity generator and retailer.
- 2011** **Kelly & Co/Santos**
Wharfage dues agreement arbitration
Expert report and testimony in arbitration proceedings to determine the 'normal wharfage dues' to be paid for use of the port facility at Port Bonython for the transfer of petroleum products to tanker ships from a processing terminal in South Australia.
- 2010** **Barclays Capital/Confidential client**
Due diligence, Alinta Energy
Advice on the key industry related risks and issues facing Alinta Energy's gas and electricity assets during the due diligence process associated with its recapitalisation and sale.
- 2009** **Freehills/Santos**
Gas supply agreement price review
Analysis and advice on factors influencing the market price of gas in eastern Australia, to be determined in a potential arbitration concerning the terms of a substantial long term gas supply agreement.
- 2008-09** **Clayton Utz/Origin Energy**
Gas supply agreement arbitration
Expert reports and testimony in an arbitration concerning the market price of gas, which was determined and applied in a substantial long term gas supply agreement.
- 2008-09** **Minter Ellison/Confidential client**
Treatment of past capital contributions
Expert report and evidence given in arbitration proceedings on the extent to which a discount should apply under a long term water supply contract, in recognition of a capital contribution made at the outset of the agreement.
- 2008** **Freehills/Tenix Toll**
Logistics contract arbitration
Advice on the appropriate methodology for adjusting prices under a long term logistics contract in light of changing fuel costs.
- 2008** **BG plc**
Market analysis
Advise on economic aspects of the operation of the east Australian wholesale gas market in the context of the potential development of coal seam gas for use in LNG production and export.

- 2008** **Gilbert + Tobin/Waste Services NSW**
Damages estimation
Damages assessment in the context of a Federal Court finding of misleading and deceptive conduct in relation to the extent of environmental compliance in the provision of waste services.

Securities and finance

- 2018** **William Roberts/Representative proceeding**
Misleading and damaging conduct
Preliminary analysis on the extent of liability and potential damages arising from a shareholder class action alleging breach of disclosure obligations.
- 2017-18** **Australian Pipelines and Gas Association**
Allowed rate of return
Advice in relation to the Rate of return guideline review being undertaken by the Australian Energy Regulator, including participation in the AER's concurrent expert evidence session one.
- 2017** **Slater and Gordon/Gasmere Ltd**
Share portfolio valuation
Expert report prepared in relation to Supreme Court of Victoria proceedings brought against Shaw and Partners concerning the appropriate valuation of a share portfolio, the subject of a damages claim following the collapse of Opus Prime.
- 2017** **Portfolio Law/Representative proceeding**
Misleading and deceptive conduct
Expert report in representative proceedings in the Supreme Court of Victoria concerning the effect of certain disclosures on the price of ASX listed securities in Myer Ltd.
- 2016-17** **Allens/QBE**
Shareholder class action
Advice and analysis on the extent of liability and potential damages arising from a shareholder class action alleging breach of QBE's ASX disclosure obligations.
- 2016** **Elliot Legal/Representative proceeding**
Misleading and deceptive conduct
Expert reports in representative proceedings in the Supreme Court of Victoria concerning the effect of certain disclosures on the price of ASX listed securities in Downer EDI Ltd.
- 2015-16** **Maurice Blackburn/Representative proceeding**
Misleading and deceptive conduct
Expert reports submitted to the Federal Court assessing the effect of alleged misstatements in relation to the annual accounts and associated going concern assumption in relation to Tamaya Resources Ltd (in liquidation).
- 2013-15** **Sydney Water Corporation**
Cost of capital estimation
Prepare three expert reports for submission to the Independent Pricing and Regulatory Tribunal (IPART) on the framework for determining the weighted average cost of capital for infrastructure service providers, and on estimation of an appropriate equity beta.

- 2012-15** **HWL Ebsworth/Confidential client**
Insider trading
Expert advice and analysis in the context of criminal proceedings alleging insider trading in certain ASX-listed securities (2012-13). Subsequent expert report filed in Supreme Court of Tasmania estimating price effects of inside information in context of 'proceeds of crime' proceedings.
- 2014** **Wotton Kearney/Genesys Wealth Advisors**
Misleading and deceptive conduct
Expert report submitted to the Supreme Court of Victoria assessing the accuracy of product disclosure statements and other information in relation to two fixed interest investment funds offered by Basis Capital.
- 2014** **TransGrid**
Cost of capital estimation
Preparation of an expert report for submission to the Australian Energy Regulator (AER) estimating the weighted average cost of capital for electricity network service providers.
- 2011-13** **Slater & Gordon/Modtech**
Shareholder damages assessment
Expert reports and testimony in representative proceedings before the Federal Court alleging misstatement and/or breach of the continuous disclosure obligations of the ASX-listed entity, GPT.
- 2011-12** **Freehills/National Australia Bank**
Shareholder damages assessment
Expert advice in connection with representative proceedings before the Federal Court alleging misstatement and/or breach of the continuous disclosure obligations of an ASX-listed entity.
- 2012** **Johnson Winter & Slattery/Victorian gas distributors**
Cost of equity estimation
Expert report submitted to the AER on the appropriate methodology for estimating the cost of equity under the capital asset pricing model.
- 2009-13** **Minter Ellison/Confidential client**
Misleading and deceptive conduct
Expert report and related advice in light of investor claims and pending litigation following the freezing of withdrawals from a fixed interest investment trust that primarily held US-denominated collateralised debt obligations (CDOs), as offered by a major Australian financial institution. Analysis undertaken includes the extent to which the investment risks were adequately described in the fund documents, and the quantum of any potential damages arising.
- 2011** **Barringer Leather/Confidential client**
Market manipulation
Expert report prepared in the context of criminal proceedings brought in the Supreme Court of NSW alleging market manipulation in the trading of certain ASX-listed securities.
- 2010-11** **Wotton Kearney/Confidential client**
Misleading and deceptive conduct
Expert report and analysis in light of investor claims and pending litigation following the freezing of withdrawals from two fixed interest investment trusts that primarily held US-denominated collateralised debt obligations (CDOs).

- 2010-11** **Maurice Blackburn/Confidential client**
Shareholder damages assessment
Analysis and advice in connection with representative proceedings before the Federal Court alleging misstatement and/or breach of the continuous disclosure obligations of an ASX-listed entity.
- 2010-11** **Mallesons/ActewAGL**
Judicial review of rate of return determination
Expert report and testimony in Federal Court proceedings seeking judicial review of a decision by the Australian Energy Regulator of its determination of the risk free rate of interest in its price setting determination for electricity distribution services.
- 2009-11** **William Roberts/Clime Capital**
Shareholder damages assessment
Expert reports submitted in representative proceedings before the Federal Court alleging misstatement and/or breach of the continuous disclosure obligations of ASX-listed entity, Credit Corp.
- 2009** **Jemena Limited**
Cost of equity estimation
Co-authored an expert report on the application of a domestic Fama-French three-factor model to estimate the cost of equity for regulated gas distribution businesses.
- 2008-09** **Clayton Utz/Fortescue Metals Group**
Materiality of share price response
Expert report and testimony before the Federal Court addressing alleged breaches of the ASX continuous disclosure obligations and the associated effect on the price of FMG securities arising from statements made by it in 2004.
- 2008-09** **Energy Trade Associations – APIA, ENA and Grid Australia**
Value of tax imputation credits
Preparation of expert report on the value to investors in Australian equities of tax imputation credits, for submission to the Australian Energy Regulator.
- 2008-09** **Freehills/Centro Properties**
Shareholder damages assessment
Assistance in the estimation of potential damages arising in representative proceedings concerning accounting misstatements and/or breach of the continuous disclosure obligations of an ASX-listed entity.
- 2008** **Slater & Gordon/Boyd**
Shareholder damages assessment
Expert report for submission to a mediation on the damages arising in representative proceedings before the Federal Court alleging accounting misstatements and/or breach of the continuous disclosure obligations of EDI Downer.
- 2007-08** **Maurice Blackburn/Watson**
Shareholder damages assessment
Advice in relation to damages arising in representative proceedings before the Federal Court alleging accounting misstatements and/or breach of the continuous disclosure obligation by the ASX-listed entity, AWB Limited.

Institutional and regulatory reform

- 2008-11** **Department of Sustainability and Environment**
Management of bulk water supply
Advice on the concept and merits of establishing market based arrangements to guide both the day-to-day operation of the bulk water supply system in metropolitan Melbourne, as well as the trading of rights to water between the metropolitan water supply system and those throughout the state of Victoria.
- 2008** **Department of Treasury and Finance**
Access regime for water networks
Report on the principles that should be applied in developing a state-wide third party access regime for water supply networks.

Sworn testimony, transcribed evidence²

- 2018** **Expert evidence before the Board of the Australian Energy Regulator, on behalf of the South Australian public lighting customers, in arbitration proceedings concerning public lighting charges**
Expert reports, transcribed evidence, Melbourne, 7 May 2018
- Expert evidence before the Board of the Australian Energy Regulator, on behalf of the Australian Pipelines and Gas Association, in the Review of Rate of Return Guidelines, Concurrent expert evidence session one**
Joint expert report, transcribed evidence, Sydney, 15 March 2018
- Expert evidence before the Federal Court on behalf of Changshu Longte Grinding Ball Co Ltd, in the matter of Changshu Longte v Anti-Dumping Review Panel and others.**
Expert reports, sworn evidence, Sydney, 1 February 2018
- 2017** **Expert evidence before the Competition Tribunal on behalf of CrownBet, in the application by Tabcorp for authorisation to acquire Tatts**
Expert reports, sworn evidence, Melbourne, 30 May–1 June 2017
- 2016** **Expert evidence before the Federal Court on behalf of Generic Health, in the matter of Bayer Pharma Aktiengesellschaft v Generic Health Pty Ltd**
Expert reports, sworn evidence, Sydney, 14-15 December 2016
- Testimony before an UNCITRAL arbitral tribunal on behalf of Maynilad Water Service Inc (MWSI), in the matter of MWSI v Republic of the Philippines**
Report, sworn evidence, Singapore, 6 December 2016
- Expert evidence on behalf of Powerco, at the Commerce Commission's Conference on the Cost of Capital matters**
Transcribed evidence, public hearings, Wellington, 7 September 2016
- Expert evidence before the Federal Court on behalf of plaintiffs, in the matter of HFPS v Tamaya**
Expert reports, sworn evidence, Sydney, 13 May 2016

² Past ten years only.

Expert evidence before an arbitral tribunal on behalf of Serudong Power Sdn Bhd (SPSB), in the matter of SPSB v Sabah Electricity Sdn Bhd (SESB)
Expert reports, sworn evidence, Kuala Lumpur, 27-28 April 2016

Expert evidence before the Federal Court on behalf of the Commonwealth of Australia, in the matter of Griffiths v Northern Territory
Expert reports, sworn evidence, Darwin, 24-25 February 2016

2015 **Expert evidence before an arbitral tribunal on behalf of Port Dickson Power Berhad (PDP), in the matter of PDP v Tenaga Nasional Berhad (TNB)**
Expert reports, sworn evidence, Kuala Lumpur, 28 January 2015

2014 **Expert evidence before a UNCITRAL arbitral tribunal on behalf of Manila Water Corporation Inc (MWCI) in the matter of MWCI v Metropolitan Waterworks and Sewerage System (MWSS)**
Expert reports, sworn evidence, Sydney (by videolink to Manila), 31 August 2014

Expert evidence before the Australian Competition Tribunal on behalf of the ACCC, in the matter of AGL Energy v ACCC
Expert reports, sworn evidence, Sydney, 10-11 June 2014

2013 **Expert evidence before the Supreme Court of Victoria on behalf of Maddingley Brown Coal in the matter of Maddingley Brown Coal v Environment Protection Agency of Victoria**
Expert reports, sworn evidence, Melbourne, 12 August 2013

Expert evidence before the Federal Court on behalf of Modtech in the matter of Modtech v GPT Management and Others
Expert reports, sworn evidence, Melbourne, 27 March 2013

2012 **Expert evidence before the Supreme Court of Queensland on behalf of Origin Energy, in the matter of Origin Energy Electricity Ltd and Others v Queensland Competition Authority and Others**
Expert reports, sworn evidence, Brisbane, 3 December 2012

2011 **Expert evidence before the Federal Court on behalf of the Australian Turf Club and Australian Racing Board, in the matter of Bruce McHugh v ATC and Others**
Expert report, sworn evidence, Sydney, 12 and 14 October 2011

Expert evidence in arbitration proceedings before J von Doussa, QC, on behalf of Santos in the matter of Santos, and Others v Government of South Australia
Expert report, sworn evidence, Adelaide, 13-15 September 2011

Expert evidence before a panel of arbitrators on behalf of UNELCO, in the matter of UNELCO v Government of Vanuatu
Expert report, sworn evidence, Melbourne, 23 March and 21 April 2011

Expert evidence before the Federal Court on behalf of ActewAGL, in the matter of ActewAGL v Australian Energy Regulator
Expert report, sworn evidence, Sydney, 17 March 2011

Deposition Testimony in Re Payment Card Interchange and Merchant Discount Litigation, in the United States District Court for the Eastern District of New York

Deposition testimony, District of Columbia, 18 January 2011

2010

Expert evidence before the Federal Court in behalf of the Australia Competition and Consumer Commission, in the matter of ACCC v Cement Australia and others

Expert report, sworn evidence, Brisbane, 19-21 October 2010

Expert evidence on behalf of Orion NZ, at the Commerce Commission's Conference on its Input Methodologies Emerging View Paper

Transcribed evidence, public hearings, Wellington, 24 February 2010

Deposition Testimony in Re Payment Card Interchange and Merchant Discount Antitrust Litigation, in the United States District Court for the Eastern District of New York

Deposition Testimony, District of Columbia, 18 February 2010

2009

Expert evidence before the Australian Competition Tribunal on behalf of Fortescue Metals Group Ltd, in the matter of Application for Review of Decision in Relation to Declaration of Services Provided by the Robe, Hamersley, Mt Newman and Goldsworthy Railways

Expert report, sworn evidence, Melbourne, 12-13 October and 5-6 November 2009

Expert evidence on behalf of Orion NZ, at the Commerce Commission's Conference on its Input Methodologies Discussion Paper

Transcribed evidence, public hearings, Wellington, 16 September 2009

Expert evidence before the Federal Court on behalf of Fortescue Metals Group Ltd, in the matter of ASIC v Fortescue Metals Group and Andrew Forrest

Expert report, sworn evidence, Perth, 29 April–1 May 2009

Expert report and evidence in arbitration proceedings before Hon Michael McHugh, AC QC, and Roger Gyles, QC, between Origin Energy and AGL

Expert report, sworn evidence, Sydney, 19-24 March 2009

2008

Expert evidence on behalf of Orion NZ, at the Commerce Commission's Conference on its Draft Decision on Authorisation for the Control of Natural Gas Pipeline Services

Transcribed evidence, public hearings, Wellington, 21 February 2008

2007

Expert report and evidence in arbitration proceedings before Sir Daryl Dawson between SteriCorp and Stericycle Inc.

Expert report, sworn evidence, 11 July 2007

Speeches and publications³

- 2017**
- IPART 25th Anniversary Conference**
Electricity and Water: Mutual Lessons
Speech, Sydney, 27 October 2017
- GCR 6th Annual Law Leaders Forum**
ACCC v Flight Centre: What was going on?
Speech, Sydney, 6 May 2017
- Association for Data-driven Marketing and Advertising**
Driving Customers to you: Insights from Location Data
Speech, Melbourne, 5 April 2017
- Global Competition Review Conference**
Roadblocks and Solutions in Cross Border Mergers
Panel discussant, Singapore, 2 March 2017
- 2016**
- NSW Planning Assessment Commission**
Economic Effects of Drayton South Mine on Upper Hunter Industry
Presentation to public hearing, Muswellbrook, 16 November 2016
- 2015**
- Electricity Networks Association Regulation Seminar, Brisbane**
Participant in Expert Plenary Panel
Speech, Brisbane, 5 August 2015
- NZ Commerce Commission Input Methodologies Review, Wellington**
'Allocation of Risk' and 'New Technologies'
Panel Discussant, Wellington, 29 July 2015
- Competition Matters Conference, Wellington**
Disruptive Technologies
Chair, Discussion Panel, Wellington, 24 July 2015
- Competition Law Conference**
The Public Interest in Private Enforcement
Speech, Sydney, 30 May 2015
- Singapore Aviation Academy, Singapore**
Private Financing of Airport Infrastructure Expansions
Speech, Singapore, 5 March 2015
- GCR 4th Annual Law Leaders Forum Asia-Pacific**
Differences in using economics in EU and Asia Pacific
Speech, Singapore, 5 March 2015
- AEMC Public Forum**
East Coast Gas Market Review
Speech, Sydney, 25 February 2015
- 2014**
- Competition and Consumer Workshop, Law Council of Australia**
An Economist's Take on Taking Advantage
Paper and Speech, Brisbane, 14 September 2014

³ Past ten years only

Energy Networks 2014

Innovation and Economic Regulation
Speech, Melbourne, 1 May 2014

The Network Industries Quarterly, *Consumer Advocacy in Australian Regulatory Decision Making – ‘Hard Choices Await’*, Vol. 16, No 1, 2014

Ecole Polytechnique Federale de Lausanne, 31 March 2014

GCR 3rd Annual Law Leaders Asia Pacific

Role of Economists in Competition Law Enforcement in Asia-Pacific
Speech, Singapore, 6 March 2014

2013**University of South Australia – Competition and Consumer Workshop**

Empirical test and collusive behaviour
Speech and participation game, Adelaide, 16 November 2013

Energy in WA Conference

Capacity Payments in the WEM – Time to Switch?
Panel Discussion, Perth, 21 August 2013

ACCC/AER Regulatory Conference

Designing Customer Engagement
Speech, Brisbane, 25 July 2013

Victorian Reinsurance Discussion Group

Australian Mining – When Opportunities and Risk Collide
Speech, Melbourne, 1 March 2013

NZ Downstream Conference

Investment and Regulation
Panel Discussion, Auckland, 25 July 2013

2012**Rising Stars Competition Law Workshop**

Expert Evidence in Competition Cases
Speech, Sydney, 24 November 2012

KPPU – Workshop on the Economics of Merger Analysis

Theories and Methods for Measuring the Competitive Effects of Mergers
Speech, Bali, 19-21 November 2012

University of South Australia – Competition and Consumer Workshop

Reflections on Part IIIA of the Competition Act
Speech, Adelaide, 12 October 2012

NZ Downstream Conference

Lines company consolidation – what are the benefits and risks?
Panel discussion, Auckland, 6-7 March 2012

2011**Law Council of Australia - Competition Workshop**

Coordinated effects in merger assessments
Speech, Gold Coast, 27 August 2011

ACCC Regulatory Conference

Adapting Energy Markets to a Low Carbon Future
Speech, Brisbane, 28 July 2011

- 2010** **IPART Efficiency and Competition in Infrastructure**
Improving Performance Incentives for GTE's
Speech, Sydney, 7 May 2010
- Law and Economics Association of New Zealand**
Shareholder Class Actions – A Rising Trend in Australia
Speeches, Auckland and Wellington, 15-16 November 2010
- 2009** **ACCC Regulatory Conference**
Substitutes and Complements for Traditional Regulation
Speech, Gold Coast, 30 July 2009
- Minter Ellison Shareholder Class Action Seminar**
Investor Class Actions – Economic Evidence
Speech, Sydney, 18 March 2009
- Competition Law and Regulation Conference**
Commerce Amendment Act: Impact on Electricity Lines Businesses
Speech, Wellington, 27 February 2009
- 2008** **Non-Executive Directors**
Shareholder Class Actions in Australia
Speech, Sydney, 28 July 2008
- Mergers & Acquisitions: Strategies 2008**
Competition Law Implications for Mergers & Acquisitions
Speech, Sydney, 27 May 2008
- Institute for Study of Competition and Regulation**
Role of Merits Review under Part 4 and Part 4A of the Commerce Act
Speech, Wellington, 20 February 2008
- 2007** **Law Council of Australia - Trade Practices Workshop**
Hypothetical breach of s46
Economic expert in mock trial, 20 October 2007
- Assessing the Merits of Early Termination Fees, *Economics of Antitrust: Complex Issues in a Dynamic Economy*, Wu, Lawrence (Ed)**
NERA Economic Consulting 2007
- Assessing the Impact of Competition Policy Reforms on Infrastructure Performance**
ACCC Regulation Conference
Speech, Gold Coast, 27 July 2007

Daniel Young

Senior Economist

HoustonKemp
Level 40, 161 Castlereagh St
Sydney NSW 2000
Tel: +61 2 8880 4826
Mobile: +61 405 170 291
E-mail: Daniel.Young@houstonkemp.com
Web: HoustonKemp.com



Overview

Daniel has thirteen years' experience in solving economic problems arising in regulatory, policy, finance and competition matters. He has a particular strength in the use of mathematical and statistical tools to inform his insights.

Daniel has advised corporations, regulators and governments across a range of industry sectors including energy, communications, water and transport. Daniel brings a deep understanding of regulatory frameworks, and particularly the application of building block models, approaches to asset valuation and tariff design.

Daniel has extensive experience advising on telecommunications matters in Australia, New Zealand and beyond. This includes the design and review of cost models for fixed line and mobile networks, advice on regulatory policy, analysis of competition issues and the calculation of damages. Daniel has a particular interest in the development of regulatory frameworks to address issues raised by the increasing penetration of fibre networks.

In the finance area, Daniel has played a significant role in advancing the regulatory debate on rate of return issues. He has advised businesses and regulators on these issues across a wide range of sectors and jurisdictions. His analysis has underpinned a series of successful Competition Tribunal appeals on the return on debt, and includes contributions to understanding the application of the capital asset pricing model in Australia and advice on using financial market data to estimate the current cost of equity.

On competition matters Daniel has assisted clients to improve the understanding complex problems through mathematical and statistical modelling. His experience includes advice on the likely effects of proposed mergers and acquisitions in relation to electricity wholesale, mining, media, petrol retailing, pharmaceuticals and metering. Daniel has advised businesses in a range of commercial litigation and arbitrations, including in relation to the renegotiation of major gas supply contracts and in the calculation of damages in international arbitrations.

Prior to joining HoustonKemp, Daniel was an Associate Director at the Competition Economists Group and an Analyst at NERA Economic Consulting. Daniel holds a Master of Commerce with first class honours majoring in Economics from the University of Auckland. He also holds a Bachelor of Commerce majoring in Economics and a Bachelor of Science majoring in Operations Research from the University of Auckland.

Qualifications

1999-2004 **University of Auckland**
Master of Commerce in Economics
(First Class Honours)
Bachelor of Commerce and Science in Economics and Operations Research

Prizes and Scholarships

2004 Senior Scholarship in Statistics

2004 Senior Prize in Economics

2004 University of Auckland Masters Scholarship

2003 University of Auckland Department of Economics Scholarship

Career Details

2015- **HoustonKemp Economists**
Senior Economist, Sydney, Australia

2008-2015 **CEG Asia Pacific**
Associate Director, Sydney, Australia

2005-2007 **NERA Economic Consulting**
Analyst, Sydney, Australia

Project Experience

Competition Analysis

- 2017-18** **DLA Piper/Dalrymple Bay Coal Terminal Management, Australia**
Application of declaration criteria
Provided advice to DLA Piper assessing the prospects of DBCT satisfying access criteria. Our advice included detailed modelling and analysis establishing whether the service provided is a natural monopoly and whether declaration would promote competition in dependent markets.
- 2017-18** **Gilbert + Tobin, Australia**
Advice on the requirements of Part 23 of the NGR
Prepared advice for a confidential gas pipeline operator advising on the nature and outcomes of workably competitive markets, reflecting the objective of the new rules, and the implications of this for pipeline revenues and prices determined in arbitration under these rules.
- 2017** **Minter Ellison/Crownet Australia**
Proposed acquisition of Tatts by Tabcorp
Contributed to the preparation of an expert report, prepared for Minter Ellison on behalf of Crownbet, examining the effects of the proposed acquisition by Tabcorp of Tatts. The report was submitted to the Australian Competition Tribunal.
- 2016-17** **Confidential Client, Australia**
Proposed merger
Prepared a report setting out the likely effect of a proposed merger in the gas pipeline sector, and provided a framework for examining the competitive effect of mergers to be used for future transactions.
- 2016** **APA Group, Australia**
Proposed auction for contracted but un-nominated gas pipeline capacity
Prepared advice for APA in relation to the AEMC's proposals to introduce a new auction for all contracted but un-nominated capacity in eastern Australia. The advice included an assessment of the economic propositions underpinning the AEMC's proposals.
- 2015** **Johnson Winter & Slattery/Confidential Client**
Substantial lessening of competition
Contributed to a report on whether certain business conduct would substantially lessen competition in the context of a potential investigation or prosecution by the ACCC.
- 2014** **Vector, New Zealand**
Electricity smart metering merger
Advised Vector on the competitive effects of its successful bid to acquire Meridian Energy's electricity smart metering provider, Arc Innovations. This required a high degree of familiarity with the market framework and the competitive dynamics, including the "market-driven" nature of the deployments to date.
- 2014** **Vector, New Zealand**
Competition in gas metering
Provided advice to Vector as part of a preliminary inquiry by the Commerce Commission into whether to regulate gas metering services.

- 2014** **Commerce Commission, New Zealand**
Mobile spectrum auction purchase
Provided modelling of the costs involved in a number of alternative potential ownership configurations of mobile spectrum in New Zealand in advice to the New Zealand Commerce Commission.
- 2013** **Australian Competition and Consumer Commission, Australia**
Advice on proposed petrol station acquisitions
Advised the ACCC on the competitive analysis provided in support of a proposed acquisition of retail petrol stations. Our advice included new econometric analysis of the effects of the proposed acquisition on price formation and leadership in the relevant markets.
- 2012** **Australian Energy Market Commission, Australia**
Market power in generation markets
Assisted in preparing a report for the AEMC on the existence of market power and barriers to entry in the markets for electricity generation within the NEM
- 2011** **Australian Competition and Consumer Commission, Australia**
Advice on proposed media acquisitions
Assisted the ACCC in developing its analysis about the competitive effects of two proposed acquisitions in the media sector
- 2010** **Gilbert + Tobin, Australia**
BHPB proposed joint venture with Rio Tinto
Assisted in the preparation of expert statements on the likely impact of the joint venture of the Pilbara iron ore assets of BHP Billiton and Rio Tinto. The legal and economic teams involved were awarded ‘Deal of the year – Asia Pacific’ by Global Competition Review.
- 2009** **Van Bael & Bellis, EU**
Proposed transaction between GSK and Astra Zeneca
Provided market modelling of the effect of a concentration between Glaxo Smith Kline and Astra Zeneca in relation to certain common pharmaceutical product lines.
- 2009** **Gilbert + Tobin, Australia**
Analysis of proposed transaction in relation to small industrial packaging
Provided expert statements and empirical analysis on the substitutability between different types of small industrial packaging.
- 2008** **Gilbert + Tobin, Australia**
BHPB proposed merger with Rio Tinto
Empirical analysis and assisted in the preparation of an expert report on the competitive effect on iron ore prices of the proposed merger between BHP Billiton and Rio Tinto.
- 2006** **Australian Competition and Consumer Commission, Australia**
Proposed merger in electricity generation
Assessed the likely competitive effect of a proposed acquisition by International Power of NRG Flinder’s electricity generation assets in Victoria and South Australia.
- 2006** **Johnson, Winter and Slattery, Australia**
Joint Services Agreement authorisation
Assisted in the finalisation of an expert report assessing the net public benefits of authorising Qantas’ JSA with British Airways in Singapore.

- 2006** **Freehills, Australia**
Access to Foxtel's set-top box
Provided drafting and analytical assistance for an expert report examining the effect of Foxtel's proposed special access undertaking on competition in the market for subscription television services
- 2005** **Economic Development and Labour Bureau, Hong Kong**
Investigation of competition in the retail auto-fuel sector
Conducted benchmarking of retailing margins on auto-fuel as part of a team examining the competitiveness of the sector in Hong Kong.
- 2005** **Australian Competition and Consumer Commission, Australia**
Proposed merger in electricity generation
Developed a modelling framework for the ACCC analysing the effect on the proposed acquisition of Singapore Power's generation assets by China Light & Power and advised on potential divestitures
- 2005** **Phillips Fox, Australia**
Alleged predatory pricing in rail carriage
Assisted in the preparation of advice to Austrac in relation to alleged breaches of section 46 of the Trade Practices Act

Regulatory Analysis and Cost Modelling

- 2017-18** **Gilbert + Tobin, Australia**
Advice on implementing the requirements of Part 23 of the NGR
Prepared advice for a confidential gas pipeline operator setting out the implications of new rules for information disclosure and binding arbitration. We advised on the outcomes of workably competitive markets, reflecting the objective of the new rules, and applied asset valuation methods using the recovered capital method prescribed by the new rules
- 2017-18** **DLA Piper, Australia**
Estimating a recovered capital method asset valuation
Advised a confidential gas pipeline operator on the calculation of a recovered capital method asset valuation complying with section 569(4)(b) of the NGR, including the appropriate approach to estimating a commercial rate of return over time.
- 2017-18** **King & Wood Mallesons, Australia**
Outcomes consistent with a workably competitive market
Prepared an expert report for a confidential gas pipeline operator to be submitted as part an arbitration under Part 23 of the NGR. The report addressed how the objective of Part 23, to reflect the outcomes of a workably competitive market, should be applied by the arbitrator in determining the terms and conditions of access.
- 2017** **Bell Gully/Auckland Transport, New Zealand**
Estimating the efficient costs of providing bus services
Prepared expert advice and testimony in the context of arbitration of the contract price for a bus route in Auckland. The advice implemented data envelopment analysis to assess the efficient rate of costs for providing the service.

- 2017** **Chorus, New Zealand**
Addressing the risks associated with the provision of fibre services
Prepared advice for Chorus examining whether the proposed regulatory frameworks for copper and fibre services address the risks faced in providing services. Our advice suggested corresponding regulatory approaches that could manage these risks.
- 2016-17** **Trustpower, New Zealand**
Electricity Authority's proposed changes to transmission pricing
Prepared two expert report reviewing the Electricity Authority's policy proposals and the cost-benefit analysis supporting them. The Authority proposed to introduce revised arrangements for transmission pricing that would set charges based on the benefits that accrue to network customers.
- 2016** **Port Authority of New South Wales, Australia**
Review of maximum fees and site occupation charges in Sydney Harbour
Assisted the Port Authority in preparing its submissions to IPART's review of maximum fees and site occupation charges for cruise ships in Sydney Harbour. This included assistance with preparing the submission and advice on building block modelling and the cost of capital.
- 2015-2016** **New South Wales Government, Australia**
Review of regulatory modelling
Conducted a peer review of regulatory modelling as part of the partial leases of Ausgrid and Endeavour Energy.
- 2015** **AEMC, Australia**
Regulatory treatment of energy storage
Advised the AEMC in relation to economic principles underpinning the regulatory treatment of both network-level energy storage and behind-the-meter storage.
- 2015** **Optus, Australia**
Benchmarking prices for the domestic transmission capacity service
Advised Optus on the process of benchmarking prices for regulated DTCS on the basis of prices for services that were deemed competitive. The advice included application of stochastic frontier analysis to the data.
- 2010-15** **Australian Amalgamated Terminals, Australia**
Regulatory model of car terminals
Prepared and presented a model of Australian Amalgamated Terminal's costs to estimate efficient cost-recovery prices as part of a regulatory process overseen by a price expert. Regularly maintaining and updating this model for this purpose.
- 2014-15** **Everything Everywhere, United Kingdom**
Estimation of annual licence fees
Assisted Everything Everywhere in relation to Ofcom's review of the annual licence fees charged for 900 MHz and 1800 MHz spectrum.
- 2014** **Australian Energy Market Commission, Australia**
Survey of regulations on bidding in good faith in international jurisdictions
Prepared an expert report for the AEMC surveying the regulations on bidding, and the ability to change bids, in a range of international electricity markets.

- 2013-15** **Chorus, New Zealand**
Modelling the UCLL and UBA prices
Assisted in the preparation of multiple expert reports for Chorus on issues relevant to estimating the TSLRIC costs of providing UCLL and UBA, including in relation to demand, depreciation and price trends.
- 2014** **Australian Broadcasting Commission, Australia**
Estimate of cost-based charge for high frequency transmission
Prepared a report for the ABC demonstrating the likely level of cost-based charges for high frequency transmission under alternative asset valuation approaches.
- 2014** **Everything Everywhere, United Kingdom**
Mobile termination
Reviewed Ofcom's model estimating the costs of mobile termination.
- 2014** **Orion, New Zealand**
WACC percentile
Provided advice to Orion as part of the Commerce Commission's review of the use of the 75th percentile of the WACC range.
- 2014** **SA Power Networks, Australia**
Materials cost escalation factors
Assisted SA Power Networks by estimating materials cost escalation factors for its operating and capital expenditure program. The report also included analysis of the performance of the modelling methodology over time.
- 2013** **Herbert Geer, Australia**
Telecommunications fixed line pricing methodology
Assessed the ACCC's methodology for setting prices for fixed line services. Assisting Herbert Geer (on behalf of iiNet) in formulating questions for the ACCC and Telstra so as to assess the size of potential errors.
- 2013** **Vector, New Zealand**
Default price-quality paths for electricity distribution and gas pipeline businesses
Advised Vector in relation to the Commerce Commission's draft decision on the application of DPPs to electricity and gas pipeline businesses. The focus of the review was on the Commission's application of econometrics in benchmarking the level of operating expenditure for the next regulatory period.
- 2012-13** **Chorus, New Zealand**
Benchmarking the UBA price
Advised Chorus New Zealand on the Commerce Commission's proposed method of determining the UBA price in New Zealand by benchmarking against prices in other jurisdictions.
- 2012-13** **NBN Co, Australia**
Special access undertaking
Assisted NBN Co in assessing aspects of its proposed SAU, including its proposed regulatory model and restrictions on its pricing behaviour. Subsequently advising NBN Co on the ACCC's draft decision in relation to these aspects and others of its undertaking.

- 2012-14** **New South Wales, ACT and Tasmanian electricity network businesses, Australia**
Materials and labour cost escalation factors
Undertook modelling of materials and labour cost escalation factors for the businesses' regulatory proposals. Subsequently providing updates and responding to issues raised by the AER in its response to proposals.
- 2012-13** **Virgin Australia, Australia**
Cost modelling of landing charges
Provided Virgin advice about modelling of landing charges proposed by a number of Australian airports.
- 2012** **T-Mobile, Netherlands**
Mobile termination review
Provided T-Mobile with preliminary advice on OPTA's modelling of mobile termination charges.
- 2012** **ElectraNet, Australia**
Materials cost escalation factors
Estimated materials cost escalation factors for ElectraNet and providing it advice on the use of labour cost escalation factors.
- 2012** **Australian Broadcasting Commission, Australia**
Building block model review
Assisted the ABC by peer reviewing a building block model that it had commissioned. The review focused on the internal consistency of the model, particularly in relation to cashflow timing and the cost of capital.
- 2012** **Everything Everywhere, United Kingdom**
Unbundled local loop appeal
Co-authored an expert witness statement assessing the basis of Ofcom's forecasting of fixed line volumes.
- 2012** **Vector, New Zealand**
Default price quality paths
Analysed the Commerce Commission's draft decisions on its starting price adjustments for electricity and gas network businesses. Preparing two expert reports for Vector responding to these decisions.
- 2011-12** **Western Power, Australia**
Materials and labour cost escalation factors
Prepared two expert reports setting out the basis for and estimating cost escalation factors for Western Power.
- 2011-12** **Chorus, New Zealand**
Benchmarking the UCLL price
Advised Chorus New Zealand on the Commerce Commission's proposed method of determining the UCLL price in New Zealand by benchmarking against prices in other jurisdictions. Testified as an expert on behalf of Chorus at the Commission's conference.

- 2011-12** **TransGrid, Australia**
Cost escalation factors
Provided cost escalation factors to TransGrid as part of its internal budgeting processes.
- 2011-12** **Everything Everywhere, United Kingdom**
Mobile termination modelling and advice
Advised Everything Everywhere UK on its submissions and appeal in respect of Ofcom's decision on mobile termination rates
- 2011** **Chorus, New Zealand**
International benchmarking of sub-national density characteristics
Conducted detailed research of sub-national density characteristics across a range of jurisdictions with potentially comparable UCLL prices.
- 2010-11** **Airservices Australia, Australia**
Pricing of air traffic control services
Assisted Airservices Australia in the development of its regulatory proposal to the ACCC
- 2010-11** **Integral Energy, Australia**
Assessment of credit metrics
Provided an internal report for Integral in relation to whether its existing dividend policy was consistent with maintenance of a credit rating.
- 2010-11** **Digicel, Tahiti**
Mobile cost modelling
Developed a mobile cost model for Digicel Tahiti.
- 2009** **Digicel, Vanuatu and Tonga**
Benchmarking mobile termination charges
Estimated benchmarks for mobile termination prices using econometric analysis on overseas benchmark for Digicel in Vanuatu and Tonga
- 2010-11** **Digicel, Vanuatu and Tonga**
Benchmarking mobile termination charges
Estimated benchmarks for mobile termination prices using econometric analysis on overseas benchmark for Digicel in Vanuatu and Tonga
- 2010** **Digicel, Papua New Guinea**
Mobile cost modelling
Developed a mobile cost model for Digicel PNG.
- 2010** **Integral Energy, Australia**
Indexing ODRC valuation
Estimated of a current ODRC value for Integral Energy's assets on the basis of roll-forward and escalation of previous bottom-up estimate
- 2010** **Optus, Australia**
Fixed line pricing principles
Advised Optus on appropriate principles for fixed line pricing and the formation of a roll-forward regulatory regime. Identifying and responding to a critical error in the proposed pricing principles

- 2009** **Digicel, Samoa**
Mobile cost modelling
Developed a mobile cost model for Digicel Samoa in the context of regulatory proceedings on mobile termination rates. Assisting Digicel in responding to the regulator's model and presenting findings in Apia.
- 2009** **Confidential, Australia**
Telecommunications cost modelling
Produced a high level cost assessment of an Australian telecommunications network on behalf of a confidential client.
- 2009** **Jemena Gas Networks, Australia**
Material and labour escalation factors
Estimated cost escalation factors, including carbon effects, for JGN's regulatory access arrangement.
- 2009** **Competitive Carriers Coalition, Australia**
Steiner improvements to minimum spanning trees
Estimated the potential cost improvements that could be achieved within the ACCC's fixed line cost model by the use of Steiner trees rather than minimum spanning trees on behalf of the Competition Carriers' Coalition
- 2008** **Optus, Australia**
Replacement cost estimate for a FTTP
Undertook adjustments to the ACCC's fixed line cost model to estimate the cost of a fibre to the premise roll out in Australia for Optus
- 2008-09** **New South Wales and Tasmanian electricity network businesses, Australia**
Material and labour escalation factors
Estimated cost escalation factors for the businesses initial and revised regulatory proposals.
- 2008-09** **ETSA, Australia**
Prices for public lighting
Provided ETSA with advice in relation to a dispute with ESCOSA over its proposed prices for public lighting.
- 2008** **Confidential, Australia**
Telecommunications cost modelling
Developed a network model for an Australian telecommunications company, estimating the cost associated with a regulated service.
- 2008** **ElectraNet, Australia**
Material and labour escalation factors
Estimated cost escalation factors for ElectraNet's revised regulatory proposal.
- 2007** **MultiNet, Australia**
Efficient margins on outsourced operating expenditure
Assisted in the preparation of an expert report on the prudence of MultiNet's outsourcing contracts in the context of the National Gas Code

- 2006-07** **GDSE, Macau**
Efficient tariff design
Advised the electricity regulator in Macau about efficient tariff reform using modelling of the short run and long run marginal cost of supply in Macau
- 2006** **Telecom New Zealand, New Zealand**
Universal service obligation replacement cost modelling
Assisted in the preparation of expert reports for Telecom New Zealand on the correct methodology for calculating the cost of providing the TSO (universal service obligation) using new entrant costs
- 2005** **Integral Energy, Australia**
Estimating long run marginal cost
Advised Integral Energy on its LRMC of meeting growing network demand and how to reflect this in efficient tariff design (including design of critical peak pricing)

Cost of Capital and Finance

- 2016** **Powerco, New Zealand**
Review of asset beta and debt raising costs
Prepared expert reports, submitted to the Commerce Commission, assessing whether an asset beta uplift is required for gas distribution businesses relative to electricity network businesses. Further advised on efficient debt raising costs, including estimating the new issue premium and the costs of meeting ratings agencies requirements for debt raising practices.
- 2016** **New South Wales Government, Australia**
Implications of cost of capital litigation
Drafted sections of vendor due diligence document summarising recent developments in the regulatory cost of capital. In particular, the drafting reviewed the implications of the Tribunal's decisions on the return on equity, return on debt and the value of imputation credits
- 2016** **Perth Airport, Australia**
Estimating the weighted average cost of capital
Prepared an expert report estimating the cost of equity, cost of debt and the weighted average cost of capital for Perth Airport in the context of its commercial negotiations with airlines.
- 2015-16** **Australian Government Solicitor / Commonwealth of Australia**
Native title compensation claim
In the context of a claim for compensation for extinguished native title in the Federal Court of Australia, contributed to the calculation of the compensation for the time value of money under a number of scenarios.
- 2015** **Tuas Power Generation, Singapore**
Changes to forward sales contract scheme
Prepared an expert report for submission to the EMA advising on potential changes to the forward sales contract scheme, which underpins the electricity futures market in Singapore.

- 2015** **Jemena Gas Networks and the Victorian electricity distribution businesses, Australia**
Cost of debt
Prepared an expert report providing analysis of the AER's draft determination and recommending approaches for estimating the cost of debt.
- 2014-15** **New South Wales and ACT electricity distribution businesses, Australia**
Advice on the weighted average cost of capital
Preparing expert reports responding to the AER's draft decision and undertaking new analysis of indications of the cost of equity and the cost of debt for regulated electricity network businesses.
- 2014** **ATCO, Australia**
Estimating the debt risk premium
Assisted in the preparation of an expert report for ATCO advising of issues in the estimation of the debt risk premium. Further assistance in response to the ERA's draft decision.
- 2014** **Victorian and South Australian electricity distribution businesses, Australia**
Estimating the new issue premium
Performed analysis of a large sample of bond issues made by Australian domiciled businesses in Australia and overseas to estimate the difference between primary yields and secondary market yields at the time of issue.
- 2013-15** **Chorus, New Zealand**
Providing advice on the WACC
Provided Chorus advice on the WACC, including expert reports, in the context of its Final Pricing Principle for the UCLL and the UBA. This included general WACC advice in relation to estimating the cost of debt and the cost of equity, and also assistance in estimating the optimal mark-up to the cost of capital associated with asymmetric costs to society from mispricing regulated services.
- 2013** **Jemena, Australia**
Replicating the RBA's cost of debt benchmark
Undertook analysis aimed at understanding and replicating the analysis performed by the Reserve Bank of Australia in producing estimates of yields on corporate bonds.
- 2013** **United Energy, Australia**
Cost of debt statistics
Co-authored a report investigating the statistical properties of alternative yield curve estimates for estimating the cost of debt.
- 2013** **Victorian electricity distribution businesses, Australia**
Cost of debt
Estimated the cost of debt for use in the regulation of Victoria's advanced metering infrastructure. The analysis involved collection of bond data and analysis of the Bloomberg fair value curve as well as estimation of alternative yield curves.
- 2013** **Dampier to Bunbury Pipeline, Australia**
Estimating the benchmark credit rating
Assisted in the preparation of an expert report addressing the benchmark credit rating for the purpose of determining the debt risk premium. The report conducted econometric benchmarking of credit ratings against business characteristics.

- 2012-13** **Victorian gas network businesses, Australia**
Debt risk premium
Prepared expert reports estimating the regulatory debt risk premium for four Victorian gas distribution businesses. Assisting these businesses in their appeal of the AER's decision.
- 2012-13** **Victorian gas network businesses, Australia**
Internal consistency in estimating the cost of equity
Prepared expert reports reviewing the internal consistency of the AER's application of the Sharpe-Lintner CAPM for estimating the cost of equity. Advising of alternative and consistent means to estimate the cost of equity.
- 2012** **Western Power, Australia**
Regulatory cost of capital for electricity distribution
Prepared three expert reports for Western Power addressing issues in respect of the estimation of the equity beta, the calculation of debt risk premium and consistency of between CAPM parameters in estimating the cost of equity
- 2012** **Vector, New Zealand**
Appeal of input methodologies WACC decision
Assisted Vector in its appeal of the New Zealand Commerce Commission's WACC input methodology.
- 2011-12** **Vector, New Zealand**
Development of input methodologies
Prepared expert reports for Vector responding to the New Zealand Commerce Commission's proposed input methodologies for estimating the cost of capital
- 2011-12** **Energy Network Association, Australian Pipeline Industry Association, AusGrid, Australia**
AER rule change proposal
Advised the ENA and APIA in relation to the AER's proposed change to the National Electricity Rules and National Gas Rules.
- 2011** **AusGrid, Australia**
Effect of government ownership on the cost of debt
Produced an expert report assessing a rule change proposal based on a claim that government ownership should lower the benchmark cost of debt used for regulated electricity and gas network businesses.
- 2011** **APA, Australia**
Debt risk premium analysis
Prepared expert reports for APA in relation to debt risk premium for APT Allgas and APTPPL. Assisted APA in its successful appeal of the AER's APT Allgas debt risk premium decision.
- 2011** **Vanuatu Government, Vanuatu**
Country risk premium
Provided expert advice to the Vanuatu government in respect of the correct country risk premium to apply in the context of a dispute and arbitration to determine the cost of capital for UNELCO
- 2010-11** **Envestra Queensland and South Australia, Australia**
Cost of capital for gas distribution
Prepared expert reports advising Envestra of the risk-free rate, debt risk premium and equity beta to be used in its original and revised access arrangement proposals. Assisting on the appeal in relation to debt risk premium.

- 2010** **Commercial Radio Australia, Australia**
Cost of capital for multiplexer access
Assisted in the preparation of a report to Commercial Radio Australia advising it of the cost of capital in the context of regulation of access to its multiplexers in capital cities.
- 2010** **Victorian electricity network businesses, Australia**
Debt risk premium estimation and appeal
Advised the Victorian electricity network businesses on estimating the debt risk premium and in the successful appeals of the AER's decision. Responded to expert statistical analysis prepared by the AER's witness in these proceedings.
- 2010** **Jemena Gas Network, Australia**
Debt risk premium estimation and appeal
Advised the Jemena Gas Networks on estimating the debt risk premium and in its successful appeals of the AER's decision.
- 2010** **South East Queensland Water Businesses, Australia**
Cost of capital for water distribution access
Advised the South East Queensland Water Businesses on the risk-free rate, debt premium and equity beta applicable to their regulation by the Queensland Competition Authority
- 2010** **ActewAGL, Australia**
Debt risk premium estimation and appeal
Advised ActewAGL on the AER's methodology for estimating the cost of debt and debt risk premium. Assisted in the subsequently successful appeal on the same issue.
- 2008-09** **Energy Networks Association, Australia**
AER's review of cost of capital parameters
Advised on the appropriate estimation of the cost of capital associated with capital assets used to provide electricity networks services in the context of a five yearly review performed by the Australian Energy Regulator
- 2008-09** **New South Wales and Tasmania electricity network businesses, Australia**
Risk free rate and debt risk premium estimation and appeal
Advised on the appropriate estimation of the regulated cost of capital for distribution and transmission electricity network businesses in New South Wales and Tasmania and assisted in their subsequent appeal to the Australian Competition Tribunal.
- 2008** **ElectraNet and ActewAGL, Australia**
Calculating the real risk free rate
Assisted in the preparation of expert reports for ElectraNet and ActewAGL describing the correct method for deriving a real risk free rate in the CAPM.
- 2005-07** **Rismark, Australia**
Financial products
Assessed the economic assumptions underlying an innovative mortgage product proposed by Rismark.

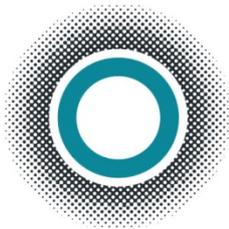
Market Design and Damages

- 2013** **CEZ Shperndarje, Albania**
Economic damages for breach of contract
Estimated economic damages due to alleged conduct of the Albanian government in respect of CEZ's electricity distribution and supply businesses.
- 2013** **Confidential, Australia**
Commercial negotiation of wholesale agreement
Assisted a telecommunications business in its negotiations with a wholesale provider.
- 2012** **Clayton Utz, Australia**
Commercial damages in Australian iron ore
Assessed the potential costs of alternative uses of specific Pilbara iron ore deposits held by Hancock Prospecting and Wright Prospecting.
- 2012** **Australian Government Solicitor, Australia**
Plain packaging of tobacco products
Assisted the government solicitor in understanding the tobacco market in Australia in advance of international litigation due to the government's plain packaging legislation.
- 2011** **Telecom New Zealand, New Zealand**
Estimation of damages
Estimated damages to access seekers caused by non-availability of a service. Assisted Telecom in assessing Commerce Commission modelling and in settling the claim.
- 2010-11** **Mallesons, Australia**
Financial assumptions in tax disputes
Assisted Malleson's to analyse a paper by Giffnock estimating a reasonable level of fees paid by CKI companies to the parent company for credit support.
- 2009** **Commercial Radio Australia, Australia**
Reserve price at auction
Estimated a reserve price in Commercial Radio Australia's auction of unallocated multiplexer capacity
- 2007** **Meerkin & Apel, Australia**
Commercial damages in medical waste disposal
Prepared an expert report and response for Meerkin & Apel examining the reasonableness of economic assumptions underlying the estimation of damages in a commercial arbitration
- 2007** **Freehills, Australia**
Class action damages estimates
Prepared estimates of the potential damages faced by Telstra under a class action lawsuit from its shareholders.
- 2007** **Santos, Australia**
Arbitration of a gas supply contract
Assisted in determining the market gas price on behalf of Santos in arbitration for a major gas supply contract between the Cooper Basin producers and AGL.
- 2006** **Santos, Australia**
Arbitration of a gas supply contract
Assisted in determining the market gas price on behalf of Santos in arbitration for a major gas supply contract between the South West Queensland gas producers and Xstrata.

Policy Analysis

- 2017** **Transport for New South Wales, Australia**
Reviewing the contribution of the cruise industry and implications for pricing
Advised Transpower for New South Wales on the extent of the economic contribution of the cruise industry in New South Wales and the size of subsidies provided. The advice included implications of our findings for prices and price structures.
- 2017** **Infrastructure Australia, Australia**
Assessing projects for inclusion on the infrastructure priority list
Assisted Infrastructure Australia by assessing initiatives for inclusions in the infrastructure priority list. The task includes analysing the economic, social and environmental impacts of the proposed initiatives.
- 2016** **Visy, Australia**
Negotiations in relation to a commercial contract
Advised Visy on assessing potential options in relation to negotiations it was conducting over a commercial contract with a supplier of inputs. Our analysis included reviewing the benefits and costs that the options would have for Visy.
- 2016** **AEMC, Australia**
Arrangements for ensuring reliability of electricity supply
Prepared an internal report for the AEMC that summarised the various arrangements across the electricity supply chain for ensuring the continuity of supply to end-use customers.
- 2015-16** **Climate Change Authority, Australia**
Peer review of modelling of emissions reductions policies
Prepared a peer review for the Climate Change Authority assessing Jacob's modelling of the effects of seven alternative approaches to meeting Australia's emissions reductions commitments. The review included a rigorous evaluation of the assumptions used and approaches adopted by Jacob's analysis.
- 2015** **New South Wales Government, Australia**
Assessment of new business opportunities
Prepared an expert report investigating regulatory barriers to the ability of the New South Wales distribution network businesses to engage in new areas of unregulated activities, as part of the partial lease of these businesses.
- 2007** **Ministerial Council on Energy, Australia**
Demand response of electricity users to smart metering
Estimated the likely response in the demand for electricity to the increased proliferation of time of day and critical peak tariffs as part of the MCE's cost/benefit analysis of the introduction of smart meters
- 2007** **Independent Pricing and Regulatory Authority, Australia**
Household survey analysis
Analysed the results of the 2006 household survey of electricity, gas and water consumption in the Sydney region and preparing a report summarising these on behalf of IPART

- 2006** **Australian Railway Association, Australia**
Comparative charging regimes for road and rail
Assisted in the preparation of reports for the Australian Railway Association on the efficiency of methods for charging for use of road and rail networks. Prepared a critique of an econometric analysis on the benefits of changing the charging methodology
- 2004** **University of Auckland, New Zealand**
Analysis of healthcare outcomes
Conducted statistical modelling of the relationships between socioeconomic variables and healthcare outcomes using census data



HOUSTONKEMP

Economists

Sydney

Level 40
161 Castlereagh Street
Sydney NSW 2000

Phone: +61 2 8880 4800

Singapore

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

Phone: +65 6817 5010

Appendix 3 Comparison of DBCT Access Framework to DBCT User Group concerns

DBCT User Group concerns regarding protections that would be lost		How concerns are addressed in DBCT Access Framework
Page 5	Certainty of long term access	<p>✓ - The Standard Access Agreement under the Access Framework provides for certainty of long-term access. Clause 20 of the Standard Access Agreement provides that, if the period during which coal is to be shipped during the term of the Agreement is 10 years or more, the user has an option to extend the term for 5 years or more (exercisable at any time up to 12 months prior to the end of the term, including the term as already extended by the exercise of such an option). This is consistent with clause 20 of the Standard Access Agreement under DBCTM's current access undertaking. The Deed Poll also provides for the Framework to remain in effect for at least 10 years, which is longer than the term of DBCTM's access undertakings under the QCA Act.</p>
	Reasonable terms	<p>✓ - As set out in section 4.3 of the DBCTM Submission, the Access Framework is an open access framework that provides access on reasonable terms. The reasonableness of the terms and conditions is demonstrated by the consistency of the Access Framework with all material aspects of the current access undertaking. In addition, the reasonableness and effectiveness of the Access Framework is highlighted by its conformity with the Competition Principles Agreement (CPA) principles. In particular, as summarised in the table in Appendix 5 of the DBCTM Submission, the Access Framework conforms with the principles set out in clause 6 of the CPA.</p>
	Efficient pricing levels	<p>✓ - The pricing provisions in the Access Framework ensure efficient pricing levels. The Access Framework provides for access charges to be negotiated between DBCTM and each user, or determined by an independent arbitrator if agreement is not reached. In the event of an arbitration, the arbitrator is required to determine a TIC that (in summary):</p> <ul style="list-style-type: none"> • Reflects the price that would be agreed between a willing but not anxious buyer and a willing but not anxious seller; • Is between a floor and ceiling, with the floor price being the price that would apply under a QCA administered price regime and the ceiling price being the highest price at which coal volumes served at DBCT would be the same as if the floor price applied. <p>As set out at paragraph 332 of the DBCTM Submission, the pricing framework under the Access Framework will ensure that access prices comply with the pricing principles specified in the CPA (which are equivalent to the principles in section 168A of the QCA Act).</p>

DBCT User Group concerns regarding protections that would be lost		How concerns are addressed in DBCT Access Framework
<p>Page 77</p> <p>The QCA being responsible for approving the Terminal Infrastructure Charge (which ensures an efficient and reasonable price for all access holders, and long term certainty as to how prices will continue to be calculated in the future).</p>	<p>✓ (other than QCA approval) - While the QCA will not be responsible for approving the TIC in the future without declaration, the pricing framework under the Access Framework ensures efficient and reasonable prices for access seekers and access holders (as discussed in the row above).</p> <p>The pricing framework also provides long-term certainty as to how prices will be calculated, as the Deed Poll provides for the Framework to be in place for at least 10 years and requires that any amendments to the Framework promote the Framework Objective (which is to promote the economically efficient operation of, use of and investment in, the Terminal, with the effect of promoting effective competition in upstream and downstream markets). The ceiling price provided for in the Framework provides certainty as to the maximum price payable relating to the TIC and the willing but not anxious principle provides certainty that the TIC will be a market-based price.</p>	
<p>A standard user agreement – setting reasonable terms and conditions for access, that are available for all access seekers, including:</p> <ul style="list-style-type: none"> • an evergreen renewal right that provides secure long term access to users; • compliance with the terminal regulations – which contains substantial protections against operational discrimination (and provisions which protect the users from discriminatory changes to such terminal regulations). 	<p>✓ - The Standard Access Agreement under the Access Framework is substantively similar to the Standard Access Agreement under the current access undertaking. Section 12 of the Access Framework includes an equivalent provision to Section 13 of the current access undertaking for a Standard Access Agreement to guide access negotiations, and includes a right for access seekers to require that the access agreement be substantively identical to the Standard Access Agreement.</p> <p>The Standard Access Agreement under the Access Framework includes the key terms that are in the Standard Access Agreement under the current access undertaking, including:</p> <ul style="list-style-type: none"> • an evergreen renewal right that provides secure long term access to users (see clause 20, which is equivalent to clause 20 of the Standard Access Agreement under the current access undertaking); • compliance with the terminal regulations (see clause 3.6, which is equivalent to clause 3.6 of the Standard Access Agreement under the current access undertaking). 	
<p>Protections for users to ensure appropriate changes are made to the access undertaking in the event that the user owned operator is removed (which is important as the current undertaking and user agreements assume prudence of operating charges by the operator given the user ownership structure, and further checks and balances would be required to prevent operational discrimination if a third party operator was engaged).</p>	<p>✓ - Sections 3.2 and 3.3 of the Framework (relating to the Operator) are consistent with the equivalent provisions in the current access undertaking. Those sections provide for the Operator to be Dalrymple Bay Coal Terminal Pty Limited for the term of the Framework. DBCTM's ability to change these provisions is constrained by the Deed Poll, which requires consultation on proposed amendments and that amendments can only be made if they promote the Framework Objective.</p>	
<p>A transparent queuing process which provides an even playing field for all access seekers, including a 'notifying access seeker' regime that enables an access seeker to obtain access if other access seekers do not contract for the available access at the same or an earlier time.</p>	<p>✓ - The Access Framework contains a transparent queuing process that is equivalent to the process under the current access undertaking (see Section 5.4), with disputes able to be referred for independent determination.</p>	

DBCT User Group concerns regarding protections that would be lost		How concerns are addressed in DBCT Access Framework
	A clear, transparent and certain path to expansion of the terminal where sufficient demand exists.	✓ - The Access Framework contains expansion provisions that are equivalent to the expansion provisions under the current access undertaking (see Section 11), with an independent Expansion Arbitrator performing the role of the QCA.
Page 78	The ring-fencing provisions which provide protections not just in relation to BPC, but any future vertically integrated supply chain business.	✓ - The Access Framework contains equivalent ring-fencing provisions to the ring-fencing provisions in the current access undertaking (see Section 8). The ring-fencing provisions in the Access Framework include that DBCTM and its related bodies corporate will not own or operate a Supply Chain Business in any market that is related to or uses the Terminal. The <i>Competition and Consumer Act 2010</i> (Cth) also provides protections that are relevant to the future integration (such as the prohibition on acquisitions that have the effect or likely effect of substantially lessening competition in a market). As set out in DBCTM's Trading SCB DAAU dated 27 June 2018, the Trading SCB provided by BPC will cease trading as of 1 September 2018. Therefore, separate protections relating to Trading SCB are not required in the Access Framework. The ring-fencing provisions in the Access Framework include that DBCTM and its related bodies corporate will not own or operate a Supply Chain Business in any market that is related to or uses the Terminal.
	A best endeavours requirement to pursue supply chain efficiency initiatives.	✓ - The Access Framework contains equivalent provisions to the current access undertaking relating to whole of supply chain efficiency and master plans (see Sections 13 and 14). The Standard Access Agreement that forms part of the Access Framework also includes equivalent provisions to the Standard Access Agreement under the current access undertaking relating to a User Committee that provides a forum for consultation on matters including factors which may impact on the future performance or efficiency of the Terminal (see clause 17).
	The disclosure and reporting regime – which provides transparency and accountability.	✓ - The Access Framework contains reporting provisions that provide for DBCTM to publicly report on its compliance with the Framework and on service quality key performance indicators (see Sections 9.1 and 9.2).
	The obligation on DBCTM to negotiate in good faith (section 100 QCA Act).	✓ - The Access Framework contains an equivalent provision to section 100 of the QCA Act (see Section 5.1(c)).
	The obligation to make all reasonable efforts to try to satisfy the reasonable requirements of the access seeker (section 101 QCA Act).	✓ - The Access Framework contains an equivalent provision to section 101 of the QCA Act (see Section 5.1(e)).
	The prohibition on DBCTM and its related bodies corporate of engaging in conduct for the purpose of preventing or hindering a user's access to the service under an access agreement (including providing access to a related body corporate of the access provider on more favourable terms than a competitor: section 104(2) QCA act) (section 104 QCA Act).	✓ - The Access Framework contains equivalent ring-fencing provisions to the ring-fencing provisions in the current access undertaking and section 104 of the QCA Act (see Section 8). The provisions include that DBCTM will not engage in conduct for the purposes of preventing or hindering an access holder's or access seeker's access, or unfairly differentiate between access seekers, access holders or rail operators (Section 8.2). The ring-fencing provisions in the Access Framework also include that DBCTM and its related bodies corporate will not own or operate a Supply Chain Business in any market that is related to or uses the Terminal (Section 8.1).

DBCT User Group concerns regarding protections that would be lost		How concerns are addressed in DBCT Access Framework
	<p>Protections against future integration.</p>	<p>✓ - The Access Framework contains equivalent ring-fencing provisions to the ring-fencing provisions in the current access undertaking (see Section 8). The ring-fencing provisions in the Access Framework include that DBCTM and its related bodies corporate will not own or operate a Supply Chain Business in any market that is related to or uses the Terminal. The <i>Competition and Consumer Act 2010</i> (Cth) also provides protections that are relevant to future integration (such as the prohibition on acquisitions that have the effect or likely effect of substantially lessening competition in a market).</p>
<p>83 and 84</p>	<p>All other potential buyers of tenements will be at a material disadvantage to both BMA/BHP Mitsui and the existing DBCT access holders due to being highly exposed to DBCT Management's conduct, with no certainty of access, pricing or other access terms, where DBCT Management will have the power and economic incentives to act as a monopolist.</p> <p>...</p> <p>Even if DBCTM was to offer any future contractual arrangements they are highly unlikely to provide the certainty of long term pricing and efficient pricing levels required in order for potential producers to continue to invest in acquisition of tenement [sic] in the Hay Point catchment coal tenements market.</p>	<p>✓ - The Access Framework provides certainty of access, pricing and other access terms. As set out in the DBCTM Submission and this document, the Access Framework provides a binding and enforceable open access framework for the negotiation and provision of access. It includes a right for access seekers to negotiate access (pursuant to a process equivalent to Section 5 of the current access undertaking) and a binding dispute resolution mechanism if a dispute arises in relation to such negotiations.</p> <p>The Standard Access Agreement under the Access Framework provides certainty as to the terms of access, with Section 12 of the Access Framework including a right for access seekers to require that the access agreement be substantively identical to the Standard Access Agreement. Clause 20 of the Standard Access Agreement provides for long-term agreements and provides an option exercisable by the user to extend the term (consistent with clause 20 of the current Standard Access Agreement under DBCTM's current access undertaking). The Deed Poll also provides for the Framework to remain in effect for at least 10 years, which is longer than the term of DBCTM's access undertakings under the QCA Act.</p> <p>Further, pricing certainty and efficient pricing is provided through the pricing framework, which includes a ceiling TIC (providing certainty as to the maximum price payable relating to the TIC) and provides for the price to be set based on a willing but not anxious buyer and seller (which provides certainty that the TIC will be a market-based price).</p>

DBCT User Group concerns regarding protections that would be lost	How concerns are addressed in DBCT Access Framework
<p>86</p> <p>DBCTM is vertically integrated in respect of its related secondary trading operation, BPC, which has been, since its establishment, a related body corporate.</p> <p>Declaration has given rise to QCA regulation (via terms of the access undertaking) of the anti-competitive effect which would otherwise arise from that vertical integration – by restricting how the secondary trading operation can conduct itself (refer to section 9.1 and Schedule H DBCT 2017 AU and section 9 of the November 2016 QCA Final Decision on the 2015 DAU)</p> <p>In particular, the regulatory arrangements arising from declaration:</p> <ul style="list-style-type: none"> (a) makes it impossible for DBCTM to refuse (or condition) consents to transfers on the basis that the trade is done through the secondary trading operation; and (b) prohibits stockpiling/reserving capacity by BPC. <p>In the absence of declaration, there would be no restriction on anti-competitive behaviour such as:</p> <ul style="list-style-type: none"> (c) DBCTM refusing to consent to assignments/capacity trading (under clause 12.2 and 12.5 of the User Agreements) unless done through the secondary trading business; and (d) BPC acquiring all surplus capacity and then only selling it on a monopoly pricing basis. <p>In combination with the requirement for consents to assignment which exist in each User Agreement this would allow DBCTM's related secondary trading business to have a monopoly in the DBCT secondary capacity transfer market.</p> <p>By contrast, with declaration and the resulting undertaking, producers can (and do) have a choice of dealing directly with each other – such that DBCTM's related secondary trading business competes with producers who have surplus capacity for such trading.</p>	<p>✓ - The Access Framework contains equivalent ring-fencing provisions to the ring-fencing provisions in the current access undertaking (see Section 8). As set out in DBCTM's Trading SCB DAAU dated 27 June 2018, the Trading SCB provided by BPC will cease trading as of 1 September 2018. Therefore, separate protections relating to Trading SCB are not required in the Access Framework. The ring-fencing provisions in the Access Framework include that DBCTM and its related bodies corporate will not own or operate a Supply Chain Business in any market that is related to or uses the Terminal.</p> <p>The <i>Competition and Consumer Act 2010</i> (Cth) also provides protections from anti-competitive behaviour (such as arrangements or acquisitions that substantially lessen competition in a market, and conduct that substantially lessens competition if a corporation has a substantial degree of power in a market).</p> <p>Further, clauses 12.2 and 12.3 of the Standard Access Agreement under the Access Framework provide for assignments and limit DBCTM's discretion to refuse to an assignment. Clause 12.2 provides that DBCTM's consent must not be unreasonably withheld, and clause 12.3 requires DBCTM to consent to an assignment unless DBCTM (acting reasonably) is satisfied of certain matters such as that the assignor is in material breach of the Agreement or the assignee is not of good financial standing or is incapable of performing the obligations under the Agreement. Refusals to consent to a transfer are subject to binding dispute resolution under the Agreement. Clause 12.5 (permission to third party to ship) of the Standard Access Agreement under the Access Framework is also equivalent to clause 12.5 of the Standard Access Agreement under the current access undertaking.</p> <p>The concerns of the DBCT User Group regarding secondary capacity trading are therefore misplaced.</p>

DBCT User Group concerns regarding protections that would be lost	How concerns are addressed in DBCT Access Framework
<p>87</p> <p>While it is acknowledged that rail haulage providers do not directly contract access at DBCT, they need certainty that:</p> <ul style="list-style-type: none"> (a) the provider of the Service will not become a [sic] vertically integrated with a supply chain business and then favour their related rail haulage operator or coal producer (or discriminate against non-related entities) – noting that Brookfield has in the last 2 years sought to acquire Asciano (including Pacific National) and proposed to buy coal mines in connection with a proposal [sic] restructuring of WICET; (b) the provider of the Service will not engage in monopoly pricing that will hinder future investment in coal production and/or damage the financial viability of existing coal producers; (c) the provider of the Service will work collaboratively to improve supply chain efficiency; and (d) the provider of the Service will expand the terminal when demand exists to do so to provide for growth in the haulage business. <p>Yet, it is the undertaking that currently provides protections against each of those matters.</p>	<p>✓ - The Access Framework provides certainty that:</p> <ul style="list-style-type: none"> (a) DBCTM and its Related Bodies Corporate will not own or operate a Supply Chain Business in any market that is related to or uses the Terminal (Section 8.1). Section 8.2 further provides that DBCTM will not engage in conduct for the purpose of preventing or hindering an access holder's or access seeker's access or unfairly differentiate between access seekers, access holders or rail operators. The <i>Competition and Consumer Act 2010</i> (Cth) also provides protections from anti-competitive behaviour (such as arrangements or acquisitions that substantially lessen competition in a market, and conduct that substantially lessens competition if a corporation has a substantial degree of power in a market). (b) The TIC is constrained such that the use of DBCT remains the same with or without declaration. As set out above, the pricing provisions in the Access Framework include a ceiling TIC and prices set based on a willing but not anxious buyer and seller. (c) DBCT will work collaboratively in relation to supply chain efficiency. The Access Framework contains equivalent provisions to the current access undertaking relating to whole of supply chain efficiency and master plans (see Sections 13 and 14). (d) Obligations to expand will be consistent with obligations to expand under the current access undertaking. The Access Framework contains equivalent provisions to the current access undertaking regarding obligations to accommodate capacity and Terminal capacity expansions (see Section 11). The Port Services Agreement also imposes obligations on DBCTM relating to expansions.

<p>Castalia report, pages 13-14</p>	<p>The existing declaration and regulation of terms and conditions of access, including price, ensures that all users, both current and future users, have a legally enforceable right of access on reasonable terms and conditions (subject to capacity being available).</p> <p>This has a direct bearing on the tenement market, as both new entrants interested in acquiring tenements through either a tender process, direct application, M&A activity or transfer of an existing tenement, and existing firms, have a clear, transparent and efficient process to seek access.</p> <p>This is because the declaration has resulted in DBCT access undertakings that provide:</p> <ul style="list-style-type: none"> • a queuing regime such that access capacity is managed in an efficient manner (including notifying access seekers where it is possible for a new access seeker who is ready to contract to 'leap frog' other access seekers that are not ready to contract); • standard non-price terms and conditions of access—in effect a deemed contract that does not require negotiation • regulated efficient pricing for the service (with a known and well-established methodology for calculating that efficient pricing); • protections regarding a change away from the current user owned operator model (which provide protections in relation to efficiency of the Service, as the interests of the users and user owned operator are aligned); and • obligations on DBCT to expand the terminal to meet demand and the terms and conditions under which such expanded access is provided. <p>The Act also requires that access seekers [sic]:</p> <ul style="list-style-type: none"> • negotiate in good faith • make all reasonable efforts to try to satisfy the reasonable requirements of the access seeker; and 	<p>✓ - As set out in the DBCTM Submission and above, the Access Framework includes a legally enforceable right for access seekers to negotiate access (pursuant to a process equivalent to Section 5 of the current access undertaking, which is clear, transparent and efficient) and a binding dispute resolution mechanism if a dispute arises in relation to such negotiations. The reasonableness of the terms and conditions is demonstrated by the consistency of the Access Framework with all material aspects of the current access undertaking and the CPA principles (see, for example paragraphs 308, 324-325 and Appendix 5 of DBCTM's Submission).</p> <p>Consistent with the current access undertaking, the Access Framework provides:</p> <ul style="list-style-type: none"> • <i>A queuing regime such that access capacity is managed in an efficient manner (including notifying access seekers where it is possible for a new access seeker who is ready to contract to 'leap frog' other access seekers that are not ready to contract)</i> - The Access Framework contains a transparent queuing process that is equivalent to the process under the current access undertaking (see Section 5.4 of the Access Framework). • <i>Standard non-price terms and conditions of access—in effect a deemed contract that does not require negotiation</i> - The Standard Access Agreement that forms part of the Access Framework is substantively similar to the Standard Access Agreement under the current access undertaking. Section 12 of the Access Framework includes an equivalent provision to Section 13 of the current access undertaking for a Standard Access Agreement to guide access negotiations, and includes a right for access seekers to require that the access agreement be substantively identical to the Standard Access Agreement. • <i>Regulated (through arbitration in the event of a dispute) efficient pricing for the service (with a known and well-established methodology for calculating that efficient pricing)</i> - The Access Framework provides for access charges to be negotiated between DBCTM and each user, or determined by an independent arbitrator if agreement is not reached. In the event of an arbitration, the arbitrator is required to determine a TIC that (in summary) reflects the price that would be agreed between a willing but not anxious buyer and a willing but not anxious seller and that is between a floor and ceiling. As set out at paragraph 332 of the DBCTM Submission, the pricing framework under the Access Framework will ensure that access prices comply with the pricing principles specified in the CPA (which are equivalent to the principles in section 168A of the QCA Act). A floor and ceiling price methodology is a well-established and known methodology for calculating efficient pricing. For example, the pricing methodology under Queensland Rail's access undertaking approved by the QCA includes floor and ceiling limits. The Western Australia <i>Railways (Access) Code 2000</i> similarly includes a pricing methodology based on floor and ceiling prices. • <i>Protections regarding a change away from the current user owned operator model (which provide protections in relation to efficiency of the Service, as the interests of the users and user owned operator are aligned)</i> - Sections 3.2 and 3.3 of the Framework (relating to the Operator) are consistent with the equivalent provisions in the current access undertaking. Those sections provide for the Operator to be Dalrymple Bay Coal Terminal Pty Limited for the term of the Framework. DBCTM's ability to change these provisions is constrained by the Deed Poll, which requires consultation on proposed amendments and that amendments can only be made if they promote the Framework Objective. • <i>Obligations on DBCTM to expand the terminal to meet demand and the terms and conditions under which such expanded access is provided</i> - The Access Framework contains equivalent provisions to the current
--	---	---

DBCT User Group concerns regarding protections that would be lost	How concerns are addressed in DBCT Access Framework
<ul style="list-style-type: none"> do not prevent or hinder a user's access to the service—for example inefficient price discrimination <p>If the declaration is not renewed these protections and rights would be in jeopardy.</p>	<p>access undertaking regarding obligations to accommodate capacity and Terminal capacity expansions (see Section 11). The Port Services Agreement also imposes obligations on DBCTM relating to expansions.</p> <p>Consistent with the QCA Act, the Access Framework requires DBCTM to:</p> <ul style="list-style-type: none"> <i>negotiate in good faith</i> - see Section 5.1(c); <i>make all reasonable efforts to try to satisfy the reasonable requirements of the access seeker</i> - see Section 5.1(e); and <i>not prevent or hinder a user's access to the service—for example inefficient price discrimination</i> - see Sections 5.1(d) and 8.2. <p>The Access Framework therefore means that the above protections and rights would be the same with or without declaration.</p>

Appendix 4 DBCTM analysis of market demand

488 In this Appendix DBCTM demonstrates that total foreseeable demand in the market exceeds the existing capacity of DBCT over the period for which the DBCT service would be declared. It does this using the geographic scope of the Hay Point catchment proposed by Castalia, and Wood Mackenzie February 2018 production forecasts.

'Hay Point catchment' in the User Group Submission

489 As noted in the HoustonKemp Review on (b)⁴⁰², the User Group Submission (including the PwC report) does not form a clear view about the region from which potential customers of the DBCT service would be drawn. DBCTM notes, however, that the User Group Submission does identify the concept of a 'Hay Point catchment' area⁴⁰³ for the purposes of assessing criterion (b).

490 In defining the market in which the service is provided, the User Group contends that the appropriate market definition is 'the Hay Point common user coal handling services market'.⁴⁰⁴ The User Group further elaborates that the current acquirers (of the service) are all the existing users of DBCT, and

"[t]he potential acquirers are future coal producers in those parts of the Bowen Basin that are within the **Hay Point catchment**'⁴⁰⁵ (emphasis added)

491 The User Group Submission does not further describe the geographic extent of this catchment other than to include a diagram from RMI⁴⁰⁶ (which extends as far south as Kestrel and as far north as Hillalong / Wards Well), and to further note that a 'mine located near the Goonyella system (in what is referred to as the Hay Point catchment in this submission.)'⁴⁰⁷

492 Elsewhere in the User Group Submission, references to a 'Hay Point catchment' are largely with regard to the coal tenements market. It is in this context that the closest geographic approximation of the 'Hay Point catchment' is determined, and illustrated (by Castalia). The Castalia Report in the User Group Submission states:⁴⁰⁸

The 'Hay Point catchment' is not perfectly aligned with the Goonyella rail system – as tenements that are not connected to the rail system, but for which that would be the most efficient export port would be within the market, although the Goonyella rail system and proximate areas is a reasonable proxy for the current boundaries of the market.

493 This is the closest the User Group Submission comes to establishing the geographical scope of the 'market' with regard to the 'Hay Point catchment'. The User Group Submission also states that the 'geographic dimension of the market is appropriately defined as the Hay Point catchment'.⁴⁰⁹

494 Given the User Group has defined the appropriate market for the purposes of assessing criterion (b) as one in which potential acquirers of the DBCT service as those that are within the Hay Point catchment, and has

⁴⁰² HoustonKemp report on (b), page 11

⁴⁰³ User Group Submission, page 21-22, refers to the PwC analysis and identifies this concept in the context of substitution limitations for a "coal producer in the Hay Point catchment switching the terminal it used". (see also pages 60, 71, etc)

⁴⁰⁴ User Group Submission, page 16

⁴⁰⁵ User Group Submission, page 16

⁴⁰⁶ User Group Submission, page 17

⁴⁰⁷ User Group Submission, pages 34 and 38

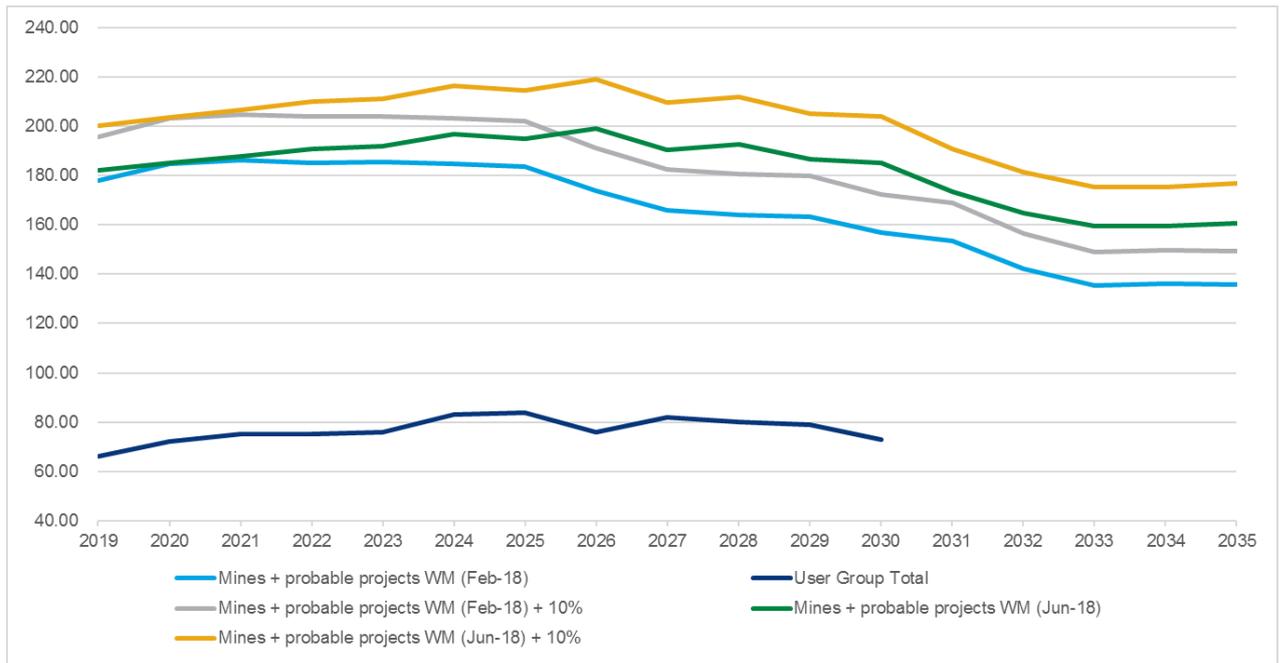
⁴⁰⁸ User Group Submission, page 44

⁴⁰⁹ User Group Submission, page 45

separately determined an approximation of this catchment graphically, DBCTM has sought to create the total foreseeable demand within this ‘Hay Point catchment’, based on:

- 494.1 the User Group Submission’s geographic dimension of the market, as illustrated by a red circle⁴¹⁰
- 494.2 data sourced from the User Group’s market analyst, Wood Mackenzie (February 2018 forecasts)⁴¹¹, which was used in the User Group Submission
- 494.3 latest data sourced from the User Group’s market analyst, Wood Mackenzie (June 2018)
- 494.4 An illustration of contractual congestion of 10%

Figure 20: Total Foreseeable Demand in the ‘Hay Point catchment’ (Mtpa)



495 As illustrated in Figure 20, the maximum total foreseeable demand (including all existing mines and ‘probable’ projects - as defined by Wood Mackenzie - in the ‘Hay Point catchment’ area) for throughput reaches 186.1Mtpa in 2021 (per February 2018 Wood Mackenzie forecasts). The maximum foreseeable demand for contracted capacity reaches 204.7Mtpa in 2021. By excluding all the probable projects within the ‘Hay Point catchment’ area (which would be done erroneously, but to illustrate only existing mines), demand for throughput peaks at 181.0Mtpa in 2020.

496 As stated earlier, this is based on February 2018 Wood Mackenzie mine and project forecasts, which were used in the User Group Submission (noting the User Group made unpublished adjustments to the Wood Mackenzie data, presumably to exclude all BMA and BMC production, and any other mines within the area that are currently using the services of another terminal, etc.).

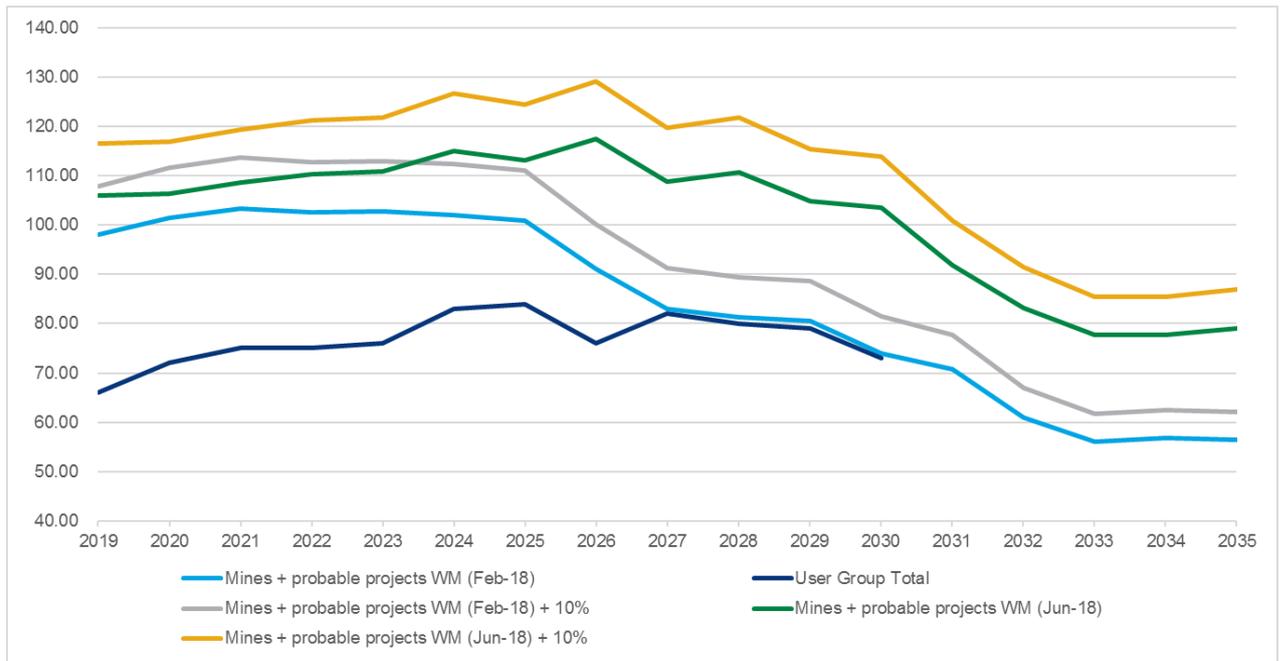
497 Figure 20 also illustrates the June 2018 updated Wood Mackenzie data (for the same geographic area), which indicates even greater demand than its February 2018 forecast. Peak throughput demand within the ‘Hay Point catchment’ area reaches 199.1Mtpa in 2026.

⁴¹⁰ User Group Submission, page 45; and Castalia Report, page 8

⁴¹¹ DBCTM notes this is to replicate the data set that Wood Mackenzie provided the Users for their submission

498 Figure 21 below illustrates the impact on total foreseeable demand if one were to (erroneously) exclude all BMA and BMC mines. Total foreseeable demand for throughput in the Hay Point catchment from existing mines and probable projects peaks at 103.4Mtpa in 2021 (and 97.8Mtpa in 2020, when including operating mines only). This is significantly higher than the throughput demand forecast on page 59 of the User Group Submission. Peak throughput demand, based on June 2018 Wood Mackenzie forecasts, reaches 117.4Mtpa in 2026.

Figure 21: Total Foreseeable Demand in the ‘Hay Point catchment’ (excluding BMA and BMC mines)



499 While excluding BMA and BMC mines from the demand side of the market is a fundamental error, the above chart is merely to illustrate that Wood Mackenzie’s data, if used to calculate demand for the User group’s ‘Hay Point catchment’, still indicates demand in excess of DBCT’s capacity. This is consistent with HoustonKemp and AME analyses.

500 In conclusion, the User Group Submission failed to appropriately address the geographic dimension of the relevant market with regard to assessing criterion (b). DBCTM has used the vague definitions of a ‘Hay Point catchment’ throughout the User Group Submission to create, based on the User Group’s independent analyst’s data, the total foreseeable demand in the market. The results indicate foreseeable demand that vastly exceeds the maximum reasonably expanded capacity of DBCT.

Appendix 5 Rail capacity analysis

501 This Appendix uses publicly available information to demonstrate that the User Group's assertions regarding the limited extent of spare below rail capacity in the CQCN are incorrect.⁴¹² Rather, as demonstrated below, there is currently sufficient rail capacity for a DBCT user in the Goonyella system to switch throughput to either AAPT in the north or RGTCT/WICET in the south.

Current nameplate capacity of each rail system

502 The existing capacity of each rail system in the Central Queensland Coal Network (CQCN), as provided by Aurizon Network's 2016 Baseline Capacity Assessment Report, is set out in **Table 1**.

Table 1: Aurizon Network's existing (coal) network capacity (Mtpa)

System	Capacity
Goonyella	140.0
Blackwater ⁴¹³	95.9
Newlands/GAPE	53.7
Moura	32.7
Total	322.3

Source: Aurizon Network 2016 Baseline Capacity Assessment Report

Current contracted capacity of each rail system (FY2018)

503 Spare capacity in railway and port infrastructure can be determined in one of two ways. It can be determined as total capacity less contracted capacity, or alternatively, as total capacity less actual throughput.

504 The estimated contracted capacity of each rail system in the CQCN is provided below in **Table 2**. In terms of determining contracted below rail services for FY2018 (and at the time of writing this submission), Aurizon Network has published only three of the four quarterly performance reports for FY2018. It is assumed that the third quarter Train Service Entitlements (TSEs) of FY2018 persisted in the fourth quarter. The estimates, which are expressed in TSE and reference tonnage terms, are presented in **Table 2**.

Table 2: Estimated yearly contracted TSEs in FY2018

Component	Newlands-GAPE	Goonyella	Blackwater
Total (TSEs)	12,694	26,836	15,812
Reference Train Payload (t)	6,871	10,055	8,211
Contracted Capacity Mtpa⁴¹⁴	43.6	134.9	64.9

Source: Aurizon Network's Public Quarterly Performance Reports (Qtrs 1-3) and 2016 AU (pp. 388 to 400)

Current actual throughput of each rail system (FY2018)

505 **Table 3** outlines the estimation of actual CQCN rail system throughput (excluding the Moura system) for FY2018. At the time of writing this submission, the FY2018 fourth quarter throughput figures are unknown.

⁴¹² User Group Submission, page 35; PwC Report, page 12

⁴¹³ Non-coal committed traffic removed from total existing capacity of 171.0Mtpa, which leaves an existing (coal) capacity of 95.9Mtpa

⁴¹⁴ [(TSEs x Reference Train Payload) / 2] / millions. Note, TSE's is divided by 2 to reflect loaded and empty paths

The analysis therefore assumes that the throughput volumes from April 2018 to June 2018 are equal to the quarterly averages achieved from July 2017 to March 2018.

Table 3: Estimated actual throughput for each system in FY2018 (Mt)

GAPE	Newlands (Local)	Goonyella	Blackwater
15.142	13.221	127.826	61.813

Source: Aurizon Network’s Public Quarterly Performance Reports (Qtrs 1-3)

506 It is noted that the Newlands/GAPE system’s estimated FY2018 actual throughput is 28.3Mtpa, which is 47% less than below rail capacity (53.7Mtpa⁴¹⁵) and 43% less than AAPT terminal capacity (50.0Mtpa).

507 It is clear that, from a throughput perspective, the rail system to AAPT has substantially greater spare capacity than the rail system to DBCT/HPCT. In this context, it is noted that there is a material difference in actual throughput versus contracted capacity of Aurizon Network’s below-rail infrastructure. **Table 4** contrasts the differences between **Table 2** and **Table 3**.

Table 4: Comparison of FY2018 contracted capacity and actual throughput (Mtpa)

System	Estimated Contracted Capacity	Estimated Actual Throughput	Variance – Actual relative to Contracted
GAPE ⁴¹⁶	24.5	15.1	(9.4)
Newlands (Local)	19.1	13.2	(5.9)
Goonyella	134.9	127.8	(7.1)
Blackwater	64.9	61.8	(3.1)

Source: Aurizon Network’s Public Quarterly Performance Reports (Qtrs 1-3) and 2016 AU (pp. 388 to 400)

508 In the Newlands/GAPE system, estimated throughput (28.3Mtpa) is 65% of contracted capacity (43.6Mtpa). This demonstrates that the Goonyella system is more congested than the Newlands/GAPE system, and that there is scope for mines to divert their coal from DBCT to AAPT, without the requirement for any below rail system upgrades.

509 Contracted rail capacity is often assigned between miners. Given the high proportion of unutilised contract capacity on the Newlands/GAPE system, it is reasonable to conclude that any miner who wants to secure capacity to rail to the north would be able to secure their requirements in a secondary market transaction.

Implications for system substitutability

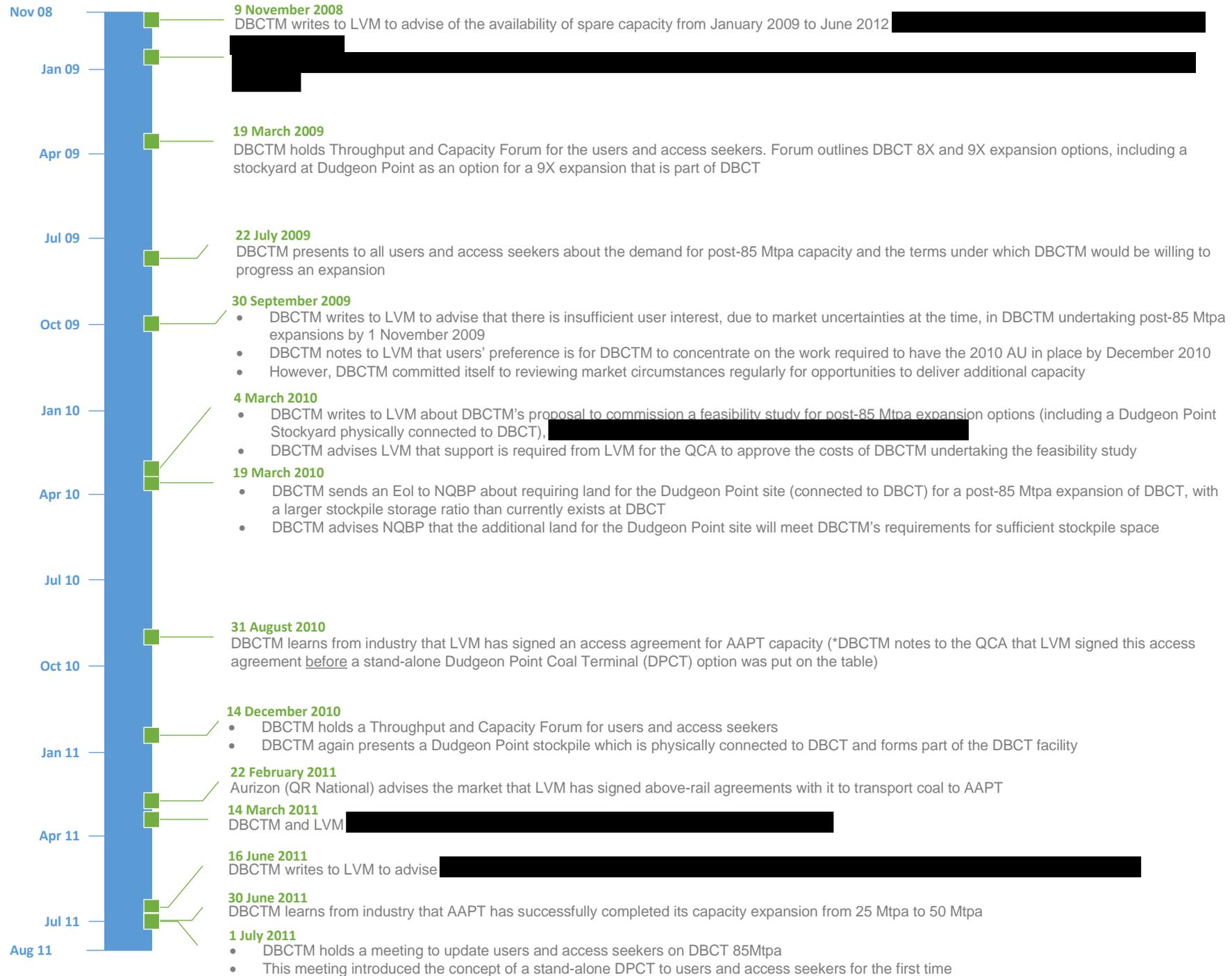
510 DBCTM notes that from an actual throughput perspective, the Newlands/GAPE and Blackwater systems have more spare capacity than the Goonyella system. Therefore, there is currently sufficient rail capacity on the Newlands/GAPE and Blackwater below-rail systems for a DBCT user in the Goonyella system to switch throughput to either AAPT in the north or RGTCT/WICET in the south.

⁴¹⁵ Aurizon Network BCAR, p. 8

⁴¹⁶ DBCTM notes this includes substantial Rio Tinto contracts, which have been declared onerous and Rio Tinto has publicly stated “...we actually don’t need that capacity and it’s unlikely we’d use it” – see: <https://www.theaustralian.com.au/business/mining-energy/takeorpay-coal-contracts-puts-hefty-dent-in-bottom-line/news-story/965d5a6250766a40599b2a0269b30510>

Appendix 6 Lake Vermont interactions timeline

DBCTM's interaction with LVM about DBCT expansion options



Appendix 7 Wood Mackenzie letter

28 June 2018

DLA Piper Australia
140 William Street
Melbourne VIC 3000
PO Box 4301
Melbourne VIC 3000
Australia

Dear Ms Grace,

Regarding Wood Mackenzie Port Throughput Data

Wood Mackenzie provided permission for Peabody to utilise WM data in a submission to the QCA. We provided Peabody with our Q1 and Q2 2018 data sets. I understand the chart presented to the QCA was based on our data however some of our throughput export assumptions were moved from DBCT to Hay Point.

Yours sincerely,



Paul Manley
Director of Metals and Mining Consulting APAC