

Aurizon Network – Response to Submissions on the Review of Declared Services

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Aurizon Network – Response to Submissions on the Review of Declared Services

Executive Summary

This submission responds to the Queensland Competition Authority's (QCA) supplementary questions dated 6 June 2018 and also comments on aspects of the submissions made by other stakeholders to the QCA's Issues Paper in relation to the review of the declared services comprised in the Central Queensland Coal Network (CQCN). This submission should be read together with Aurizon Network's initial submission in response to the review (**Initial Submission**).

The substantial costs arising as a result of declaration of the services comprised in the CQCN materially exceed the claimed benefits of declaration and can be avoided or at least be minimised by a less intrusive form of regulation.

A less intrusive form of regulation has been identified by Aurizon Network in this submission as a counterfactual against which the QCA can assess the relative costs and benefits of declaration. The counterfactual described by Aurizon Network would operate to protect stakeholder interests by including:

- rights to negotiate access and arbitration where reasonable terms of access cannot be agreed;
- ring-fencing and functional separation of above and below rail functions;
- an obligation to provide access to a related above rail operator on arm's length terms;
- remedy and enforcement rights; and
- prices oversight to help ensure that no more than a reasonable return is earned.

Submissions by the Queensland Resources Council (QRC) and Pacific National in respect to the CQCN in favour of declaration fail to identify any counterfactual to declaration, and provide no comparative analysis of costs and benefits against which to assess the declaration benefit claims.

In answer to one of the QCA's supplementary questions, **an assessment of the effectiveness of the current regulatory regime** (including a cost versus benefits comparison) is not only relevant to the QCA's assessment of the public interest criterion for declaration, it **is essential to that assessment and the best available comparator against which to assess the public interest criterion**.

Consistent with:

- regulatory precedents;
- court and tribunal decisions; and
- the submission to the QCA by Dalrymple Bay Coal Terminal (DBCT) Management,

in applying the public interest test for declaration, the QCA (and the Minister) cannot rely on theoretical propositions as to the benefits and the magnitude of costs associated with declaration. **The QCA (and the Minister) must be satisfied as to those benefits and the magnitude of those costs by reference to cogent data and facts.**

Submissions made by stakeholders in favour of declaration are based on bald assertions as to the benefits of declaration and as to perceived negative consequences arising from non-declaration. Those stakeholder submissions do not contain or point to any evidence or data to support those bald claims and assertions. **In the circumstances, and in the absence of such evidence or data from other sources, the QCA cannot be satisfied that the public interest criterion has been satisfied.**

One of the claims made by stakeholders supporting declaration is that declaration would provide greater certainty as to the cost of access. This type of claim has already been addressed by the Australian Competition Tribunal in relation to another matter involving the handling of coal. The Tribunal (and the Minister) in that case found that the uncertainty associated with the costs of access was immaterial compared to the uncertainty in coal prices and other mine operational costs such as the cost of labour. **The QCA cannot be satisfied that any uncertainty in the price of access that theoretically arises from non-declaration, justifies the imposition of the magnitude of actual comparatively and materially higher costs associated with declaration.**

The building block method to regulation applied under the *Queensland Competition Authority Act, 1997 (QCA Act)* in circumstances involving one component of the supply chain (i.e. below rail access) with a high level of regulatory discretion, and an absence of observable comparable data to assess the reasonableness and efficiency of proposed regulatory outcomes, is a highly ineffective means of industry regulation.

The public interest criterion for declaration requires a consideration of the benefits of declaration, not the benefits of access. Stakeholder submissions favouring declaration fail to make this critical distinction. Unsupported claims about the benefits of access are irrelevant to the application of the criteria for declaration.

A report by Frontier Economics for Aurizon Network supports the conclusion that the incremental benefits of declaration relative to the provision of access do not support the costly, complex, restrictive and uncertain regulation that applies under the declaration model. In particular, Frontier Economics confirm that:

- prices for access set under the current regulatory model are likely to be **“far less stable than those commercially negotiated”**;
- **declaration under the QCA Act is not a necessary condition to realise investment benefits** from reasonable and certain terms - Frontier Economics also confirming that it is *“not aware of any arguments suggesting that the Part IIIA regime which applies in the Hunter Valley.....is inferior to the compulsory undertakings under the QCA Act”*;
- they cannot identify any reasons why investment incentives would be improved (or “less hindered”) by declaration which results in *“heavy-handed ...compulsory undertakings and uniform reference tariffs [that] stand in some contrast to a negotiate-arbitrate approach”*; noting further that **the current regulatory approach “seems very unlikely to inspire more confidence to invest”**.
- **“rather than contributing to benefits, imposing a level of standardisation in both pricing and terms potentially involves a cost, as it may preclude the negotiation of terms more favourable to both parties”**; and
- **“compared to a reasonable benchmark counterfactual, there is little basis” for the assumption** made by some stakeholders **that output and therefore royalty benefits to the State would be higher under a declaration model**;

In assessing the declaration criterion in clause 76(2)(b) the QCA (and the Minister) must compare the cost of using the existing facility and the cost of using the existing facility supplemented by one or more additional facilities – it involves an assessment of the incremental cost, ignoring any sunk costs.

If the services offered at the Dalrymple Bay Coal Terminal are declared on the basis proposed by the DBCT User Group, it must naturally follow that below rail services using rail transport infrastructure comprising the Northern Missing Link and which also utilise rail transport infrastructure comprising the Goonyella coal system, do not satisfy:

- criterion a) as access on reasonable terms from declaration would not promote a material increase in the rail haulage market;
- criterion b) as the total foreseeable market demand is met by the facility comprising the Goonyella coal system; and
- criterion d) as access on reasonable terms from declaration would not promote the public interest.

Aurizon Network maintains the view expressed in its initial submission to the QCA, that for the reasons expressed in that submission, the appropriate duration of any declaration if one is to be made, is 5 years. In any case, nothing contained in the submissions from stakeholders favouring declaration supports a declaration period beyond a maximum of 10 years.

This submission also contains tables summarising Aurizon Network's responses to specific issues raised by various stakeholders where those issues are not otherwise addressed in the body of the submission.

For the reasons expressed in this submission and in Aurizon Network's initial submission to the QCA, the QCA (and the Minister) cannot be reasonably satisfied that all of the criteria for declaration (and in particular the public interest criterion in section 76(2)(d)) are satisfied in relation to the various below rail services in the CQCN.

Overview of Aurizon Network's Initial Submission

Aurizon Network's Initial Submission to the QCA Staff Issues Paper provided a targeted response to the consideration of the access criteria in section 76(2) of the QCA Act as they pertain to the declared services that comprise the CQCN.

The Initial Submission placed a significant emphasis on the observations and evidence of outcomes from declaration under the QCA Act to conclude that declaration of various services that comprise the CQCN would not promote the public interest.

Aurizon Network submits that there are substantial costs from declaration under the QCA Act and those costs materially exceed the expected benefits from increased allocative efficiency. These costs are largely associated with the design and performance of the current regulatory framework. The public interest can only be satisfied where those costs are substantially reduced through less prescription, increased incentives to invest and more commercial flexibility to support increased coordination and supply chain efficiency.

That conclusion is underpinned by the prospect that the material and avoidable costs of discretion based industry regulation applied through the mandatory access undertaking process substantially exceed the benefits that are likely to be realised by access from declaration. The regulatory risks and diminished incentives for the access provider to invest in the facility associated with the design and performance of

the current regulatory framework applying to the CQCN mean that declaration is not in the long-term interests of:

- the owner of the facility;
- the user of the services provided by the facility; or
- the broader Queensland economy.

It is important to note that Aurizon Network's Initial Submission did not contend that there was a lack of connection between the provision of access to services in the CQCN and the benefits of competition in the rail haulage market. However, to support declaration under the legislated criteria these benefits to competition must be found to be the result of access arising from declaration and not simply from the fact of access. If the competition and efficiency benefits of access are able to be both retained and enhanced through effective principles-based access rather than from declaration, the declaration criteria will not be satisfied.

Aurizon Network submits that based on the material submitted by other stakeholders and otherwise published by the QCA in its Issues Paper, the QCA cannot be satisfied that declaration is needed to achieve the relevant competition and efficiency benefits.

The Initial Submission also commented that in undertaking the review of declared services, the QCA is obliged to assess the access criteria against all the relevant part services that comprise the declared services provided in the CQCN. In this regard, Aurizon Network's view of the access criteria indicates that:

- the use of the Newlands coal system for providing transportation by rail would not satisfy the access criteria if the Northern Galilee Basin Rail project was to proceed and provide direct competition from a competing facility for the transportation of coal;
- the use of a coal system for the transportation of intermodal and agricultural freight by rail does not satisfy the criteria given the scale of the market and the direct modal substitutes;
- the use of the Moura coal system for providing transportation by rail does not satisfy the access criteria on the grounds it is not significant to the Queensland economy;
- the use of more than one existing coal system can provide direct facilities based competition to the use of a single coal system given the contestability of export supply chains;
- the use of a coal system for the transportation of passengers by rail will not promote competition the market for passenger movement; and
- the use of a coal rail system that originates from a coal basin which was not directly connected to the CQCN on 8 September 2020 cannot satisfy the access criteria at the time of this review and would need to be separately assessed if and when such a connection is made in the context of a separate application for declaration, if any.

Finally, should the QCA and Minister conclude that the access criteria are satisfied for one or more part services, the Initial Submission set out the reasons why the period for declaration should not exceed a period of 5 years.

Evaluation of the public interest of declaration under the Queensland Competition Authority Act 1997

A central construct of the Initial Submission is that the costs associated with regulation under the QCA Act are substantial. The costs identified were consistent with, and proportional to:

- the conclusions reached in the economic literature regarding the loss of economies of scope and the coordination costs associated with multiple users on high density rail systems; and
- those costs identified with respect to economic regulation of east coal supply chains which were identified and strenuously supported in submissions by Rio Tinto and BHP to the National Competition Council, the Australian Competition Tribunal and the Federal Court of Australia with respect to applications for declaration under Part IIIA of the *Competition and Consumer Act, 2010 (CCA)*.

With the exception of the submission made to the QCA by DBCT Management, stakeholder submissions to the Issues Paper, did not identify or evaluate any of the material costs of declaration including any of the costs considered directly relevant as identified in literature and declaration matters described above. Instead, the stakeholder submissions primarily identified the benefits of access, in limited high-level terms and without the provision of supporting evidence or substantial factual material in support of the various propositions being advanced.

In assessing any claimed benefits, the QCA must ensure that it:

- distinguishes between the benefits arising from undeclared access to the service, relative to the benefits of access on reasonable terms from declaration of the service; and
- is satisfied that the differential in the benefits under these two cases are material and based on facts or evidence that support the order of magnitude of the benefits being claimed.

In regard to the latter point Aurizon Network agrees with the statements in the DBCT Management submission that¹:

The QCA must base its findings on material that has some probative value, in the sense that the material tends logically to show the existence of facts consistent with the finding, and the reasoning in support of the finding must not be logically self-contradictory.

Furthermore, the DBCT Management submission is consistent with the statement made by the Australian Competition Tribunal (**ACT**) on the matter of the declaration of the Port of Newcastle in respect to arguments that an increase in prices by the Port of Newcastle would have adverse effects on competitive outcomes:

That is no more than a set of theoretical propositions, unsupported by data that might inform the possible magnitude of the effects claimed².

The importance and relevance of facts to inform the order of magnitude is apparent in respect of claims by some stakeholders that declaration of the service would provide certainty and provide a strong incentive to invest in Queensland's coal industry³. Those claims are again, unsupported by any facts or

¹ DBCT Management (2018) DBCT Declaration Review: DBCT Management submission to the QCA, May, p. 8

² Application by Glencore Coal Pty Ltd [2016] ACompT 6 [144]

³ For example the QRC submission at page 25 and DBCT Users Group at page 85.

evidence. Furthermore, the relevance of uncertainty was also considered by the ACT in that Port of Newcastle matter as follows:

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 market⁴.

Aurizon Network agrees with and adopts the reasoning of the ACT and submits that it is appropriate for the QCA and the Minister to apply the same reasoning and approach in the current review of the declaration of services in the CQCN.

Aurizon Network notes that the submissions made to the QCA in support of declaration, do not include any relevant information or analysis as to the proportionality of the below rail costs or as to the uncertainty of those costs as compared to other inputs and parameters relevant to investment in mines, including the price of the export product.

This provides a clear example of where the QCA should not merely accept that a claimed benefit will follow from declaration or that the claimed benefit will necessarily outweigh other factors that militate against declaration. The QCA must have appropriately scrutinised evidence to reach a conclusion as to the order of magnitude of the benefits. While Aurizon Network notes that it is not practical for consideration of the public interest to quantify the costs and benefits of declaration, the assessment does require a rigorous evaluation of the likely orders of magnitude to make a qualitative judgement of whether criterion d) is satisfied.

In this submission, Aurizon Network expands on the arguments presented in the Initial Submission on matters relevant to whether the costs of access from declaration exceed the benefits relative to the circumstance where access is provided without declaration and therefore, whether declaration is in the public interest.

In addressing stakeholder submissions and the QCA's supplementary questions, Aurizon Network addresses:

- the requirements for the QCA to consider the costs and benefits of the regulatory framework in assessing whether declaration is in the public interest;
- the issues associated with the application of a building block approach under regulatory discretion where there is limited observational data to apply industry regulation;
- the requirement that the assessment consider the benefits of access from declaration and not the benefits of access;
- the conclusion that the benefits of declaration are not sufficiently material relative to the benefits from access to overcome the material costs and inefficiencies from declaration; and

⁴ Application by Glencore Coal Pty Ltd [2016] ACompT 6 [156]

- the observation that the access frameworks proposed by Queensland Rail and DBCT Management are consistent with Aurizon Network's conclusions that declaration is not in the public interest.

Aurizon Network recognises that consideration of the benefits from access from declaration requires the specification of a counterfactual in which access to the declared service is provided. In this regard Aurizon Network has specified a counterfactual where access is provided by a generic regulatory framework which possesses the following features:

- Provides the right to negotiate access on reasonable terms with recourse to arbitration where reasonable terms cannot be agreed as would occur if the service was declared under Part IIIA of the CCA;
- Ring-fencing (including compliance and audit) and functional separation with access being provided on an arm's length basis between the network operator and the upstream users of the service (i.e. above rail haulage providers and coal producers);
- Remedy and enforcement of conduct which substantially lessens competition is subject to Part IV of the CCA; and
- Price oversight which monitors whether the business is earning a reasonable return (as a mechanism by which data could be gathered in assessing whether a more direct and more intrusive form of regulation was justified).

For avoidance of doubt this does not represent the regulatory framework Aurizon Network believes should apply to the provision of access to services comprising the CQCN. However, it represents a suitable baseline model for determining whether the benefits from declaration are sufficiently material to support the costs they impose. Where the incremental benefits from declaration are not significant relative to the counterfactual, it provides a clear and compelling demonstration that the costs associated with the current regulatory framework do not support a conclusion that declaration is in the public interest.

The use of the building blocks model with regulatory discretion under the QCA Act is a highly ineffective means of applying industry regulation

The Initial Submission noted⁵:

Where policy makers must address concerns regarding an imbalance in negotiating power or other market failures this has occurred through bespoke industry regulation, and not generic access regulation. Access regulation is a costly and highly ineffective policy instrument to address issues that are more efficiently resolved through commercial negotiation and alignment of commercial interests.

The inherent flaw in applying an industry regulation approach to Part 5 of the QCA Act is the excessive levels of regulatory discretion.

The general condition for industry regulation is that it must be consistent across the industry and the industry must be comprised of a sufficient number of firms. This is evident in the application of both the

⁵ Aurizon Network (2018) CQCN Declaration Review: Aurizon Network Submission to the QCA, May, p. 10

National Electricity Rules and the National Gas Rules where the industry comprises multiple firms and information asymmetry is more readily overcome through benchmarking. The process of determining efficient costs and prices in these industries benefits from firms providing comparable services with reasonably similar levels of commercial and regulatory risks. The regulator also has the benefit of access to observable market data within the scope of the businesses it is regulating and from comparable regulated business in the same industry in other jurisdictions.

These conditions are simply not found in the regulation of the below rail services for dedicated bulk export supply chains within the CQCN as:

- open access is typically not prevalent on export supply chains⁶ where vertical integration is widely recognised as producing higher levels of static and dynamic efficiency;
- there is weak empirical evidence and limited research on what represents efficient maintenance and asset renewals within the broader railway industry, given the material differences in the inherent and inherited engineering and environmental characteristics and the diversity of both the ownership of, and the types of traffics on, railways⁷;
- there is no observable comparable data to assess reasonableness and efficiency through more effective top-down benchmarking methods; and
- there are no pureplay listed, regulated, privately owned and structurally separated railways to inform the market based return on investment in the CQCN.

The practical effect of these limitations is that the current approach to regulation of a firm within a highly limited pool of observations is that use of the building blocks model with regulatory discretion under the QCA Act is a highly ineffective means of applying industry regulation. It is these features which are largely responsible for the complex, restrictive and uncertain regulatory outcomes that currently apply.

In summary an industry regulation model under the QCA Act of one component of a supply chain, without external benchmarks, is not able to:

- prescribe or enforce the level of industry cooperation required across all elements of the supply chain to optimise and maximise the economic value of the industry as whole;
- address or overcome the private incentives of all participants in the supply chain to align the broader economic interests of the whole supply chain;
- estimate the required rate of return with any degree of precision or in a manner which would be consistent with achieving commercially reasonable outcomes as the cost of equity for comparable regulated rail business is not observable;
- assess the costs of maintaining, operating and renewing the asset other than on the basis of subjective opinion as opposed to the assessment of reasonableness against maintenance, operational and renewal spending by peers; and

⁶ The exception being the publicly owned Hunter Valley Coal Network. While open access obligations exist on Pilbara railways access has not been provided.

⁷ For example, see discussion in Odolinski, K. and Wheat, P. (2018) Dynamics in rail infrastructure provision: maintenance and renewal costs in Sweden. *Economics of Transportation*, Vol 14, pp 21-30, and Gaudry, M., Lapeyre, B., Quinet, E. (2016) Infrastructure maintenance, regeneration and service quality economics: a rail example, *Transportation Research Part B, Methodological*, 86 pp 181-210.

- provide the incentives necessary to promote innovation.

In respect to these first two points, these objectives can only be pursued through industry collaboration. With respect to the three remaining observations, the incentives to pursue mutually beneficial outcomes is dependent on the extent to which flexibility and reasonableness can be achieved.

Estimating the Required Rate of Return

The current approach to estimating the return on investments commensurate with the commercial and regulatory risks relies almost exclusively on qualitative subjective judgement, using imprecise statistical information from industries completely unrelated to the declared service and the industry dynamics in which that service is provided/operates. That subjectivity is a consequence of the absence of stand-alone regulated and listed below rail comparators. While observable market data for the cost of capital of railways is widely available, the QCA and its consultants have disregarded or placed no weight on these comparators in exercising discretionary judgement of the required rate of return on the basis they are irrelevant to investor expectations of returns for a regulated railway⁸.

Assessing the Efficiency of Operating Costs

For most regulated networks and utilities there are reasonable, direct peer data sets and observations on costs. Given the level of homogeneity and comparisons that can legitimately be made of these businesses, the regulator has access to benchmark data which allows for a 'reasonableness test' of the proposed regulatory outcome.

This peer benchmarking takes into account that peer networks will bear certain inefficient costs, but the customers will gain the benefit of certain efficiencies which are not precisely quantified, and there is an approximate "net off". The possibility of extracting additional efficiencies, which can be appropriated to the infrastructure owner, incentivises innovation.

This can be contrasted with the single firm problem where there is very little or no comparator data available. In these circumstances, the regulator is forced to rely on the bottom up approach to efficiency assessment where the primary objective and almost sole focus is to identify and remove any, and all inefficiencies. These approaches inevitably lead to forensic examinations of maintenance cost with a limited frame of reference other than the subjective opinion of experts who also lack access to benchmark data from comparable firms and generally, any actual experience in operating and maintaining a below rail business.

A "bottom-up" approach, not moderated by peer benchmarking or an incentive based approach, results in the regulator penalising inefficiency and expropriating any efficiencies which leaves the operator without any margin for error, and any incentive, given the relatively short regulatory period in which efficiencies can be enjoyed.

The practical consequence of the absence of external market data or benchmarks is that the building block model will be subject to downward bias, will involve significant costs and complexity and those estimation errors will be affected by the downward bias.

⁸ This is despite the balance sheets for US Class 1 railways being comprised mainly of below rail infrastructure given the predominance of car leasing and ownership by shippers. For 2017 UP and BNSF reported assets to the Surface Transportation Board are comprised of 78% and 80% of road equipment. That is the financial investment risk is primarily below rail.

Limited incentives for innovation

In circumstances where the regulatory objective under industry regulation through declaration is to only allow the access provider to recover the minimum efficient costs of providing the declared service determined by the regulator, the only available mechanism for the regulator to induce the access provider to improve efficiency in the provision of the declared service is to impose revenue penalties. These penalties usually take the form of “efficiency” deductions to allowable revenues, with the expectation the service provider will (somehow) achieve those efficiencies (with limited empirical justification or analysis as to whether those efficiencies can be realised).

Conversely, workable and effective efficiency sharing mechanisms usually involve stronger incentives to reduce costs by allowing the service provider to partially retain the profits from its innovations.

However, declaration under the QCA Act provides no incentives for innovation or research and development. This is largely a function of the fact that innovation involves risk and the costs of pursuing innovation are likely to exceed any benefit to the access provider where the cost of unsuccessful innovations is unrecoverable and the gains from successful innovations are likely to be fully expropriated through price reductions to users of the service.

This is contrary to the long-term interests of users of the services comprising the CQCN, given a privatised monopoly has strong incentives to identify the least cost method to provide its services, with or without regulation. However, declaration restricts or impairs the access provider’s incentives to assume the risk of investing in innovations which might lead to future cost reductions or improve service delivery.

In summary, it is unlikely that the application of industry regulation involving discretionary regulatory approaches on key issues, in circumstances where the regulator is informationally constrained, could ever be effective and produce more efficient outcomes than a regulatory framework which places increased emphasis on commercial negotiation and constructive engagement between the service provider and its customers.

The cost of regulation is a relevant consideration to whether declaration promotes the public interest

In response to the Initial Submission the QCA staff issued further questions for stakeholders on 6 June which included the following question (**Supplementary Question**):

Stakeholders are invited to comment on the extent to which an assessment of the effectiveness of the current regulatory regime (including a cost versus benefits comparison) is relevant to the QCA’s assessment of criterion (d)?

In this regard, Aurizon Network notes that an assessment of costs and benefits is widely recognised as the most appropriate method for determining whether a policy or administrative decision is in the public interest. This arises because government intervention in markets will inevitably impose costs and it is always necessary to ensure benefits from that intervention outweigh those costs. As discussed above, this assessment does not need to take the form of a formal cost benefit analysis but should be sufficiently rigorous that an order of the magnitude of the likely costs and benefits from declaration can inform the decision maker as to whether declaration would promote the public interest.

Aurizon Network requested Frontier Economics to prepare a response to the Supplementary Question. The views of Frontier Economics are consistent with those of Aurizon Network and supported by relevant precedent and policy discussion on the public interest criterion.

As to whether that assessment should include the effectiveness of the current regime, Aurizon Network agrees with Frontier Economics that:

The presumption that access is provided on reasonable terms and conditions, which provides a basis for the ‘thought experiment’ relating to the outcomes with and without declaration, does not imply that the costs and risks associated with declaration, including the determination of access prices (e.g. the compulsory undertakings process, or the risk that prices will be set too low) or complementary regulation are not relevant.

In circumstances where there had been no previous declaration, then the effectiveness of the current regime would, clearly, not be a factor that could easily be taken into account. However, the regime’s performance can and should be assessed where the service has previously been declared. The past performance of the regime provides the best indication of what is likely to occur in the future. If there is evidence that the regulatory regime has not been effective in promoting the interests of the public – notwithstanding that tests (a) and (b) might be passed – then this is certainly a factor that should be taken into account under part (d).

In summary, in Aurizon Network’s opinion, the answer to the Supplementary Question is that an assessment of the effectiveness of the current regulatory regime (including a cost versus benefits comparison) is not only relevant, but essential, to the QCA’s assessment of criterion (d).

Criterion d) requires consideration of the benefits of declaration and not the benefits of access

A common issue among stakeholder submissions in response to the Issues Paper is that they do not make the proper distinction between benefits associated with:

- access to the service on reasonable terms from declaration; and
- access to the service on reasonable terms without declaration.

That is, the stakeholders assume that access would not be made available “on reasonable terms” (or perhaps at all) without regulation under the current regulatory model.

The premise of this submission is that access would continue to be provided to the service on reasonable terms without declaration. Aurizon Network notes that there are alternative means available to ensure that access is continued to be provided on reasonable terms, including:

- through the provision of voluntary but enforceable access protocols, such as those prevailing at but not limited to:
 - the Port of Brisbane;
 - the Wiggins Island Coal Terminal;
 - Moorebank Intermodal Terminal;
 - various Western Australian state agreements for port access;
 - voluntary access undertakings to the ACCC under Part IIIA; and
 - access frameworks via Deed Poll as proposed by Queensland Rail and DBCT Management.
- the general competition provisions which govern the behaviour by a firm with market power that substantially lessens competition is prohibited by the section 46 of the CCA; and

- investigations about the monopoly business activities under Division 3 of Part 3 of the QCA Act for a declared non-government business activity under section 21A.

Aurizon Network acknowledges that, while it is vertically integrated the access arrangements relevant to the counterfactual would need to meet minimum standards that would include the following features identified by Frontier Economics:

- obligations to supply;
- robust prohibitions covering price and non-price discrimination against competitors;
- adequate ring fencing of regulated and unregulated business units, to improve the ability of the access regulator and other stakeholders to monitor conduct to avoid cost shifting, cross subsidies or price squeezes;
- protocols dealing with treatment of access seekers' commercially sensitive information and regarding provision of information to access seekers, such as for network upgrades or changes in capacity; and
- efficient, effective and clear complaints and dispute resolution procedures to handle any alleged breaches of the access provisions.

To the extent that a feasible counterfactual exists which could be implemented if declaration is not renewed, then this provides a sufficient and reasonable basis to assess the benefits of access from declaration against the benefits of access under the counterfactual.

Aurizon Network contends that access is likely to continue to be provided on reasonable terms due to:

- the ability of large end users to exercise countervailing market power by seeking authorisation from the ACCC to exchange information and collectively negotiate terms and conditions;
- the transparency of Aurizon Network costs and revenue through its annual reports to investors and the associated threat of regulation; and
- Aurizon Network's commercial incentive to maximise access to below rail services in the CQCN.

However, as identified in the Initial Submission there are significant coordination costs with associated allocative and productive efficiency losses arising from third party access. This assessment evaluates the incremental benefits of access from declaration relative to the benefits from access where those benefits originate primarily from competition in the rail haulage market. On balance these benefits are likely to be marginal given the high levels of complementarity of above and below rail efficiency and that any future benefits are unlikely to involve material step changes in above rail productivity. Therefore, the benefits from access are also unlikely to be material relative to an alternate counterfactual of no access.

The incremental benefits of declaration relative to the provision of access do not support the costly, complex, restrictive and uncertain regulation that currently applies

Aurizon Network engaged Frontier Economics to undertake an assessment of the likely order of magnitude of the benefits that might arise from declaration relative to those from providing access to the services comprising the CQCN under the counterfactual. The implications for this analysis are that to the extent to which incremental benefits from declaration are marginal then the material costs associated with

the costly, complex, restrictive and uncertain regulation that currently applies cannot support a conclusion that declaration is in the public interest.

Frontier Economics has identified the following categories for the claimed benefits in stakeholder submissions that are relevant to access on reasonable terms from declaration:

- by providing certainty and predictability in relation to the terms and conditions for access, which promotes efficient investment in the above-rail services and other complementary services;
- by facilitating and promoting efficient use of below rail services;
- by facilitating and promoting efficient operation of the relevant supply chains;
- the state of Queensland and its taxpayers will benefit from increased tax and royalty revenue; and
- reduced costs of negotiation via the use of standard access agreements.

Aurizon Network also notes that:

- It is in the commercial interests of the access provider to provide the service to reduce the allocative efficiency losses through efficient price and tariff structures and therefore the benefits of access regulation with respect to output being less than the socially optimal levels are likely to be close to or less than zero;
- Access from declaration is not necessary to ensure that access would be provided under reasonable terms due to:
 - the alternate framework in the counterfactual would require the preparation of a separate set of financial statements and account keeping obligations; and
 - the price oversight options available under either the CCA or Part 3 of the QCA Act; and
 - the amendments to section 46 of the CCA which provide for significant penalties for the misuse of market power that lessen competition in the relevant market.
- Access from declaration is not a necessary or demonstrated requirement to promote efficiency in the provision of services comprising the CQCN.

Price Certainty and Predictability

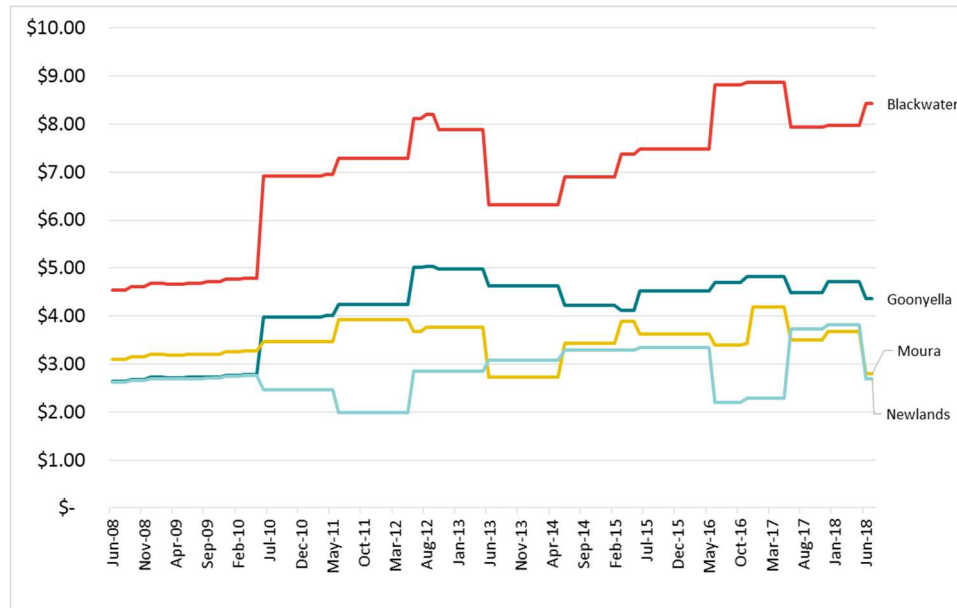
The benefit of price certainty was identified in the QRC submission:

There is far less incentive to invest in a coal mine when (even assuming that access is provided) the price of transporting coal is uncertain and potentially volatile

Aurizon Network agrees with the conclusions by Frontier Economics that:

In fact, the experience with lengthy delays in finalising prices and periodic reviews of prices (and uncertainty over the applicable return on capital) indicate that prices are likely to be far less stable than those commercially negotiated. Some evidence of this is shown in Figure 1, where there have also been material ongoing adjustments in 2010, and each of years 2013-16.

Figure 1: Indicative Access Costs (\$/net tonne) from tariff variability on the CQC



Aurizon Network contends that there has been no evidence presented that prices would be any less stable or predictable under the counterfactual. Furthermore, the market norms for unregulated infrastructure provision demonstrates that commercially negotiated private contracts will typically provide greater long-term price certainty than regulatory determined mandatory reference tariffs.

Reasonable terms and the rail haulage market

Frontier Economics notes that stakeholder submissions assert that offering reasonable and relatively certain terms is also likely to be a factor affecting investment in the rail haulage market. Aurizon Network agrees with their summary that:

The key issue is whether declaration under the QCA Act is a necessary condition to realise the benefits from reasonable and certain terms. There is little material from stakeholders on that issue. At face value, QCA declaration seems to offer few benefits for reasonableness or certainty of rail haulage terms compared to an alternative approach under Part IIIA. We are not aware, for example, of any arguments suggesting that the Part IIIA regime which applies in the Hunter Valley (via the Hunter Valley Access Undertaking) is inferior to the compulsory undertakings under the QCA Act.

The QRC submission includes comments on matters relevant to potential entrants making investment in rollingstock and associated facilities as summarised in Table 1. However, the issues identified by the QRC are technology and market factors unrelated to whether access is provided from declaration as opposed to access from the counterfactual. Importantly, the issues identified by the QRC are highly relevant to the QCA's consideration under criterion a) as to whether declaration would promote a material increase in competition.

Table 1. QRC comments on issues relevant to above rail investment⁹

QRC Comment	Relevance to Declaration
The asset life of typical rolling stock is approximately 25 years. In contrast, the weighted average length for a rail haulage contract is approximately 10 years.	The issue relates to competitive stranding where the aggregate above rail capacity exceeds the total market demand.
In circumstances where an above-rail haulage provider is looking to invest in rolling stock and associated equipment, it requires certainty that it will be able to deploy the rolling stock required to service a particular haulage contract on another contract following the existing/prospective contract expiring, in order to justify the investment required.	Access from declaration is not relevant to the underlying competitive dynamics of the above rail market.
The CQCN is narrow gauge track. As a result, rolling stock from other networks like the Hunter Valley Rail Network cannot be used without modification. The investment made in the CQCN is therefore effectively stranded as there is not a realistic possibility that equipment / assets could be transferred to another jurisdiction.	<p>The issue relates to concerns regarding barriers to exit. To the extent the barriers are material this necessarily calls into question the results from criterion a) as access on reasonable terms would not promote a <u>material</u> increase in competition in a market with material barriers to entry and exit.</p> <p>Access from declaration is not relevant to the economics of entry and exit from the CQCN.</p>
New entry ordinarily requires one or more significant initial haulage contracts to justify the level of investment required (e.g. Rio Tinto / Xstrata in relation to Pacific National). Sponsoring such new entry would be less likely where the Service is not declared, as a new entrant would be concerned about how Aurizon would respond given its vertically integrated above-rail operations.	<p>The issues relates to economies of scale in the above rail market and whether there is a minimum efficient scale of operations. Again this calls into question the results from criterion a).</p> <p>Access from declaration is not relevant to the scale of above rail haulage tenders and how customers sponsor market entry.</p> <p>These concerns would be addressed through appropriate ring-fencing arrangements which would be in place under both access from declaration and access provided under the counterfactual.</p>

The concerns expressed by the QRC are predominantly related to whether, in the absence of declaration, there would be ongoing rights of access to the CQCN and assurances that access continues to be provided on a non-discriminatory basis. In this respect, Frontier Economics notes:

Whether there are benefits from declaration may then hinge on whether the ring fencing measures as part of undertakings under the QCA Act provide benefits additional to those postulated under the counterfactual.

Aurizon Network considers the counterfactual would include rights of access and behavioural controls proportional to those that currently exist in the existing undertaking such that the benefits from declaration over the counter-factual are minimal.

⁹ Queensland Resources Council (2018) Declaration Review of CQCN: QRC Submission to the QCA Issues Paper, May, p. 19.

Efficient use of rail infrastructure

Aurizon Network does not support arguments that access through declaration on reasonable terms would result in the more efficient use of rail infrastructure. As noted by Frontier Economics:

- reference tariffs that do not allow for differentiation between end-users, are much less likely to maximise throughput than a situation where tariffs would be negotiated with a general right of access and fall-back arbitration;
- the current approach of segregating systems with different regulatory asset bases does not, for example, appear to offer the necessary flexibility to set efficient prices to optimise the use of existing capacity; and
- mine-based discrimination can increase economic efficiency, but that this is quite different from discrimination in favour of affiliated operations. It is difficult to see that the QCA declaration offers additional benefits in preventing anti-competitive discrimination.

Importantly, under the counterfactual there is no prospect of price bundling as access continues to be provided on arm's length basis with the end-user retaining the option to negotiate its access and rail haulage arrangements independently and sequentially as currently occurs. In summary, Aurizon Network does not consider that declaration provides any net benefits in terms of efficient use of infrastructure and contends to the contrary.

Efficient Investment in rail infrastructure

The Initial Submission noted that the inadequate returns from regulation which are lower than the reasonable terms appropriate to the relevant market circumstances reduce incentives to invest in:

- network expansions to expand capacity;
- asset improvement or reliability which improve the efficiency of above rail operations; and
- innovation which improves dynamic efficiency and lowers costs for users of the service in the long run.

Furthermore, regulatory returns which exclude the real option value associated with the uncertainty of both the long-term demand and the expected regulatory approved cash flows are likely to involve significant economic costs due to either the delays to expansions or the requirement for the access seeker to fund the expansions. In this circumstance the economic value of the increased output is likely to substantially exceed the incremental costs associated with the required commercial rate of return.

In this regard, Aurizon Network agrees with the comment by Frontier Economics:

As we have noted, the issue is not necessarily whether access reduces investment incentives, but whether investment incentives under the QCA declaration are greater compared to the postulated counterfactual of Part IIIA and Part IV regulation (including price monitoring). It is difficult to think of reasons why incentives would be improved (or 'less hindered') by QCA declaration. The heavy-handed nature of the compulsory undertakings and uniform reference tariffs stand in some contrast to a negotiate-arbitrate approach; this seems very unlikely to inspire more confidence to invest.

Access Negotiation Costs

QRC submits that, while the regime imposes compliance costs on Aurizon, the costs are 'mitigated' to a degree as it reduces individual negotiation:

Aurizon Network and its customers will not have to individually negotiate all of the terms of access because the undertaking will govern many aspects of Aurizon's relationship/obligations with users or access seekers (i.e. there is some efficiency gained by having a single set of terms). This means that the costs of negotiating individual access and settling disputes is likely to be minimised.¹⁰

Aurizon Network contends that without declaration an access provider will have internal incentives to reduce the administration costs of access and will likely retain a level of standardisation of the terms of access to reduce duplication of costs and activities. In this regard, Aurizon Network notes that ARTC does not provide declared services under Part IIIA but provides indicative terms of access in its voluntary access undertakings as it is in its commercial interests to do so.

Frontier Economics also notes that:

there is also scope for users to seek authorisations from the ACCC to share information and collectively bargain to reduce the costs of negotiation (as per the ACCC authorisation of WICET Users¹¹); and

Rather than contributing to benefits, imposing a high level of standardisation in both pricing and terms potentially involves a cost as it may preclude the negotiation of terms and conditions of access which are more favourable to both parties to the access agreement.

Access agreements are typically for periods in excess of 10 years and therefore existing agreements will survive the declaration. Given the need for consistency to ensure the effective operation of the agreement on various pricing and operational matters there is limited real prospect that the costs of negotiation would substantially increase without declaration.

State economy, social and environment

Aurizon Network contends that economic output would be greater under the counterfactual than would occur under access from declaration as the incentives to invest in expansions of the facility are greater than with declaration. As a result, mining exploration is promoted where the access provider has stronger incentives to invest as it increases the probability that the facility will be expanded to provide the necessary capacity.

Stakeholder submissions have also posited that the following benefits are associated with access to the CQCN, being:

- benefits to the state economy from higher royalties leading to social benefits;
- environmental benefits from carrying more traffic by road; and
- economic and regional development.

Aurizon Network agrees with Frontier Economics conclusion that:

It is far from clear that these benefits are relevant. All of these points rely on the central assumption that output on rail networks is made higher through declaration. As we have noted,

¹⁰ Ibid. p. 26

¹¹ <https://www.accc.gov.au/public-registers/authorisations-and-notifications-registers/authorisations-register/various-queensland-coal-producers-using-wiggins-island-coal-terminal-authorisations-a91241>

compared to a reasonable benchmark counterfactual, there is little basis for assuming that output would be high.

These may (tangentially) be benefits which have a relationship to the carriage of coal by rail. They are not benefits derived from access to a below rail service, as a result of declaration, resulting from the application of the current regulatory regime.

National Consistency

The benefits of a nationally consistent approach to regulation are widely recognised. This was also embodied in the Competition and Infrastructure Reform Agreement which was agreed to by the Coalition of Australian Governments in February 2006 and included the following principles:

The Parties agree to establish a simpler and consistent national approach to economic regulation of significant infrastructure.

The Parties agree that, in the first instance, terms and conditions for third party access to services provided by means of significant infrastructure facilities should be on the basis of terms and conditions commercially agreed between the access seeker and the operator of the infrastructure.

The introduction of price monitoring for services provided by means of significant infrastructure facilities should be considered, where this would improve the level of price transparency, as a first step where price regulation may be required, or when scaling back from more intrusive regulation.

Aurizon Network considers that the current design and performance of the regulatory framework which applies to the declared services comprising the CQCN is inconsistent with these principles and that access pursuant to the counterfactual is more closely aligned.

Aurion Network also notes that the material differences in the regulatory process of mandatory access undertakings under the QCA Act relative to the voluntary access undertaking under Part IIIA is a key factor to the material inconsistency and increased complexity of economic regulation of the services comprising the CQCN relative to the services comprising the Hunter Valley Coal Network.

In this regard, there are significant costs associated with this inconsistency, particularly in relation to regulatory and financial risks, where the predominant cause of this inconsistency is the alternate interpretation and application of exactly the same regulatory objective by different regulators, rather than any underlying material differences in services being provided. Therefore, Aurizon Network agrees with the conclusion of Frontier Economics:

There are material differences in the operation of Part IIIA and QCA declaration, and while the obvious costs are simply those direct costs associated with management of multiple regimes, further costs may arise where the Queensland regime imposes far higher costs on access providers (and to some extent users) than the national access regime.

DBCT and Queensland Rail Access Frameworks demonstrate the costs of declaration exceed the benefits

Aurizon Network's concerns that the costs from access from declaration exceed the benefits such that declaration is not in the public interest is affirmed by the proposals of both Queensland Rail and DBCT Management. These proposals involve implementing access frameworks which are fundamentally identical to their existing access undertakings in all material respects, except for where the undertaking involved decision-making by the QCA.

By contrast to access in the CQC, most access negotiations involving access to the Queensland Rail network are likely to involve the setting of access charges between a floor and ceiling limit. The costs associated with declaration are therefore likely to be relevant to only a small subset of the declared service.

Aurizon Network considers the practical differences associated with the Queensland Rail's access undertaking and its proposed Access Framework is representative of the concerns with the mandatory undertaking process and excessive regulatory discretion. The decision of a Government owned corporation to explicitly seek to exclude itself from the operation of Part 5 of the QCA and effectively substitute economic regulation with self-regulation is symptomatic of the concerns regarding efficacy of the regulatory framework.

These concerns are also explicitly addressed in the referral notice¹² for the investigation of the south-east Queensland bulk water prices where the direction notice substantially removes the QCA's discretion and overrides the QCA prior view that the trailing average cost of debt should not apply:

The QCA has also considered whether to use the trailing average approach to set cost of debt benchmarks for the firms subject to price monitoring, while maintaining the on-the-day approach for firms subject to price determination. The QCA believes that applying its cost of capital methodology consistently across regulatory frameworks is important unless there are compelling reasons for different treatment for firms subject to price monitoring¹³.

Criterion b) is a societal cost test and not a private cost test

The Initial Submission noted that the relevant comparison for the purpose of criterion (b) is between the cost of using the existing facility and the cost of using the existing facility supplemented by one or more additional facilities. This means that the relevant cost of using the existing facility is an incremental cost. Sunk costs are not relevant to the comparison. To take notice of sunk costs (of the kind included in the RAB) would be bad economic policy and would be contrary to the public policy that led to the redrafting of criterion (b). The incremental cost of providing a service may be greater or less than the average cost. If the service is new, the interconnectivity of coal systems may well mean that the expansion of an existing port and coal system can be undertaken at lower cost than the use of an alternative system.

Aurizon Network also notes, and agrees, with the opinion of O'Bryan QC that:

The analysis required under Criterion (b) is whether the facility is a natural monopoly, as opposed to a monopoly. The Criterion requires a comparison between the costs that would arise if total foreseeable demand in the market were to be served by the facility in question and the costs that would arise if the demand were to be served by 2 or more facilities¹⁴.

As discussed in the Initial Submission, prices, or reference tariffs, are not a reasonable proxy for costs under Criterion b) as this criterion is necessarily concerned with the costs of expanding the facility relevant to the costs of meeting the total foreseeable demand from that single 'natural monopoly facility' relative to part of that demand being met by an alternate facility. The price to an individual service is quite distinct from the costs of meeting the total demand.

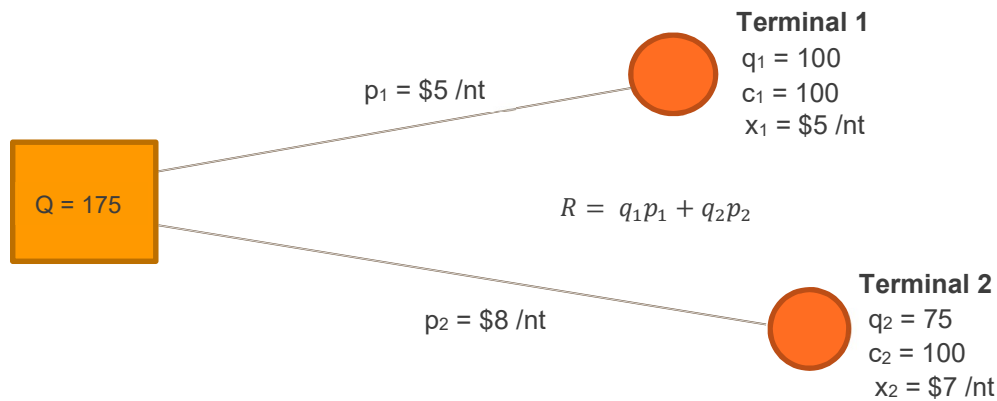
¹² <http://www.qca.org.au/getattachment/f2e72530-7f72-424c-9c29-4bd1dffa7932/Treasurer-s-Referral-Notice.aspx>

¹³ QCA (2015) Final Decision: Trailing Average Cost of Debt, April, p. iii.

¹⁴ O'Bryan, M and Muhlebach, A. (2018) Opinion prepared for QRC in relation to the Issues Paper released by the Queensland Competition Authority, May, p. 20

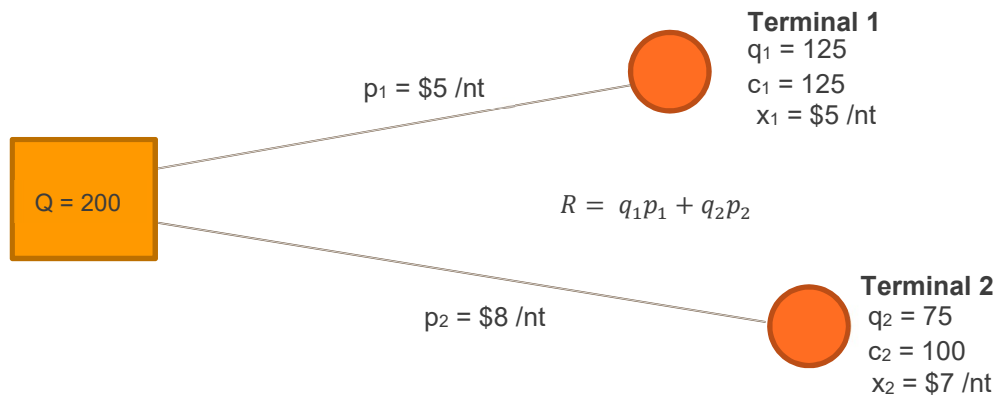
The distinction between societal and private costs can be demonstrated in the following example. An interconnected railway network services a pool of mines where the current aggregate demand Q of 175 exports throughput q_i via two coal terminals with capacity of c_i for price p_i . The lower cost transport option to port 1 is fully contracted and there is excess capacity at port 2. The railway owner earns a maximum allowable revenue, R which comprises the price and quantities to the respective terminals as shown below. The total cost of shipping via regulated terminal 1, including port costs of x is \$10 and the cost of unregulated terminal 2 is \$15. Given the choice of unconstrained terminals mines would prefer to ship to terminal 1.

Figure 1. Indicative example of railway network with competing terminals.



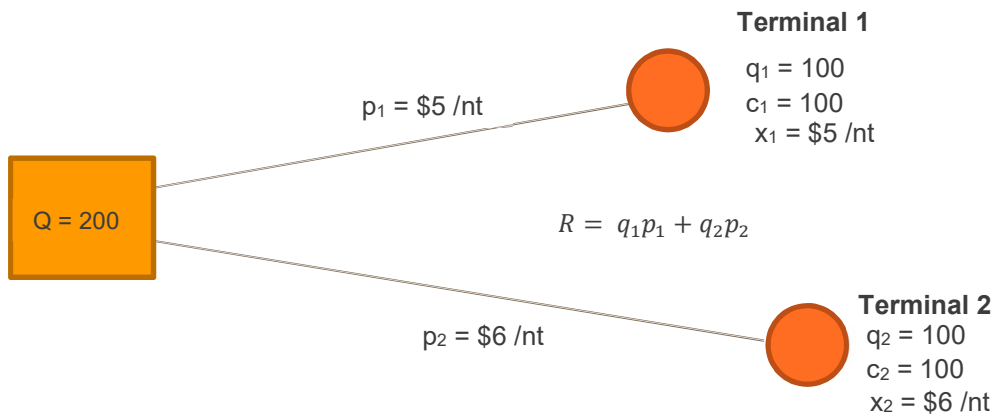
The total foreseeable market demand is expected to increase to 200. This additional demand can be serviced by expanding terminal 1 with complimentary investment in the rail network at an incremental cost equivalent to the current average costs (i.e. prices do not increase). In this example the total cost of meeting the total foreseeable demand has increased due to the additional and avoidable costs of investment as shown below.

Figure 2 Expansion of Terminal 1 to meet the total foreseeable demand



Alternatively, the demand could be routed to use the latent capacity at terminal 2 for no additional cost. The utilisation of the existing capacity at Terminal 2 and the rail network involves no additional investment and the average cost of shipping via Terminal 2 is reduced to \$12 as shown below.

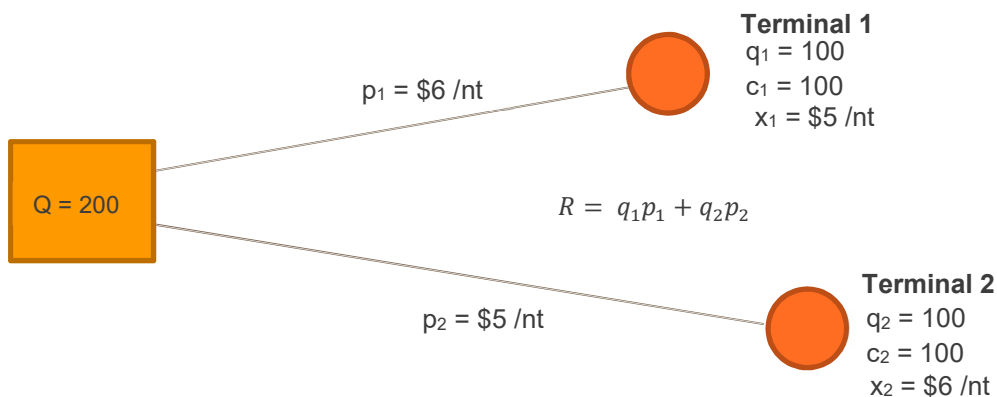
Figure 3 Meeting the total foreseeable demand with existing capacity



The problem is that the price to be paid by users of the service to Terminal 2 exceeds the costs of using Terminal 1. However, from an economic welfare perspective the total foreseeable demand is more efficiently met by the use the spare capacity at Terminal 2 rather than expanding Terminal 1. This demonstrates why costs, and not prices, are relevant to the consideration of criterion b). Furthermore, the efficient outcome would require network prices to be altered to make users indifferent such that the net costs is constant at \$11 for either terminal, and:

- the network maximum revenue constraint, R remains satisfied; and
- aggregate demand, Q is unaffected.

Figure 4 Repricing to promote efficient utilisation of the network.



This is a highly simplified example but usefully demonstrates the economic issues relevant to the assessment under criterion b). This exclusion of sunk costs is consistent with the example provided in the explanatory memorandum to the *Competition and Consumer Amendment (Competition Policy Review) Act 2017* which states:

If the demand were met by the existing line, the costs that may be considered for the assessment of criterion (b) could include:

- *the costs of changes and extensions to the facility to allow third party access, such as physical modifications to the railway line to increase its capacity to deal with higher demand and associated increased maintenance costs.*

- *coordination costs associated with having multiple users of the same rail line, such as the costs of putting new systems or technologies in place to administer all freight trains; and*
- *opportunity costs associated with having multiple users of the facility (and that would be incurred even if multiple users were granted access through a commercial agreement rather than as a result of declaration) such as:*
 - *costs to the mining company associated with a reduction in the total capacity of the rail line due to it becoming a multi-user facility,*
 - *costs arising from delays to undertaking expansions of capacity because of the need to consult other users; and*
 - *costs arising from delays to implementing technological improvements because of the need for other users to also adapt their operations.*

If the demand were met by the existing line and a new line, then the costs that may be considered for the assessment of criterion (b) could include:

- *the costs of land acquisitions,*
- *construction and maintenance costs for the new line;*
- *the costs of supporting infrastructure for the new line.*

This example does not include the costs associated with the existing facility.

Aurizon Network notes that stakeholder submissions in response to criterion b) for the services provided by the Dalrymple Bay Coal Terminal are also relevant to the QCA's consideration of criterion b) for the services provided by the Central Queensland Coal Network.

Assessment of the DBCT Management position on criterion b)

Aurizon Network has reviewed the DBCT Management submission and notes that the following view expressed in that submission is consistent with the discussion on criterion b) above:

*The least-cost calculations should consider the incremental social costs of meeting total foreseeable demand by use of DBCT alone compared with foreseeable demand being met by DBCT and one or more alternative facilities, not the private costs to miners of accessing different coal-handling services. **Returns to sunk capital investments are not incremental costs from society's point of view.** Accordingly, they should be excluded from the least-cost calculations, even though they typically account for a large share of the charges that miners pay to access existing infrastructure¹⁵.*

Aurizon Network understands the submission by DBCT Management evaluates criterion b) from the perspective that:

- the total foreseeable demand for coal exports exceeds the existing capacity of the terminal;

¹⁵ DBCT Management (2018) Declaration Review DBCT: DBCT Management Submission to the QCA, May, p. 35

- the total foreseeable demand for coal exports is currently being satisfied by more than one facility;
- while the Terminal is able to be expanded it is not reasonably possible to expand beyond 102 mtpa to meet the total foreseeable demand; and
- part of the total foreseeable demand can be met at least cost by available capacity at those alternate, interconnected terminal facilities.

Central to these conclusions is the geographical boundaries (or the partitioning of the total foreseeable demand for the CQCN) of the market for the coal handling services provided by DBCT. Identifying the total foreseeable demand for this market necessarily requires determining the economic catchment for the terminal. DBCTM has sought to do this by considering the total logistics costs, comprising current above rail, below rail and port charges, for the existing and prospective mining operations in the Bowen Basin.

Intuitively, it is anticipated that various mines in the Blackwater system will have a private commercial preference to utilise the Goonyella coal system where capacity is available, given the increased economies of scale and higher productive efficiency. That is, the lower cost per net tonne kilometre of above and below rail services in the Goonyella system expands the geographical boundaries of the market for coal handling services at DBCT beyond the Goonyella system.

While the methodology employed by HoustonKemp to estimate the total foreseeable demand in the market for coal handling services at DBCT is logical, Aurizon Network considers the assumptions applied in the report regarding resource costs used to determine whether the total foreseeable demand can be satisfied at least cost relies on either a benchmark cost or current prices, rather than a robust assessment of the incremental costs of meeting that demand. This is acknowledged within the report.

There is a distinction between the use of prices for determining the geographical boundaries of the market, as this is an essential to the application of Significant Non-transitory Increase in Prices (SSNIP) test, and the consideration of how the total foreseeable demand following the SSNIP can be met at least cost. Aurizon Network recognises that this involves a degree of complexity as the prices may vary following expansion of one or more facilities which could change the geographical boundaries of that total foreseeable demand. Alternatively, rail network prices may change to promote the efficient utilisation of existing infrastructure as assumed under criterion b) which would also substantially alter the geographical boundaries of the market.

In this regard, HoustonKemp use current prices as the benchmark for expansion cost as reflected in the report's explanation:

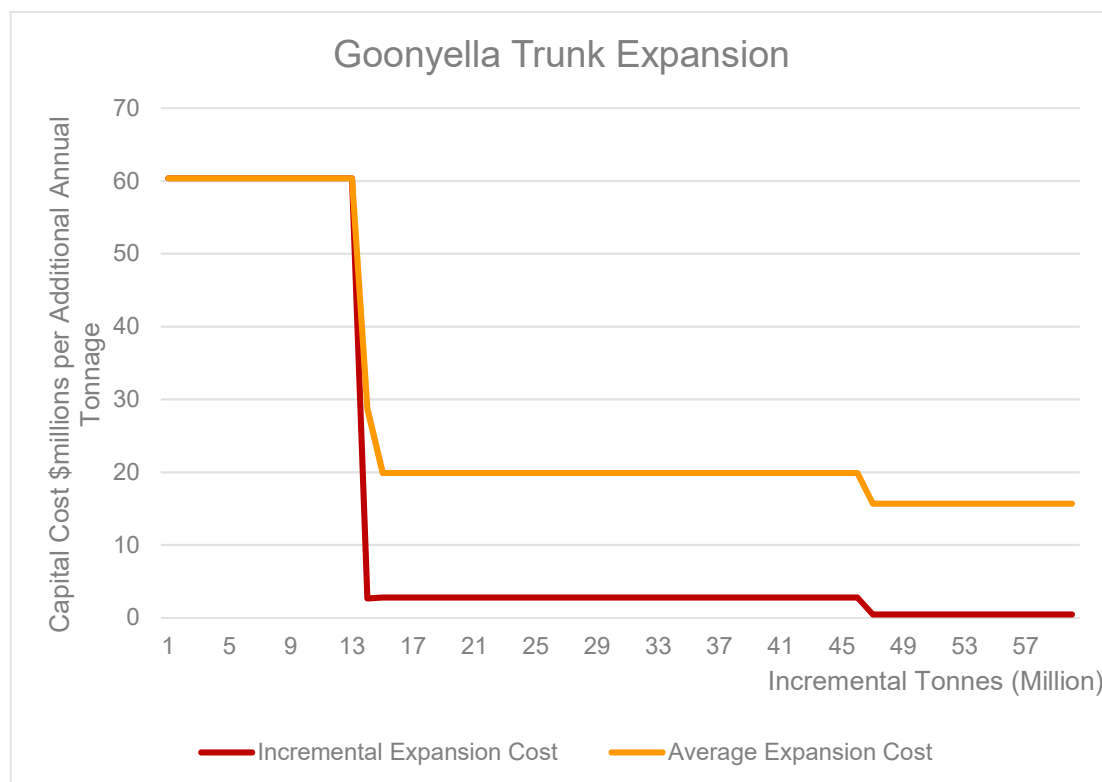
The complexity of capturing rail expansion costs suggests that a simplified approach is reasonable unless better estimates of rail capacity and expansion costs reach the public domain.

The assumption that expansion costs reflect the costs of past investments in capacity effectively assumes constant returns to scale and that capacity can expand continuously, that is, without lumpy investments. This is not likely to be an accurate reflection of expansion costs, particularly in relation to rail access. Rather, the costs of expanding the capacity of a particular coal terminal in central Queensland to accommodate increases in foreseeable demand from nearby mines are likely to be lumpy and, on a unit basis, could be either lower or higher than the price of existing

capacity depending upon the characteristics of the existing railway connecting these mines to the terminal¹⁶.

Aurizon Network does not support the use of existing prices as an appropriate means of assessing the costs associated with meeting the total foreseeable demand where that demand is unable to be met by the existing facility. As acknowledged by HoustonKemp, and noted in the Initial Submission, the costs of rail expansions are lumpy, do not display constant returns to scale, and the economic depreciation of the Regulatory Asset Base may not be representative of how replacement costs change over time. By way of example the following graph shows one expansion pathway for the Goonyella system included in the 2016 CQC Network Development Plan which involves triplication of the Connor's range¹⁷. It clearly shows the incremental cost of the expansion pathway and associated average costs. This demonstrates that the total foreseeable demand is a critical assumption to determining the costs of meeting that demand as the average cost of meeting an additional 10 mpta will differ materially to the average cost of meeting 20 mpta. Nevertheless, the graph also shows that the below rail expansion costs in terms of \$/t are likely to be materially less than the benchmark port expansion costs of \$124 million/tonne applied in the HoustonKemp analysis.

Figure 5 Indicative Costs of Expanding the Capacity of the Goonyella System via an Infrastructure-Based Expansion



Assessment of the DBCT User Group's position on criterion b)

The DBCT User Group submission is broadly consistent with the DBCT Management submission with respect to identifying a separate geographical market for the terminal services provided by the Dalrymple

¹⁶ HoustonKemp (2018) Does DBCT's coal handling service satisfy criterion b), A report for DLA Piper, May, p. 69

¹⁷ Aurizon Network (2017) 2016-17 Network Development Plan, p 42

Bay coal terminal which is distinct from the market for export thermal and metallurgical coal from the Bowen Basin. In this regard the DBCT User Group states:

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 market, although, the Goonyella rail system and proximate areas is a reasonable proxy for the current boundaries for the market.

As discussed above the geographical boundaries for the 'Hay Point catchment' may also include existing operating mines in the Blackwater system which could also utilise the existing, or expanded, Dalrymple Bay coal terminal. This is also noted in the Castalia report which states:

Of the approximately 30 mines in the catchment, more than two thirds use coal terminal at the Port of Hay Point. This is particularly evident at the boundaries of the Goonyella rail network with the Blackwater and Newlands systems¹⁸.

While there may be short term constraints on the ability of mines in Blackwater system from 'switching' to DBCT the assessment under criterion b) requires consideration of demand over the likely period of declaration. In this regard the QCA's assessment will need to consider the extent to which existing mines in the Blackwater system should be included in the market for the services provided by DBCT.

The DBCT User Group submission materially differs from that of DBCT Management with respect to the total foreseeable demand. The DBCT User Group, and its consultants, express the opinion that:

- the total foreseeable demand over their proposed declaration period does not exceed the existing 85 mtpa capacity of DBCT;
- DBCT is able to be expanded at relatively low cost to meet an alternate 'extreme' upper bound demand projection of 95 mtpa from 2029; and
- The costs of using alternate export terminals excludes those services from the relevant market.

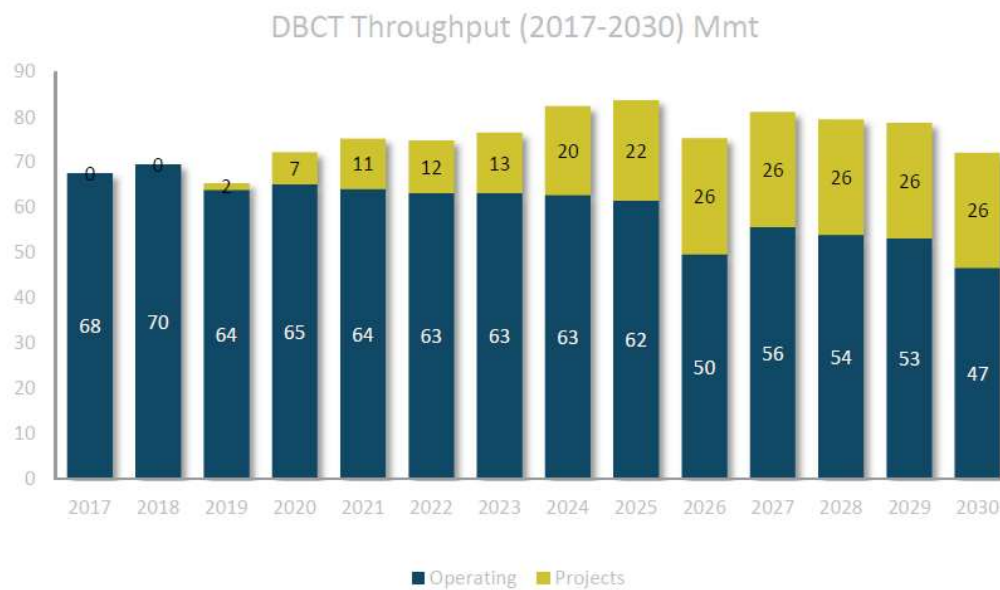
Notwithstanding the view that total foreseeable demand does not exceed the current terminal capacity, the analysis undertaken by PWC to determine whether the higher demand estimate could be met at least cost solely by DBCT is dependent on the use of existing terminal and rail prices to determine that DBCT could be incrementally expanded at lower cost. As discussed, criterion b) is a societal cost test and not a private cost test and therefore prices for the use of sunk investments are not relevant to the consideration of whether the total foreseeable demand could be satisfied at least cost by expanding DBCT and the rail network relative to the use spare capacity at other terminals. Prices are relevant only to the market definition, not the economic cost of meeting the demand from that market.

It is also unclear from the DBCT User Group submission whether the infrastructure requirements, and therefore the size of the facility, are reflective of uniform or peak demand given the historical level of under-utilisation of installed and contracted capacity. Peak capacity should be explicitly addressed by the QCA in its assessment of criterion b) as it is relevant to the scale of the facility(s) in question.

Aurizon Network has broader concerns regarding the collective user group views on the long-term demand for DBCT and the implications for asset stranding risk of Aurizon Network's investments. By the DBCT Users' own admission, the existing system capacity is the upper bound of long term demand with substantial long-term downside volume risks as shown in following graph produced by the User Group.

¹⁸ Castalia Strategic Advisors (2018) Dalrymple Bay Coal Terminal: Economic Analysis of Declaration Criteria, p.8

Figure 6 DBCT User Group Demand Forecasts for DBCT



Source: DBCT User Group Submission, p. 60

Implications of the DBCT declaration review on parts of Aurizon Network's declared service

The Initial Submission identified that 'the use of more than one existing coal system can provide direct facilities based competition to the use of a single coal system given the contestability of export supply chains'.

The preceding discussion on the geographical market for services comprising the Dalrymple Bay coal terminal is highly relevant to the assessment of this part service. This arises because the current and prospective users of the facility comprising the GAPE system are mines within the 'Hay Point catchment' as identified by both DBCT Management and the DBCT User Group.

This leads to a contrasting assessment between DBCT and the use of the GAPE system as the total foreseeable demand for mines in the Hay Point catchment are either:

- met at least cost by the services provided by DBCT and the total foreseeable market demand for the services comprising the GAPE system is zero, in which case DBCT might satisfy criterion b); or
- met at least cost by a combination of the services provided by DBCT and the Abbot Point coal terminal (**APCT**) and the foreseeable demand for services comprising the GAPE system is part of the total foreseeable demand for the Hay Point catchment, in which case DBCT would not satisfy criterion b) (at least with respect to APCT).

The implications from this assessment are clear. If the QCA assessment determines that the services provided by DBCT meet criterion b) then there is no market for the use of the GAPE system. This is largely reflected in the submissions of the DBCT User Group which state:

Historical evidence of a small volume of contracted capacity commitments at APCT, by a small number of miners operating closer to the Goonyella railway system, does not point to the conclusion that coal handling services at APCT are, or will over the declaration period be, sufficiently close substitutes in response to a SSNIP for the Service, as to be in the one market.

*Most importantly, looking forward, the demand environment (and long-term coal price – as show[n] above) which is projected over the next 15 years (the DBCT User Group's proposed declaration period), is such that there is no projection of dramatic long term coal price increases to the peak 'mining boom' levels, such that this **sort of cross-system railing is not anticipated to ever occur again**¹⁹.*

If the facility comprising the Northern Missing Link and the Newlands Coal System is not necessary to meet the total foreseeable demand for the Hay Point catchment then **criterion b) cannot be satisfied with respect to the transportation of coal by the use of those facilities for services which would also utilise rail transport infrastructure comprising the Goonyella coal system.**

Aurizon Network also notes that non-declaration of the part service comprising 'the transportation of coal by the use of those facilities for services which would also utilise rail transport infrastructure comprising the Goonyella coal system' would not be contrary to the interests of existing users of the service. Access to the GAPE System is provided pursuant to the commercially negotiated GAPE Deeds which determine price and terms of access for existing access holders. Therefore, the provision of access under these arrangements is not dependent on the declaration of those services or the approval of prices by the QCA under Part 5 of the QCA Act.

Access on reasonable terms from declaration to this service will not promote a material increase in competition as:

- the scale of the market for this service has no effect on the competitiveness of the rail haulage market in the CQCN; and
- the economic and commercial preference for mines to rail to the Port of Hay Point provides material countervailing market power.

In summary, declaration of DBCT leads to the conclusion that use of rail transport infrastructure comprising the Northern Mission Link for the transportation of coal by services which would also utilise rail transport infrastructure comprising the Goonyella coal system does not satisfy:

- criterion a) as access on reasonable terms from declaration would not promote a material increase in the rail haulage market;
- criterion b) as the total foreseeable market demand is met by the facility comprising the Goonyella coal system; and
- criterion d) as access on reasonable terms from declaration would not promote the public interest.

The Queensland Resource Council approach to total foreseeable demand is inconsistent to that of the DBCT User Group

The QRC submission to the Issues Paper submits that in respect of the services comprising the CQCN:

- the relevant facility is the CQCN;

¹⁹ DBCT User Group (2018) Declaration Review of DBCT: DBCT User Group submission to the Queensland Competition Authority, May, p. 34

- the relevant market is the market for the use of the below-rail infrastructure that makes up the CQCN.

This appears contrary to:

- the approach adopted by the DBCT User Group which takes a supply chain approach and considers the rail infrastructure relevant to the total foreseeable demand in the market for services to DBCT;
- the current regulatory approach which takes a coal system view where prices are determined with respect to a coal system as opposed to a coal network (as occurs with electricity network pricing) and
- the view of the National Competition Council who considered declaration of four services comprising the CQCN with each coal system being an individual facility.²⁰

Aurizon Network recognises that the market for coal exports from the Bowen Basin comprises all those mines in the Bowen Basin which use the CQCN. However, by definition the existence of a Hay Point catchment necessarily requires a Gladstone catchment. The distinction becomes relevant to whether, for some mines, the total foreseeable market demand for the CQCN is satisfied at least cost by a single facility comprising the network or multiple facilities represented by individual coal systems. The latter is consistent with the opinion prepared for the QRC by O'Bryan QC that:

*In our view, ancillary costs are relevant to defining the market for the service for the purposes of Criterion (b), because they are relevant to assessing whether there is likely to be actual or potential substitution between the services of competing facilities. As discussed above, if the service the subject of possible declaration is a rail track service between geographical localities that might be described as region (or point) A and region (or point) B, the substitutes (or competitive constraints) for that service might consist of haulage using different modes (for example road transport) and haulage **between different geographic localities**. (Emphasis added).²¹*

For some services comprising the CQCN there will exist a substitute rail track service between two different geographical localities. Therefore, there are three potential markets:

- services for which the ports at Hay Point are the only economically feasible option;
- services for which the ports at Gladstone are the only economically feasible option; and
- services for which the ports at Hay Point and Gladstone are economic substitutes.

Aurizon Network notes that criterion b) does not explicitly require that the facilities providing the substitute service be owned by different entities; it merely requires that the total foreseeable demand be met at least cost by a single facility. Therefore, where the QCA's assessment of the services comprising DBCT concludes that:

- the Hay Point catchment includes mines which are located in the Blackwater system; and

²⁰ National Competition Council (2010) Draft recommendation. Application for declaration of the four services comprising the Central Queensland Coal Network, September, p. 12.

²¹ O'Bryan, M and Muhlebach, A. (2018) Opinion prepared for QRC in relation to the Issues Paper released by the Queensland Competition Authority, May, p. 20

- the total foreseeable demand for that catchment can be met at least cost by the services provided by DBCT,

then the use of the Blackwater coal system for the transportation of coal by those particular part services would not satisfy criterion b).

The period of declaration should not exceed 5 years

The Initial Submission argued that due to the significant deficiencies and costs associated with the performance and design of the regulatory framework, the appropriate period for declaration should not exceed 5 years. This was further supported by the conclusion there is sufficient uncertainty with respect to the following matters to support any longer declaration period:

- the long-term demand for thermal coal;
- the prospects of supply chain substitution from a reduction of long term demand;
- the prospects for development of competing facilities; and
- the technological disruption of the railway industry through increasing levels of autonomous vehicles.

Aurizon Network observes that other stakeholder submissions have suggested that the term of the declaration should be 10 years or 15 years. For the reasons outlined below, Aurizon Network submits that no sufficient arguments have been made out for a declaration exceeding 10 years under any circumstances.

The QRC position of 15 years makes reference to the draft recommendation by the NCC in relation to Pacific National's application for declaration of the CQCN which includes the following reasons:

- a longer declaration period would provide sufficient certainty for businesses and investment decisions in the long run, benefitting service providers, access seekers and other relevant affected parties;
- a longer declaration period would permit realisation of the expected benefits from access and enable declaration rights to influence competition patterns in the relevant markets; and
- it is unlikely that significant technological developments will occur in the Below- Rail Market over a longer declaration period (i.e. any expected developments, such as increased electrification, are likely to occur in the first 10 years).

The QRC refers to the NCC views but does not include reference to the NCC recommendation:

The Council considers that a declaration of 10 years would be appropriate, in the event that its final recommendation (or the decision of the designated Minister) is that the Services be declared²².

²² National Competition Council (2010) Draft recommendation. Application for declaration of the four services comprising the Central Queensland Coal Network, September, p. 47.

Aurizon Network also considers that significant technological developments are likely to occur within the next ten years as big data and increasing levels of vehicle automation modernise railways.

The QRC also advances the following proposition in support of its preferred duration:

it is unlikely that significant legislative change will occur in the future, given the considerable attention given to the access criteria through the recent Productivity Commission and Harper Review processes²³.

In respect of this view Aurizon Network considers there are prospects for significant legislative change in the short to medium term from:

- the Government response to recommendation 50 in the Final Report of the Competition Policy Review which noted that it was open to establishing a national access and pricing regulator stating:

The Government will continue discussions with states and territories on how a new national framework could be developed between the Commonwealth, states and territories to promote economic growth including the most appropriate institutional architecture to support reform²⁴;

- the National Access Regime is subject to periodic review approximately every 10 years and material amendments to the access regime have followed from each review and it is expected that the regime will be subject to further review within the next 10 years.

Finally, the QRC also expresses the view:

the risk that the access criteria might no longer be satisfied under a longer declaration period is mitigated by the fact that the owner of the facility (Aurizon Network) could bring a revocation application²⁵.

As noted in the Initial Submission, this position is not consistent with sound public policy where periodic review of the need for ongoing intervention in markets is usually undertaken. This is consistent with the Queensland Government's decision to apply a declaration period through the transitional and savings provisions in section 250 of the QCA Act for a period of 10 years.

Aurizon Network also notes that declarations made under NAR provide the right to negotiation and do not involve the provision of an access undertaking. Therefore, declaration periods under the NAR are of limited relevance to declarations under a state based access regime with mandatory access undertakings. This is also consistent with the view that voluntary access undertakings under the NAR, as proposed by ARTC for the 2017 Hunter Valley Network Access Undertaking, or current and proposed Interstate Access Undertaking, will typically not have a term exceeding 10 years. If there were regulatory or commercial certainty benefits to the access provider from a longer period of declaration then this would be consistent with longer terms for voluntary access undertakings.

In summary, Aurizon Network maintains the view that the duration for a declaration for any of the part services which comprise the CQCN should be 5 years, and sound public policy requires a period not exceeding 10 years.

²³ Queensland Resources Council (2018) Declaration Review of CQCN: QRC Submission to the QCA Issues Paper, May, p. 11

²⁴ <https://treasury.gov.au/publication/government-response-to-the-competition-policy-review/>

²⁵ Queensland Resources Council (2018) Declaration Review of CQCN: QRC Submission to the QCA Issues Paper, May, p. 11

Comments on aspects of stakeholder submissions

This section includes selected comments on stakeholder submissions that have not already been addressed and to the extent that those comments are relevant to the consideration of the declared services comprising the CQCN. The omission of a comment on all other aspects of stakeholder submissions not addressed in this response is not indicative of Aurizon Network's agreement or acceptance of those views or positions.

Submission by the Queensland Resources Council

Aurizon Network has reviewed the submission made by the QRC with respect to the services comprising the CQCN and make the following summary observations in table 2.

Table 2 Assessment of the QRC Submission²⁶

QRC Statement	Aurizon Network Response
The QRC also submits that the QCA should take a pragmatic approach to considering demand (i.e. any obvious outlier periods of demand /spikes should be filtered out where they do not reflect the overall demand pattern).	Aurizon Network considers the QCA should make informed decisions that are consistent with the information and evidence before it. However, given the uncertainty of total foreseeable demand in the years beyond UT5 this supports a shorter period for declaration.
Based on Table 2 of the RBB Expert Report (Attachment 1), the highest level of total foreseeable demand in the Below-Rail Market over the proposed 15 year declaration period is 298.3MTpa.	<p>The QRC does not separately identify the total foreseeable demand by individual coal system and therefore does not adequately consider how that demand could be met at least cost with respect to expanding an existing rail corridor relative to its feasible substitutes.</p> <p>Aurizon Network notes that the QRC submission assumes a modest 1.3% annual growth rate in demand between 2020 and 2034 before declining in 2035.</p>
Given capacity and demand requirements, the Facility is unlikely to be able to meet total foreseeable demand in the market over the declaration period without moderate expansion.	The QRC submission does not identify total foreseeable demand by coal system and therefore Aurizon Network is unable to validate any claims by the QRC regarding the capacity of the existing coal system or the expansions that might be required to meet that demand.
A 90MTpa expansion of the CQCN would cost approximately \$695m (plus an additional \$100m per year if required during the Surat Basin Railway ramp-up stage).	It is unclear to Aurizon Network why the QRC has included expansion works relating to the Surat Basin without any explicit reference to those volumes in the total foreseeable demand for the service.
While Aurizon may continue to offer some form of access to the CQCN to some access seekers absent declaration, this does not mean that it would offer commercial terms consistent with those currently offered under declaration. Aurizon's incentive, as a vertically integrated operator free from constraints,	Aurizon Network recognises that, without declaration, it will be a necessary condition to continue to provide access to the service on a non-discriminatory basis on at an arm's length basis to its related operator.

²⁶ Queensland Resources Council (2018) Declaration Review of CQCN: QRC Submission to the QCA Issues Paper, May.

would be to behave so as to favour its related above-rail business over competitors such as Pacific National, maximising its profits while simultaneously damaging competition in the Above-Rail Market	The counter-factual model discussed in this submission contemplates these protections.
<p>Aurizon could use its power to discriminate in a number of ways, including by:</p> <ul style="list-style-type: none"> discriminating on price and other conditions by offering materially worse conditions for access where an access seeker does not use its vertically integrated above-rail provider bundling above and below-rail into a single service and only offering access if the bundled service is accepted using the additional profits obtained from its then undeclared and unregulated below-rail business to subsidise its above-rail business 	<p>Aurizon Network notes these concerns would not arise under an alternative regulatory framework to declaration under the QCA Act as:</p> <ul style="list-style-type: none"> access is provided to the end-users of the service independently of the rail haulage (bundling is not permitted); margin squeezing would not occur where the below rail access arrangements are negotiated independently and prior to the rail haulage arrangements; and key terms and conditions of access are negotiated with the end-user independently from the rail haulage and therefore discrimination between rail operators will not occur.
In Queensland, access agreements with Aurizon Network are typically entered into directly by miners with above-rail coal haulage demand requirements. A majority of third party (i.e. not a party related to Aurizon) access agreements are held by miners. The rights under those contracts are then allocated to an above-rail coal haulage provider (i.e. the miners have the right to run trains on the CQCN, but in a practical sense an above-rail coal haulage provider is engaged to run those trains on the miner's behalf). However, coal haulage providers can (and do) directly enter into a contract for use of the CQCN.	Aurizon Network agrees with the QRC observation regarding contracting behaviours and notes that the ability to contract directly with Aurizon Network largely addresses concerns regarding unfair differentiation between rail operators. This is a function of the contracting framework which Aurizon Network would commit to without declaration and therefore declaration is not necessary for the benefits of functional separation to be retained.
The QRC does not consider there to be any alternative facilities that are close competitors to the Facility. As such, in the event that a SSNIP was applied to the Facility, the QRC does not expect there would be a sufficient reaction on either the demand or supply side to render the SSNIP unprofitable.	As noted in the Initial Submission the construction of the Carmichael Rail Project would provide direct competition in the market for below rail services for a proportion of the total foreseeable demand.
The QRC submits that differential pricing is not relevant to the QCA's assessment under criterion (b). The statutory language in criterion (b) refers to 'at least cost'. How access is priced is not relevant to the interpretation of this phrase. The QRC notes that pricing may reflect the costs incurred in providing a service, but considers that the QCA's assessment should focus on the actual costs incurred in providing access to a service rather than pricing that may (or may not) be derived from them.	Aurizon Network agrees with QRC that the price is not a relevant consideration to determining least cost.
The QRC considers that existing access charges are an important component of the total price of coal. The QRC estimate that infrastructure costs (which include rail haulage costs) ordinarily account for between 10%	The consideration of costs which are unrelated to the provision of below rail services is irrelevant to the

and 20% of the free onboard price of coal. These costs can have a material impact both on decisions to invest in a new mine or to expand marginal production.

QCA's consideration of the services comprising the QCN against the access criteria.

The QRC does not provide facts or evidence to support this statement. It includes no information relating to proportionality, volatility or uncertainty of below rail access charges relative to other inputs to the extraction, processing and transportation of coal exports.

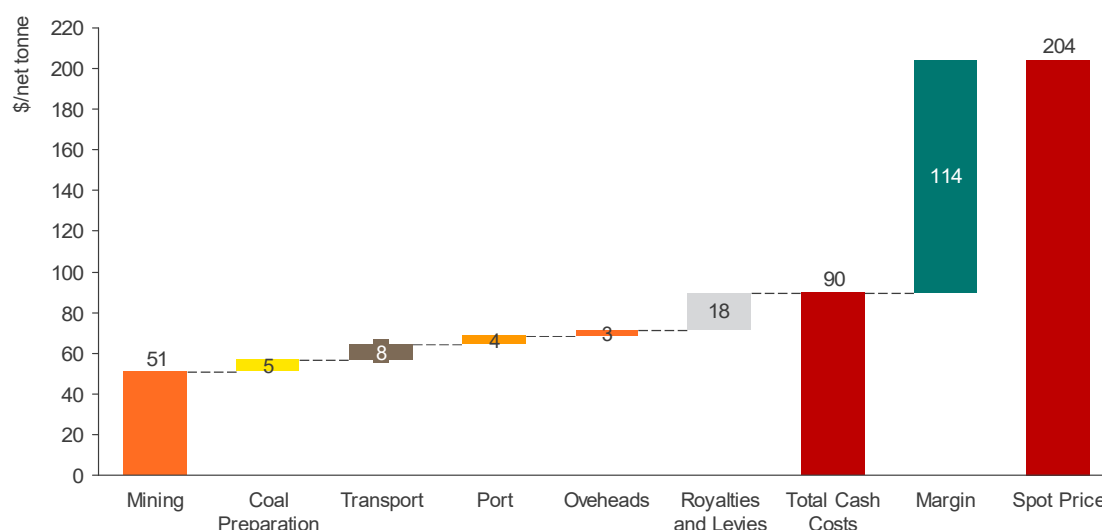
Aurizon Network has provided an indicative cost breakdown for a typical metallurgical and thermal mine in Figures 7 and 8 respectively²⁷.

The QRC submits that, absent declaration, such vertical integration would have an adverse effect on competition in the identified dependent markets. The QRC understands that a number of its members have experienced difficulty in their dealings with Aurizon Network which would only escalate were the service not to be declared.

Aurizon Network does not consider the example provided by the QRC to be related to vertical integration. As the QCA is well aware from the approval of access conditions on alternate security arrangements the issues identified by the QRC are a direct consequence of the commercial and regulatory rigidity introduced over successive undertakings.

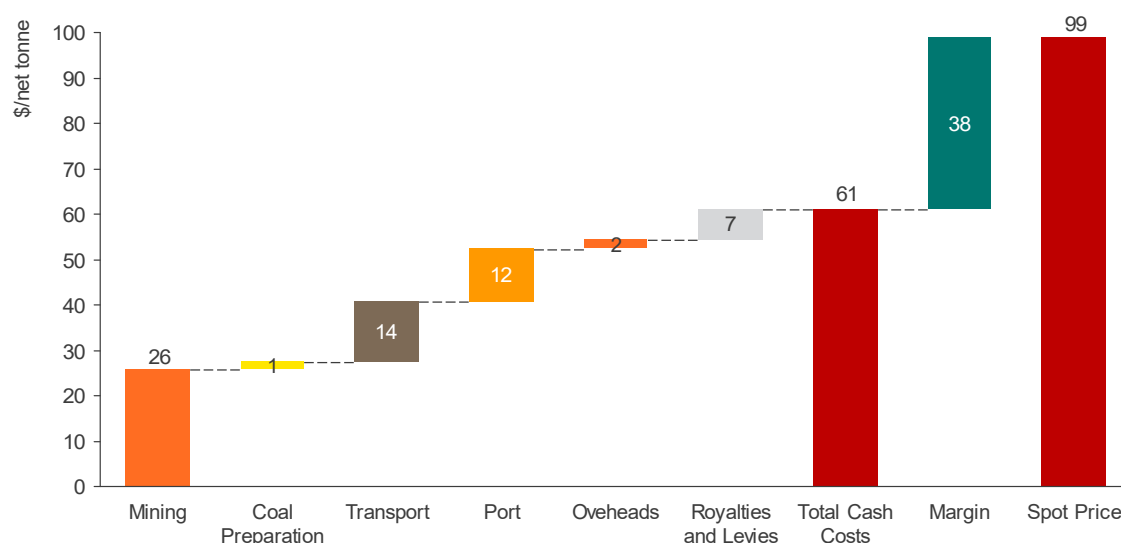
In particular, the QRC understands that certain QRC Members have experienced difficulty when seeking short term access agreements to accommodate increased tonnages, with Aurizon advising that a standard 6 month security would be required as per the undertaking, despite increased access only being sought for a shorter term. Aurizon ultimately compromised by requesting security for the relevant term.

Figure 7 Relativity of Rail Transport Costs to Total Cash Costs for Typical Goonyella Metallurgical Mine



²⁷ Source: Spot prices – Platts, Intercontinental Exchange. Hard Coking Coal price refers to Peak Downs Region product. Thermal Coal price refers to Newcastle 6,300 Gross As Received product. Wood Mackenzie Coal Cost Curves Tool (2018, version: May 2018).

Figure 8 Relativity of Rail Transport Costs to Total Cash Costs for Typical Blackwater Thermal Mine



Report by RBB Economics

Aurizon Network has reviewed the report prepared by RBB Economics on behalf of the QRC with respect to 'Estimating demand for the Central Queensland Coal Network'²⁸ and makes the following summary observations in table 3.

Table 3 Comments on RBB Economics Report

RBB Economics Statement	Aurizon Network Response
For the purpose of preparing this report, I have defined the market as the demand for the use of one or multiple rail corridor system(s) of the CQCN and the relevant period as 15 years.	Aurizon Network notes that it is necessary for the QCA to estimate total foreseeable demand for each coal system or supply chain. However, the report only addresses total demand for the CQCN.
Coal is the world's fuel of choice for electricity generation and steelmaking. It accounts for approximately 41 per cent of global electricity generation due to its reliability and affordability,	Aurizon Network notes the reports reference to IEA report from 2013. It is unclear why the report has not considered more recent evidence and analysis relevant to the proposed duration of declaration.
I have removed mines from the Wood Mackenzie data that do not or would be unlikely to use the CQCN. Those mines are Alpha, Carmichael, Carmichael Underground, China Stone, Degulla, Kevins Corner and South Galilee.	These adjustments appear reasonable but the report is not clear on whether Surat Basin volumes have also been removed. Aurizon Network does not consider there to be any reasonable prospect of Surat Basin interconnecting with the CQCN over the period of declaration.
The baseline results include cross-system usage, which are railings that make use of multiple systems. For example, if mine A has a total production of 10 million tonnes and hauls 5 million tonnes via the Goonyella system to coal terminals at Hay Point and 5 million tonnes via a combination of the Goonyella, the GAPE	Aurizon Network considers this approach to be methodologically flawed. There is no basis for treating the same tonne of coal as more than one tonne of coal based on its transport across multiple coal systems where the report is assessing aggregate total foreseeable demand for the CQCN. The basis for this

²⁸ RBB Economics (2018), Estimating demand for the Central Queensland Coal Network, A report for the Queensland Competition Authority, 30 May.

and the Newlands system to coal terminals at Abbot Point, then the railings including cross-system usage will be $5 + 3 * 5 = 20$ million tonnes, whereas railings without cross-system usage will equal to its total production volume of 10 million tonnes.	approach and its relevance to the QCA's assessment of criterion b) is also not explained.
Where the data from Wood Mackenzie was inconsistent with data provided to me by miners in response to my information request, I replaced the Wood Mackenzie data with the data provided to me by the miners. By way of an example, in the event where Wood Mackenzie estimated a total production volume of 10 million tonnes for Mine A in 2020 and Mine A's owners' own estimate for Mine A was 13 million tonnes, I have used the estimate provided by Mine A's owner instead of the data provided by Wood Mackenzie.	<p>Aurizon Network considers the manipulation of the Wood Mackenzie data is open to bias. It is not explained in the paper:</p> <ul style="list-style-type: none"> • how many of the mines in the sample responded to the survey; or • whether the changes included both upward and downward adjustments.
As shown from Figure 2 above, forecasted railing contributed by prospective mines in 2020 is approximately 5 million tonnes, accounting for approximately 1.7% of the total forecasted railings in that year. This volume will continue to increase over the relevant period and reach approximately 142 million tonnes by 2035, accounting for approximately 46.3% of the total forecasted railing.	Aurizon Network notes this observation is consistent with concerns regarding long term demand risks and exposure to mine development risks that are not observed in QCA beta comparison groups.
If the benchmark prices are higher than the total cash costs of these mines, then I can assume that the mines will continue producing or enter as announced. Conversely, if the benchmark prices are lower than the cash costs, then I can assume that the mine may cease production or decide not to enter as announced.	Aurizon Network considers that the assumption that a mine will commence production where the benchmark price exceeds the cash costs is unlikely to be representative of mine investment decisions. The cash costs will not include an appropriate return on capital and it is also expected that proponents of new mines will only invest where there is an expectation of earning resource rents.

Report by Calibre

Aurizon Network has reviewed the report prepared by Calibre²⁹ on behalf of the QRC with respect to 'the capacity of the CQCN and the costs of expanding the facility' and makes the following observations:

- the report does not contribute to the assessment of capacity given the recent work undertaken with respect to the CQCN baseline capacity assessment;
- the report makes erroneous conclusions regarding the capacity of the CQCN in reliance on the applied maintenance regime but fails to acknowledge that increased maintenance costs and flexibility in maintenance delivery are means of expanding system throughput;
- the options for expanding the capacity of the CQCN are widely understood and identified in Aurizon Network's successive Network Development Plans;

²⁹ Calibre (2018) Independent Report on Central Queensland Coal Network Regulation, Prepared for Herbert Smith Freehills, Attachment B to submission made the QRC.

- the report does not consider the total foreseeable demand by coal system and therefore cannot be reconciled with demand forecasts in the DBCT Management and DBCT User Group submissions;
- the report does not identify what expansions are most likely to be required to meet the total foreseeable demand by coal system; and
- the estimation of total replacement costs for the CQCN is unlikely to be relevant to the consideration of where an alternate facility might meet part of the total foreseeable demand at least cost.

Aurizon Network also notes the report considers the costs of upgrading the Moura system if the system was extended to the Surat Basin but makes no consideration of the costs of that extension which is contrary to the requirements of criterion b).

On balance, Aurizon Network considers the report provides little utility to the QCA's assessment of the access criteria against the relevant part services which comprise the CQCN.

Submission by Pacific National

Aurizon Network notes the following statements in the submission made by Pacific National³⁰:

In the context of a re-declaration inquiry, an important question under criterion (a) becomes whether the removal of declaration will adversely affect the competitive environment, compared to a world where declaration continued. This raises important considerations on the relevant 'counterfactual', including:

- *the extent to which key structural protections – such as vertical separation, ring fencing arrangements, transparent and non-discriminatory pricing principles – are likely to remain in place if declaration was removed;*
- *the extent to which existing coal supply chain logistic improvements have been facilitated by regulation and whether such supply chain improvements will continue if declaration was removed;*
- *the extent to which existing commercial pricing arrangements have been facilitated by regulation and whether they are would be likely to continue if declaration was to be removed;*
- *the extent to which existing structural arrangements (e.g. DBCT PL, the Integrated Logistics Company) has been facilitated by regulation and whether this is likely to continue if declaration was removed; and*
- *the likely impact of pricing in a non-regulated environment on competition in related markets.*

There are two key observations with respect to these statements:

- Firstly, the key structural protections identified by Pacific National are not dependent on declaration and would be an important feature of any counterfactual which allows for the negotiation of access; and

³⁰ Pacific National (2018) QCA Declaration Reviews: Applying the access criteria, p. 9

- Supply chain improvements and associated structural arrangements are an outcome of Aurizon Network's voluntary participation to work with all supply chain participants to improve efficiency and performance of the Queensland coal industry. As this voluntary participation is in Aurizon Network's commercial interest to improve the efficiency of the coal supply chains then that participation will continue without declaration. Furthermore, that participation is not imposed or required by regulation as regulation is highly ineffective in governing relationships outside of an access agreement between an access seeker and the access provider.

Submission by Glencore

Aurizon Network recognises that the object of the submission by Glencore is the part of the below rail services provided by Queensland Rail in relation to the facility referred to as the Mt Isa Rail corridor. In this submission, Glencore argues that criteria d) is clearly satisfied when regard is had to:

The effect declaration has upon mining investment in the North-West Queensland region as a result of the long-term certainty of access (including assurance of access on reasonable terms and conditions) and fair pricing³¹.

Furthermore, the submission goes on to state that access to the Mount Isa Line as a result of declaration has a material effect on continued investment in the North-West Queensland mining industry by³²:

Minimising barriers to entry – especially for new and junior investors that would be far less likely to negotiate reasonable terms of access (or gain access at all) to the service when compared to large incumbents due to a power imbalance during the negotiation process;

Providing long-term assurance of access – the certainty of which supports the significant sunk costs required in the exploration, establishment (in the case of facilities required in the remote Mount Isa location) and development phases; and

Making it more likely that pricing is set at closer to an efficient and reasonable level than would the case absent declaration.

Aurizon Network notes that the submission does not identify any reasonable basis for asserting that a user of the rail corridor could not expect to obtain access to the services provided by the facility and therefore why, or how declaration is necessary to promote mining investment.

As Aurizon Network understands it, the QCA does not approve reference tariffs for this rail corridor and no party has ever raised a dispute in relation to the commercially negotiated access charges. It is therefore, unclear how declaration minimises barriers to entry given the requirement for the access seeker to largely undertake the same negotiation process to obtain a comparable negotiated outcome.

Submission by the DBCT User Group

The majority of matters relevant to the services comprising the CQC within the DBCT User Group submission have been addressed in the parts of this submission covering criterion b) and d) and are not considered again in this section. The following table responds to comments in other areas of the DBCT User Group submission that might be relevant to the services comprising the CQC.

³¹ Glencore (2018) Declaration of Queensland Rail Network: Submission to the Queensland Competition Authority, May, p. 19

³² Ibid. p .19

Table 4 Comments on DBCT User Group Submission

DBCT User Group Comments	Aurizon Network Response
<p>The long history of regulation, contractual arrangements entered at the time, and all stakeholders' clear views on the merits of continued regulation, evidences a clear expectation among users, the State and various infrastructure funds which have owned the terminal, that the declaration of the Service would always continue.</p>	<p>Aurizon Network notes that no commitments or representations were made to the time of privatisation that declaration of the services provided by the CQCN would continue beyond the expiry date of declaration in section 250 of the QCA Act.</p>
<p>Transporting coal to Abbot Point requires coal producers to use the Goonyella to Abbot System (which, unlike the Goonyella coal rail system, is a non-electrified rail system and is therefore only suitable for diesel locomotives.</p>	<p>Aurizon Network does not consider the use of diesel locomotives to be a material cost barrier to the use of the GAPE system relative to the proportional cost differences in other parts of the supply chain.</p>
<p>For example, North Queensland Bulk Ports 2016-2017 Annual Report states:</p> <p><i>Existing unused capacity at Adani Abbot Point Terminal 1 is expected to be utilised in the initial stages of the Carmichael Mine and Rail Project.</i></p> <p>There is no access policy or voluntary undertaking in place regarding the provision of open access to APCT and the arrangement under which APCT was privatised do not ensure that APCT will continue to be an open access coal terminal to other users.</p>	<p>Aurizon Network recommends that the QCA make appropriate inquiries regarding the extent to which the lessee of APCT would be required to continue to provide open access and expand the terminal if it was to develop the Carmichael coal mine project to the extent that the answer to that inquiry is relevant to the services provided by both GAPE and DBCT.</p> <p>There is a substantial difference from an expectation that unused capacity might be utilised by future demand from the Carmichael Mine given no alternate demand, and a refusal to supply access where capacity is available for the purpose of capacity hoarding.</p>
<p>The mines which use the terminal services have far less uniform levels of profitability/ability to withstand pricing volatility/uncertainty/changes (given the more varied product – premium hard coking, PCI, thermal; and position on the cost curve – driven by open cut/underground and differences in scale)</p>	<p>Aurizon Network identified in the Initial Submission that uniform pricing was contrary to promoting the efficient utilisation and investment in infrastructure for the reasons described and that declaration under the QCA Act with mandatory access undertakings and tariffs promotes allocative inefficiency.</p>
<p>While it is acknowledged that rail haulage service providers do not directly contract access at DBCT, they need certainty that the provider of the service will not become a vertically integrated with a supply chain business and then favour their related rail haulage operator or coal producer.</p>	<p>Aurizon Network notes that where vertical integration arises from acquisition the matter would be addressed through the merger clearance requirements under the CCA and declaration is not necessary to address changes in market structure.</p>



Public benefits from access declaration

A REPORT PREPARED FOR AURIZON

July 2018

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Summary

- 1 The Queensland Competition Authority (QCA) is presently conducting an inquiry into whether the services comprising the Central Queensland Coal Network (CQCEN) should be re-declared. QCA staff have prepared an issues paper and sought further feedback from stakeholders. In response to this paper and further request, Frontier Economics was asked by Aurizon Network for its opinion on two matters.
- 2 The first matter relates to the access criteria in Section 76 of the *Queensland Competition Authority Act 1997* (QCA Act). These criteria include that access (or increased access) to the service, on reasonable terms and conditions, as a result of declaration of the service, would promote the public interest (**criterion (d)**). We are asked to consider whether the QCA should, in undertaking its criterion (d) assessment, assess the effectiveness of the current regulatory regime (including a cost versus benefits comparison).
- 3 The second matter is to analyse the benefits identified in stakeholder submissions in response to the QCA's Issues Paper, and to:
 - a. differentiate between those benefits which are obtained from access to the service as opposed to access from declaration; and
 - b. provide a qualitative assessment of the likely order of magnitude of those benefits that would be relevant to access from declaration.
- 4 Our conclusions on these matters are as follows.

The relevance of the current regulatory regime to criterion (d)

- 5 It is clear from the wording of Section 76 of the QCA Act that the QCA (and subsequently the Treasurer) must find that there is a positive case that declaration would promote the public interest and that the list of matters relevant to the public interest is non-exhaustive. An overall weighing process is required: whether the perceived benefits of declaration (or continued declaration) are likely to outweigh the associated costs. Only then is declaration in the public interest.
- 6 We cite a number of precedents from Court and Competition Tribunal hearings, as well as review bodies such as the Productivity Commission, which are aligned in concluding that the public interest test must be approached broadly, taking into account any benefits and costs that can be identified.
- 7 There is no reason to think that matters relating to the costs and benefits attributable to the current regulatory regime should not form part of the decision-making process. This is because observations from the past are highly likely to be relevant to the future benefits and costs from declaration. The most obvious

example is the long delays that have been experienced in considering and approving the (compulsory) access undertakings required as a result of declaration. The resulting uncertainty has imposed costs on Aurizon and access seekers. Moreover, it also reduces benefits that might be expected from imposing effective incentive regulation – which requires that revenue allowances be set *ex ante*. Any costs imposed by the current regime that are likely to be part of any future regime resulting from declaration should be considered by the QCA in its criterion (d) assessment.

The benefits from declaration

- 8 We next address the difference between the benefits which stakeholders identify that are obtained from access¹ to the service and access from declaration of the service.
- 9 Any analysis of the benefits of declaration must answer the question: benefits compared to what? For the purposes of this analysis, we compare a factual of declaration against a counterfactual of a generic regulatory model that (most importantly) includes a regulated right of access. This could be via means such as Part IIIA of the *Competition and Consumer Act (Cth) 2010 (CCA)*. Other elements of a model include recourse to Part IV of the CCA.
- 10 Our assessment is that stakeholders have identified many perceived benefits from obtaining access on reasonable terms and conditions. However, stakeholders do not identify a clear counterfactual against which they measure benefits in the public interest. Our analysis suggests that few of these benefits are actually attributable to declaration under the QCA Act, as summarised in Table 1, and explored in further detail in the main body of the report.

Table 1 Summary analysis of the perceived benefits of declaration

Perceived benefit	Comment
Certainty and predictability in relation to the terms and conditions for access promotes efficient investment in above-rail services and other complementary services	<p>Rights of access are important, but can be provided for under Part IIIA of the CCA.</p> <p>Prices under the QCA declaration have not been stable or predictable. In fact, the experience with lengthy delays in finalising prices and periodic reviews of prices (and uncertainty over the applicable return on capital) indicate that prices are likely to be far less stable than commercially negotiated prices. A comparison with the commercially-</p>

¹ Or “increased access to the service”.

Perceived benefit	Comment
	negotiated Goonyella to Abbott Point Expansion (GAPE) tariffs highlights this point.
Pricing that facilitates and promoting efficient use of below rail services	<p>Under a negotiate/arbitrate model, Aurizon would have no incentive to keep users off the network that could pay the incremental costs of serving them.</p> <p>The current declaration and undertaking process, which leads to reference tariffs that do not allow for differentiation between end-users, is much less likely to maximise throughput than a situation where tariffs would be negotiated with a general right of access and fall-back arbitration.</p>
Facilitating and promoting efficient operation of the relevant supply chains	<p>The current regulatory model under declaration limits the efficient operation of supply chains. For example, since 2011, when the GAPE was completed, the CQCN has become highly interconnected. The interconnectedness of the CQCN allows mines within the vicinity of DBCT to use coal handling services at alternative terminals. Given excess capacity at terminals other than DBCT, efficient prices would need to be set on the basis of maximising network capacity. That is, prices would need to take into account incentives to use spare capacity at a terminal even where that might involve a longer rail haul.</p> <p>The current declaration approach with separate system asset bases does not provide sufficient flexibility to incorporate system-wide pricing, which is likely to be most efficient in these circumstances.</p>
The state of Queensland and its taxpayers will benefit from increased tax and royalty revenue	These benefits are entirely contingent on declaration increasing mine output. As the current regulatory model imposes material constraints on price discrimination and restricts Aurizon's ability to encourage use of spare port capacity, it would not maximise output compared with a model offering pricing flexibility in a negotiation.
Reduced costs of negotiation via the use of standard access agreements	If this was a material benefit to Aurizon, then one would expect that it would be likely to maintain a single set of terms regardless of whether the declaration was in force or not. Constraints of the kind imposed by declaration cannot lessen costs, they can only add them, because the access provider could always behave 'as if' it was declared even if it was not.

Perceived benefit	Comment
	For users, there is scope for users to seek authorisations from the ACCC to share information and collectively bargain to reduce the costs of negotiation (as per the ACCC authorisation of the Wiggins Island coal export terminal (WICET) users).

Source: Frontier Economics analysis of submissions – see section 3 for details.

- 11 Although the QCA need not duplicate its analysis relating to benefits relating to the part (a) and (b) declaration criteria, the perceived benefits identified must be weighed against the costs of declaration. Aside from the well-known risks to below-rail investment, the QCA must also weigh the compliance costs and the foregone benefits of a (more) nationally-consistent approach to rail regulation.
- 12 The ultimate conclusions from our analysis are:
- Most of the evidence and argument submitted by stakeholders suggests that benefits come from access (or increased access), and not declaration under the QCA Act. It follows that, qualitatively, the likely order of magnitude of those benefits that would be relevant to access from declaration could only be small.
 - Declaration imposes costs on Aurizon and other access providers, which are particularly acute in light of the QCA's regulatory framework. A key difference between the QCA declaration and the alternative regulatory model is that the alternative is more amenable to commercially-negotiated solutions which are likely to enhance economic welfare.
- 13 The net effect of these considerations is that it is far from clear from the material before the QCA that criterion (d) would be satisfied.

1 Introduction

1.1 Background

14 Aurizon Network is the owner of the facilities used to provide the declared services described in section 250(1)(a) of the QCA Act. The QCA has initiated a review of the declared services in accordance with the requirements of section 87A of the QCA Act. This requires an investigation of that service for making a recommendation on whether:

- a. the service be declared; or
- b. part of the service, that is itself a service, be declared; or
- c. the service not be declared.

15 To be declared, the individual services that comprise the Central Queensland Coal Network (CQCN) must satisfy all of the criteria in section 76(2) of the QCA Act.

16 A QCA staff issues paper (QCA Issues Paper) was published on the QCA's website on 4 April 2018 to assist stakeholders in making submissions. Aurizon Network as well as a number of other stakeholders made submissions to the QCA Issues Paper.

17 The QCA issued subsequent questions to stakeholders on 6 June 2018, including a question specifically relating to Aurizon Network's assessment of criterion d) in section 76(2) of the QCA Act.

1.2 The task

18 In order to assist Aurizon Network in responding to submissions made to the QCA on the QCA Issues Paper by interested stakeholders, we were asked to:

1. Respond to the following question within in the QCA Staff Questions: Submissions on Submissions paper (**the question**):

Stakeholders are invited to comment on the extent to which an assessment of the effectiveness of the current regulatory regime (including a cost versus benefits comparison) is relevant to the QCA's assessment of criterion (d)?

2. Assess the relevant benefits identified in stakeholder submissions in response to the QCA's Issues Paper on the declaration review and other benefits stakeholder may identify and:
 - a. Differentiate between those benefits which are obtained from access to the service as opposed to access from declaration; and
 - b. Provide a qualitative assessment of the likely order of magnitude of those benefits that would be relevant to access from declaration.

1.3 Key assumptions

19 We are instructed that, in undertaking our analysis, that for the purpose of the counterfactual to declaration under the QCA Act, we should consider a generic regulatory model which possesses the following features:

- a. Provides the right to negotiate access on reasonable terms with recourse to arbitration where reasonable terms cannot be agreed as would occur if the service was declared under Part IIIA of the CCA;
- b. Ring-fencing (including compliance and audit) and functional separation with access being provided on an arm's length basis between the network operator and the upstream users of the service (i.e. coal producers);
- c. Remedy and enforcement of conduct which substantially lessens competition is subject to Part IV of the CCA;
- d. Price oversight which monitors whether the business is earning a reasonable return (as a threat for more intrusive regulation).

20 We are further instructed that, for avoidance of doubt, Aurizon Network does not consider this to be a preferred regulatory model. The objective of this generic model is to allow for comparative assessment of benefits with reference to observable regulatory models.

2 Declaration in the public interest

21 In this section, we provide our response to the question posed in the QCA Staff Questions: Submissions on Submissions paper relating to whether an assessment of the effectiveness of the current regulatory regime is relevant to the QCA's assessment of criterion (d).

22 We first set out criterion (d), and then analyse relevant precedent on the interpretation of this criterion. We also consider other approaches taken in policy settings to the public interest concept.

2.1 Section 76 access criteria

23 The Section 76 access criteria including the following terms:

(2) ...; (d) that access (or increased access) to the service, on reasonable terms and conditions, as a result of declaration of the service **would promote the public interest...**

...(5) In considering the access criterion mentioned in subsection (2)(d), the authority and the Minister must have regard to the following matters

- (a) if the facility for the service extends outside Queensland
 - (i) whether access to the service provided outside Queensland by means of the facility is regulated by another jurisdiction; and
 - (ii) the desirability of consistency in regulating access to the service;
- (b) the effect that declaring the service would have on investment in
 - (i) facilities; and
 - (ii) markets that depend on access to the service;
- (c) the administrative and compliance costs that would be incurred by the provider of the service if the service were declared;
- (d) any other matter the authority or Minister considers relevant.

24 There are two preliminary observations on the 76(2) criterion that are relevant to any analysis.

- 25 The first is that the criterion requires that the QCA (and subsequently the Treasurer) must find that there is a positive case that declaration would promote the public interest.²
- 26 The second is that the list of relevant matters is non-exhaustive – that is, subsection 5(d) acts as a “catchall” for other matters considered relevant to declaration³. That is not to imply that it should involve double counting of matters relating to the promotion of competition; however, it does require an overall weighing process of whether the perceived benefits of declaration (or continued declaration) are likely to outweigh the associated costs – as this would be in the public interest.

2.2 Relevant precedent on public interest criteria

- 27 The QCA staff paper notes that the origins of both the Commonwealth and Queensland access regimes are grounded in the national competition policy reforms of the 1990s, and the access criteria in Part 5 of the QCA Act are similarly worded to the criteria in Part IIIA of the CCA.
- 28 Application of the access criteria under Part IIIA of the CCA has been considered by the High Court of Australia, the Federal Court of Australia, the Australian Competition Tribunal (ACT), relevant Ministers and the NCC.
- 29 We agree with the QCA staff paper that the previous decisions of these bodies – both in relation to Part IIIA and broader matters relating to public interest or benefit – are relevant to the QCA’s considerations.⁴ We would also add that the opinions and analysis of the Productivity Commission (which conducted a review of Part IIIA in 2013) and the Competition Policy Review (Harper Review) are also relevant and should be taken into consideration, as these were the catalysts for the Commonwealth’s changes to Part IIIA in 2017.
- 30 Below, we set out some of the key decisions and guidance on the application of public interest criteria.

2.2.1 The Pilbara decisions

- 31 The NCC, Australian Competition Tribunal, Federal Court and High Court decisions relating to the Pilbara Railways on the public interest criterion (f) in Part

² The Pilbara Infrastructure Pty Ltd v Australian Competition Tribunal; The National Competition Council v Hamersley Iron Pty Ltd; The National Competition Council v Robe River Mining Co Pty Ltd; HCA 36 [2012], 14 September 2012. [**Pilbara decisions**]

³ This is consistent with the explanatory memorandum for the Queensland Competition Authority Amendment Bill 2018 which notes ‘The new section 76(5) provides a non-exhaustive list of matters to which the Authority and the Minister must have regard to when considering the new section 76(2)(d)’

⁴ QCA Staff Paper, p. 5.

IIIA offers guidance on the application of the test. The High Court in the Pilbara decisions provide the standing authority:

[42]...It is well established that, when used in a statute, the expression "public interest" imports a discretionary value judgment to be made by reference to undefined factual matters.... It follows that the range of matters to which the NCC and, more particularly, the Minister may have regard when considering whether to be satisfied that access (or increased access) would not be contrary to the public interest is very wide indeed.

...

[109] The Tribunal's reasons in these matters show that it considered that criterion (f) ... required the examination of all costs and benefits of access to each service and the striking of a balance between all of those costs and all of those benefits. The Tribunal said that:

"criterion (f) and the discretion do not require a precise quantifiable cost/benefit analysis. None the less, in what follows [in the Tribunal's reasons] we have attempted to compare the benefits and costs of access, where possible giving them some order of magnitude value."

...

[111] Because so many different kinds of consideration may be relevant to an assessment of what is "contrary to the public interest", many if not all of those matters which can be described as "social costs" could be relevant to that assessment.⁵

32 It is, however, notable that the High Court's particular decisions about the application of criterion (f) in the Pilbara cases may no longer be relevant given recent changes to the wording of (f). The High Court said:

[191] Thirdly, criterion (f) posed the question whether *any* access is contrary to the public interest. It did not call for an assessment of what type of access was likely to be granted either by contract or by an access determination.

33 As we now discuss, the (f) or (d) test is now explicitly framed as a comparison of the public interest with and without *declaration* that leads to access on reasonable terms. As a consequence, the decision maker must now explicitly consider what – at least in broad terms – constitutes 'reasonable terms' in order to make an appropriate comparison with the 'without declaration' counterfactual.

2.2.2 The Productivity Commission

34 Recent changes to the CCA and the QCA Act can largely be sheeted back to the Productivity Commission's 2013 review of the National Access Regime.

35 On the general role of criterion (f), the Productivity Commission said:

⁵ Pilbara decisions (Majority), at paragraphs cited.

Criterion (f) provides the only opportunity for a decision maker to consider the overall consequences of declaration. The purpose of criterion (f) should be to require that the community as a whole is likely to be better off as a result of declaration.⁶

Given the costs associated with access regulation, it is appropriate that a service can only be declared where the decision maker is satisfied that declaration is likely to generate overall gains to the community. To support this, criterion (f) would be better drafted as an affirmative test that requires the public interest to be promoted (as opposed to access being 'not contrary to' the public interest). This approach is consistent with the focus of the National Competition Policy reforms...

The Commission further noted (p. 180) that some costs might fit under (b), but others would be better suited to (f):

...some types of coordination costs should be assessed as part of criterion (b)...any other costs that would result from shared use of a facility would be more appropriately tested under criterion (f).

The Commission did not favour a formal cost-benefit test, but favoured a "rigorous test."

...Assessments under criterion (f) should specifically include any effects on investment (positive and negative) in markets for infrastructure services and dependent markets, and the administrative and compliance costs that would arise due to declaration.

This change also required that criterion (f) be framed as a test that assessed factors that affected the public interest with and without declaration.

2.3 Competition Policy Review

36 The Competition Policy Review agreed with the Productivity Commission with respect to criterion (f); again, that taking the broadest possible view of public interest is recommended:

A foundational principle of competition policy is that regulatory intervention into markets should only occur where the public interest is promoted. Although criteria (a) and (b) are important considerations in assessing whether an infrastructure facility should be declared, they do not exhaust the considerations that may bear upon the public interest in a given case. In particular, as the PC observed, third-party access may cause inefficiencies in dependent markets; in particular, access may negatively affect the ability of the infrastructure owner to co-ordinate its supply chain in the most efficient manner and may lead to the need to undertake additional capital investment in dependent markets (for example, larger stockpiles or other facilities). **All factors that bear upon the**

⁶ Productivity Commission, *National Access Regime: Inquiry Report*, 2013, p. 176.

overall public interest, including the history of the ownership of the asset, **should be taken into account in the declaration decision**. [emphasis added]⁷

2.4 Queensland Competition Authority Amendment Bill 2018

37 The Queensland Treasury briefing⁸ to the Economics and Governance Committee in respect of *Queensland Competition Authority Amendment Bill 2018* stated that:

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.

An amendment to the QCA Act to extend the declaration as proposed by the QRC would require a regulatory impact statement (RIS) process under the Regulatory Impact Assessment system. This RIS process would involve a similar amount of time, expense and assessment as will be required to conduct the QCA's review of the declaration.

38 The reference to regulatory best practice and regulatory impact statements is typically associated with consideration of all relevant economic costs and benefits of regulation. This is as reflected in the Queensland Productivity Commission guidelines⁹ for the conduct of a RIS:

An impact assessment is a description of the expected costs and benefits for each identified policy option It should consider **all significant costs and benefits** (economic, environmental and social) that each option is likely to impose on the community. However, consider the application of the proportionality principle—the depth of analysis should be commensurate with the size of the potential impacts.

39 The preceding evidence indicates that there is alignment between the QCA's process of consideration under criterion (d) with broader regulatory review processes – both require a broad analysis of all significant costs and benefits that may be identified.

2.5 Assessment of relevance of the effectiveness of the current regulatory regime

40 The QCA Staff's further question relating to part (d) implies that there might be some doubt as to whether the decision to continue declaration of the CQCN should take account of the costs and benefits of the existing regulatory regime. We

⁷ Competition policy review: Final report, March 2015, p. 437.

⁸ www.parliament.qld.gov.au/documents/committees/EGC/2018/CompetitionAuth2018/cor-06Mar2018-QT.pdf

⁹ <https://qpc.blob.core.windows.net/wordpress/2018/03/RIA-101-Impact-assessment.pdf>

understand that the Staff question may be directed at asking whether, if access is presumed to be offered at reasonable terms and conditions, that this could obviate the need to assess the costs and benefits of the existing regulatory regime.

41 The public interest criterion is, as we have seen, deliberately broad. The purpose of this additional criterion is that there might be some cases where, notwithstanding that parts (a) and (b) were satisfied, declaration would not be in the public interest. As noted by the NCC with respect to the Commonwealth part (d) amendments:

The Amendment Act EM clarifies that criterion (d) does not call into question the results of subsections 44CA(1)(a), (b) and (c). It accepts the results derived from the application of those subsections, but it enquires whether, on balance, declaration of the service would promote the public interest. It provides for the Minister to consider any other matters that are relevant to the public interest.¹⁰

42 The list of factors in sub-section 5(c) provides some guidance on the circumstances in which this might arise – for example, where compliance costs associated with declaration are high relative to the benefits obtainable from declaration. However, *any* other relevant costs or benefits should also be brought to bear here.

43 In that light, our view is that the QCA is required to consider the effectiveness of the current regime as part of its part (d) weighing process. The presumption that access is provided on reasonable terms and conditions, which provides a basis for the ‘thought experiment’ relating to the outcomes with and without declaration, does not imply that the costs and risks associated with declaration, including the determination of access prices (e.g. the compulsory undertakings process, or the risk that prices will be set too low) or complementary regulation are not relevant.

44 In circumstances where there had been no previous declaration, then the effectiveness of the current regime would, clearly, not be a factor that could easily be taken into account. However, the regime’s performance can and should be assessed where the service has previously been declared. The past performance of the regime provides the best indication of what is likely to occur in the future. If there is evidence that the regulatory regime has not been effective in promoting the interests of the public – notwithstanding that tests (a) and (b) might be passed – then this is certainly a factor that should be taken into account under part (d). This particularly includes any efficiency losses caused by the declaration in the supply of declared services.¹¹

45 Of particular relevance here are the costs pointed to by Aurizon in its initial submission, including that:

¹⁰ National Competition Council, *Guide to Part IIIA*, December 2017, p. 43.

¹¹ NCC, *op cit.*, at p. 47.

- a. undertakings are compulsory under the QCA Act, while only voluntary under the Part IIIA of the CCA. While the QCA exposes Aurizon to a heavy regulatory burden upfront, to the possible detriment of negotiated solutions, in contrast, the Part IIIA regime focuses on negotiation and arbitration as being the primary forms of access relating to declared services;
- b. there are inordinate delays in the process of developing and approving undertakings for access¹²; and
- c. there have been significant retrospective adjustments to prices (i.e. where an undertaking price is finalised sometime after it commences and involves a transfer of money between the access provider and access seekers). These create issues of equity between users, create ‘windfall’ gains or losses for access providers and access seekers, and undermine a basic principle of incentive regulation which is that for regulation to positively affect the incentives of the regulated entity, it must be forward looking.¹³
- d. the inability of Aurizon to set prices that are responsive to limited capacity on some parts of its system to direct traffic to other parts. The use of congestion pricing on a network basis, widely recognised as efficient in other contexts, would allow Aurizon to maximise overall coal supply chain capacity, but is limited due to the segregation of the RAB into coal systems which limit the use of pricing incentives.

46 While these are costs to Aurizon, they are also efficiency costs. That is, they are not transfers between access seekers and Aurizon. Nor are they costs that could be recovered from users as ‘costs of access’.

47 It is also clear that these costs are imposed by the declaration under the QCA Act and the particular obligations that this Act imposes on access providers.

2.6 Conclusion

48 In summary, we consider that the weighing process for parts (a) and (b) of the test should first establish that there are material net benefits from promoting competition and not inefficiently duplicating infrastructure (against a

¹² See Aurizon submission, Table 1, p. 21, available at: <http://www.qca.org.au/getattachment/dc37190c-10e9-4301-9896-93dbfc61a3dc/6-Aurizon-Network-Submission.aspx>

¹³ The temptation being that, in considering the price to apply to a past period, the regulator will not be able to ignore evidence of *actual* performance in determining what would have been *efficient* performance in that period if considered *ex ante*.

counterfactual of no declaration under the QCA Act). These net benefits should then be compared in a broader context to other costs and benefits that arise under part (d), which include the specific “have regard” factors under sub-section 5. These factors include the costs imposed by the current regime that are likely to be part of any future regime resulting from declaration.

3 Differentiating between benefits from declaration and benefits from access

3.1 Overview

49 The second matter which we are asked to address is the difference between those benefits which stakeholders identify that are obtained from access (or increased access) to the service, as opposed to access (or increased access) from declaration; and to provide a qualitative assessment of the likely order of magnitude of those benefits that would be relevant to access from declaration. For the purposes of this analysis, we assume a generic regulatory model as a counterfactual, which (most importantly) includes a regulated right of access such as via Part IIIA of the CCA.

50 In summary, our assessment is that stakeholders have identified many perceived benefits from obtaining access on reasonable terms and conditions. However, stakeholders have not identified a clear counterfactual against which they measure benefits; our analysis of benefits suggest that few of these benefits are actually attributable to declaration under the QCA Act. The QCA Act does, however, impose certain costs compared to the counterfactual that should be taken into consideration in the analysis of net benefits.

3.2 The “without declaration” counterfactual

51 For the purposes of conducting a ‘with or without’ declaration analysis, it is necessary to consider, at least in general terms, what the ‘without declaration’ case would look like.

52 Importantly, the without declaration counterfactual would not imply no rights of access, nor would it imply unchecked anti-competitive behaviour by access providers. This is because there are key general rules of conduct that apply across the economy, via the CCA:

- a. general rights of access to infrastructure are provided for by Part IIIA of the CCA, on meeting substantially the same tests as those under the QCA Act
- b. behaviour by a firm with market power that substantially lessens competition is prohibited by the section 46 of the CCA.

53 For completeness, we note that declaration of a service is likely to have particular benefits where it produces an effective access regime that prevents the following ‘means’ of anti-competitive foreclosure that might be pursued by a vertically-integrated access provider:

- a. denial of access / refusal to supply
- b. price discrimination and price squeezes
- c. cost-shifting and cross-subsidies
- d. non-price discrimination
- e. tying or bundling of monopoly or near monopoly services with complementary services.

54 An effective access regime is likely to contain measures to combat these means, including:

- a. Obligations to supply.
- b. Robust prohibitions covering price and non-price discrimination against competitors.
- c. Adequate ring fencing of regulated and unregulated business units, to improve the ability of the access regulator and other stakeholders to monitor conduct to avoid cost shifting, cross subsidies or price squeezes.
- d. Protocols dealing with treatment of access seekers' commercially sensitive information and regarding provision of information to access seekers, such as for network upgrades or changes in capacity.
- e. Efficient, effective and clear complaints and dispute resolution procedures to handle any alleged breaches of the access provisions.

55 Although access regimes can prevent monopoly pricing, their primary purpose is to promote competition by providing rights to access bottleneck infrastructure. However, prices monitoring can be used to supplement an access regime if there is a concern that the general Part IIIA access model would not prevent monopoly pricing and profits – and then present a ‘trigger’ for more direct pricing setting.

56 As we noted in the introduction, Aurizon has provided us with a generic regulatory model to consider. Although this model has not been subject to detailed analysis by Aurizon, and so is not considered its preferred regulatory model, it highlights the kinds of regulatory and competition protections which exist in other legislation (or, could be obtained by a voluntary commitment as we understand has been submitted by QR and DBCT). In our opinion, this is a reasonable base model by which one could assess whether the declaration and current regulatory design and performance produces any material public benefit – and would be expected to continue to produce such benefit in future.

57 In Table 2, we identify elements of the counterfactual and how each would address the problems we identify above.

Table 2 Elements of the counterfactual and how it would address access problems

Element of counterfactual	Problems addressed
<ul style="list-style-type: none"> Right to negotiate access on reasonable terms, with recourse to arbitration using Part IIIA 	Supply obligations, with clear pricing principles that prevent anti-competitive discrimination
<ul style="list-style-type: none"> Ring-fencing (including compliance and audit) and functional separation with access being provided on an arm's length basis between the network operator and the upstream users of the service (i.e. coal producers); Remedy and enforcement of the ring fencing obligations is subject to Part IV of the CCA 	Ring fencing addresses concerns regarding the transparency (and so ability to detect) a range of potential anti-competitive behaviour such as cross-subsidies or price squeezes. Includes controls on information disclosure between the upstream and downstream entities.
<ul style="list-style-type: none"> Price oversight which monitors returns earned on access services. Both national and state regulatory options are available: <ul style="list-style-type: none"> through s. 95ZF of the CCA under Part 3 of the QCA Act (by declaring Aurizon Network as a non-government monopoly business activity) 	Provides an information base to establish whether there whether the business is earning a reasonable return (as a threat for more intrusive regulation).

Source: Frontier Economics

58

The key issue in relation to such a framework would be the implementation of appropriate ring fencing or functional separation arrangements. While there are no general provisions in the CCA that could be applied to develop such a framework, as these are not part of Part IIIA provisions, we note that:

- a. There are a number of industry frameworks that could be adopted on a voluntary basis (such as frameworks in energy), and also including the current regime incorporated into Aurizon's existing access undertaking. This could be through a Part IIIA access undertaking.¹⁴

¹⁴ Noting that such provisions are clearly contemplated by s44ZZA:

... The following are examples of the kinds of things that might be dealt with in the undertaking:

- (a) terms and conditions of access to the service;
- (b) procedures for determining terms and conditions of access to the service;
- (c) an obligation on the provider not to hinder access to the service;
- (d) an obligation on the provider to implement a particular business structure;...

- b. Part IV could be used to enforce the non-discrimination commitments as it would address only that differentiation likely to substantially lessen competition; the underlying objective of access regulation.
- c. A commitment to provide for independent review and audit of compliance with the framework, including complaint handling and resolution.¹⁵

3.3 Overview of submissions

59 A number of the submissions address public interest issues in some detail. This includes Pacific National, Queensland Resources Council, New Hope / Yancoal and the DBCT Users Group.

60 While each of these submissions correctly identifies the nature of the “with and without” declaration test with respect the criterion (a) (the promotion of competition), none of these submissions apply similar rigour to the analysis of criterion (d).

61 For example, Pacific National argues in relation to the CQCN that:

Declaration and effective regulation of access to the CQCN is critical to supporting the competitive environment in several related markets. Of direct relevance to PN, declaration supports effective competition in the above-rail haulage market. Declaration also supports effective competition in the upstream market for the development of coal tenements, and in the downstream seaborne coal market.¹⁶

62 The statement essentially conflates declaration with effective access, rather than considering outcomes without declaration (and whether, for example, access would exist and what form would it take). Its statement that declaration would mean no regulatory oversight is not plausible, given a reasonable counterfactual of the kind posed by Aurizon:

...if the CQCN declaration is removed there will be no access regime under which a third party can negotiate access. Over time as current access agreements expire, Aurizon could revert to being a vertically integrated rail infrastructure owner and haulage provider without regulatory oversight or competitive pressures.¹⁷

¹⁵ A comparable model for vertical integration exists with the Moorebank Intermodal Terminal access protocol.

¹⁶ Pacific National submission, p. 11.

¹⁷ Ibid.

63 The QRC submission recognises the with/without declaration distinction with respect to the promotion of competition criterion (a), but little analysis is provided with respect to criterion (d).

64 The New Hope / Yancoal submission highlights that declaration (in its view) facilitates investment in the West Moreton system, based on certainty of being able to obtain access, access being available on reasonable terms, and pricing being set at efficient levels based on a well understood methodology.¹⁸ No specific counterfactual is considered.

65 The DBCT user group (and attached PWC report) correctly acknowledges that the without declaration scenario must be assessed:

Whilst access to DBCT likely would continue even where the services were not declared, it is likely that the terms of access - both price and non-price - would be substantially different. These differences would have potential public interest implications.¹⁹

66 However, it incorrectly assumes that there is no possibility for regulated access in the absence of QCA declaration:

A facility owner may still provide access to services even where there is no declaration. However, the basis on which access terms would be determined, negotiated, administered and enforced would be governed by whatever contractual arrangements are offered to access seekers.²⁰

67 The specific claims relating to the public interest from declaration can be summarised into the following categories:

- a. by providing **certainty** and **predictability** in relation to the terms and conditions for access, which promotes **efficient investment** in the **above-rail** services and other **complementary** services
- b. by facilitating and promoting **efficient use of below rail** services
- c. by facilitating and promoting efficient operation of the relevant supply chains; and
- d. the state of Queensland and its taxpayers will benefit from **increased tax** and **royalty** revenue.
- e. Reduced costs of negotiation via the use of standard access agreements.

¹⁸ South West Producers (New Hope and Yancoal) submission, p. 50.

¹⁹ PWC attachment, p. 48 to DBCT User Group submission.

²⁰ Ibid.

68 It is debatable whether declaration offers material benefits for any of these categories when a comparison is made between the factual and counterfactual. We will discuss each of these categories in the following sections.

69 Two forms of cost are recognised in submissions:

- a. Compliance costs
- b. Disincentives for investment

70 However, these costs are not considered by stakeholders to be material, or are recovered by the QCA levy, or would be incurred in any case.²¹ We do not agree with these suggestions and return to these matters in Sections 3.6 and 3.7.

3.4 Efficient investment in complementary upstream and downstream assets

3.4.1 Price certainty and stability

71 It is common ground that certainty and stability are important for investment, and this applies equally to investment in the facilities subject to declaration, or any investments (e.g. in above rail or mines) upstream and downstream from the facility.

72 For example, QRC argues that:

The declaration, particularly the Aurizon access undertaking, provide a number of key protections (e.g. standard terms, efficient pricing, ring-fencing etc.) that generate certainty for investors in dependent markets.²²

73 Further that:

There is far less incentive to invest in a coal mine when (even assuming that access is provided) the price of transporting coal is uncertain and potentially volatile.²³

74 The QRC submission makes the case that downstream investment requires certainty about reasonable access. However, as we have observed, rights of access could be provided under Part IIIA declaration; with the same criteria as the QCA Act this would appear to be straightforward.

75 The second point does not seem a strong argument in favour of declaration. Experience has shown in relation to the CQCN that declaration has not promoted certain or stable prices.

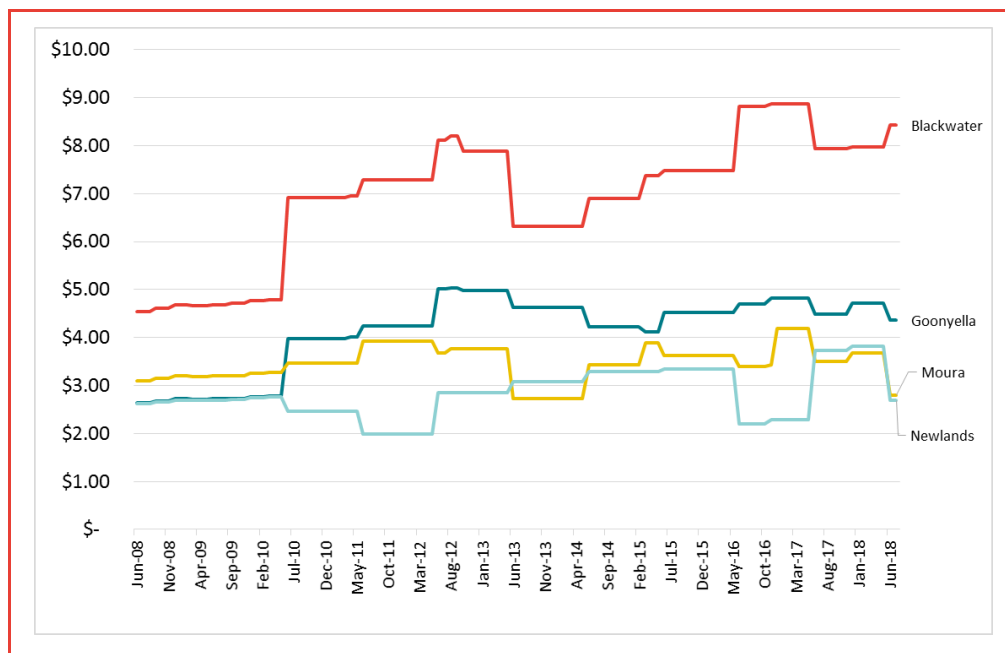
²¹ South West Producers submission, p. 53.

²² QRC Submission, p. 24.

²³ Ibid, p. 25.

76 In fact, the experience with lengthy delays in finalising prices and periodic reviews of prices (and uncertainty over the applicable return on capital) indicate that prices are likely to be far less stable than those commercially negotiated. Some evidence of this is shown in Figure 1, where there have also been material ongoing adjustments in 2010, and each of years 2013-16.

Figure 1: Indicative Access Costs (\$/net tonne) from tariff variability on the CQCN



Source: Aurizon, Frontier Economics analysis²⁴

77 In contrast, commercially negotiated rates are not subject to retrospective review or adjustment. To the extent that a Part IIIA declaration would promote negotiations more than the QCA declaration, this is a likely detriment in a 'with or without' declaration comparison.

78 These price outcomes can be contrasted with the commercially negotiated terms and conditions (including price) under the GAPE Project Deeds. Aurizon's current access undertaking includes a reference tariff for GAPE services for new services. However, the fixed capital price for foundation customers over the term of those agreements was the outcome of a commercial negotiation. The price to customers is known with a reasonable degree of certainty, as the price varies over the 15-year term in accordance with pre-agreed mechanistic processes. In other words, it provides for greater stability and predictability because it does not rely on regular, subjective regulatory assessment of input parameters. The GAPE arrangements were the outcome of negotiate-arbitrate model prior to the QCA

²⁴ Access price outcomes have been modelled on the basis of a representative haul for each coal system which also uses electric traction infrastructure in the Goonyella and Blackwater coal systems.

imposing mandatory amendments to the regulatory framework that prevents this type of arrangement without the QCA's pre-approval of the term.

3.4.2 Reasonable terms and the rail haulage market

79 Offering reasonable and relatively certain terms is also likely to be a factor affecting investment in the rail haulage market. It is referred to by Pacific National a number of times in its submission.²⁵ The QRC also addresses this primarily under criterion (a).

80 The key issue is whether declaration under the QCA Act is a necessary condition to realise the benefits from reasonable and certain terms. There is little material from stakeholders on that issue. At face value, QCA declaration seems to offer few benefits for reasonableness or certainty of rail haulage terms compared to an alternative approach under Part IIIA. We are not aware, for example, of any arguments suggesting that the Part IIIA regime which applies in the Hunter Valley (via the Hunter Valley Access Undertaking) is inferior to the compulsory undertakings under the QCA Act.

81 The QRC submission argues that a high level of certainty about gaining reasonable access is required in order for rail operators to make investment as:

- a. Asset lives for rolling stock are longer than for rail haulage contracts, so that declaration provides additional certainty that it invest knowing that it can re-deploy rolling stock after haulage contracts expire
- b. the CQCN is narrow gauge track and rolling stock is not substitutable with other networks, stranding investments if rolling stock cannot be re-deployed within the CQCN
- c. rolling stock is also specifically designed for the haulage of coal and would need to be modified at considerable cost to be used to haul other commodities; and
- d. new entry ordinarily requires one or more significant initial haulage contracts to justify the level of investment required (e.g. Rio Tinto / Xstrata in relation to Pacific National). Sponsoring such new entry would be less likely where the Service is not declared, as a new entrant would be concerned about how Aurizon would respond given its vertically integrated above-rail operations.²⁶

82 Again, these do not appear to be strong arguments in favour of a QCA declaration – they are arguments in favour of secure access. The QRC further notes that: “the

²⁵ E.g. Pacific National submission, p. 4.

²⁶ QRC Submission, p. 19.

current regulatory framework (including standard access agreements) has been in place largely since declaration and the QCA's methodology and approach is well understood and applied consistently." We agree that this is a potential benefit from declaration; however, its materiality depends on specific benefits compared to a Part IIIA framework.

83 A further argument may be that declaration is necessary to promote incentives to invest in the above rail market because of controls on the ability of the below rail service provider vertically foreclose access to that market. In the absence of QCA declaration, the risks of investigation and prosecution under Part IV of the CCA would encourage the service provider to continue to provide access on reasonable and non-discriminatory terms – see Box 1. However, whether there are benefits from declaration may then hinge on whether the ring fencing measures as part of undertakings under the QCA Act provide benefits additional to those postulated under the counterfactual. Ring fencing provides additional ability to monitor anti-competitive behaviour, via greater transparency of transactions between upstream and downstream entities; the better-defined processes in the QCA declaration undertaking compared with a (less defined) counterfactual may provide benefits in that regard.

Box 1: Use of anti-competitive conduct laws in vertically-integrated rail markets

In other jurisdictions, control of anti-competitive behaviour in rail markets is pursued under general competition. These laws, such as Article 102 of the Treaty on the Functioning of the European Union, outlaw the abuse of a dominant position (which is equivalent to a position of substantial market power). The EU's rail freight market was liberalised in 2007. The European Commission has noted that the enforcement of EU competition rules is important to ensure that past regulatory barriers are not replaced by anti-competitive behaviour of dominant rail companies. Decisions taken by the European Commission relating to vertically-integrated rail operators include:

- **Deutsche Bahn (DB) Group:** In December 2013, the Commission accepted commitments offered by the German railway incumbent Deutsche Bahn regarding its pricing system for traction current in Germany.²⁷ Prior to the commitments entering into force DB Energie, a Deutsche Bahn subsidiary, was the only supplier of traction current in Germany. The Commission had concerns that Deutsche Bahn's pricing for traction current would not have allowed equally efficient competing players to operate profitably in the German markets for rail freight and long-distance passenger transport (a so-called "margin squeeze"). This was found to be in violation of Article 102. The Commission accepted commitments from DB Group to remedy the conduct.

²⁷ http://ec.europa.eu/competition/antitrust/cases/dec_docs/39678/39678_2514_15.pdf

- **Lithuanian Railways:** In 2017, the Commission fined Lithuanian Railways an amount of €27 873 000 for hindering competition on the rail freight market, in breach of EU antitrust rules, by removing a rail track connecting Lithuania and Latvia.²⁸ The Commission suspected the company of having limited competition on the rail markets in Lithuania and Latvia and this breached Article 2012. In particular, the removal of the track may have prevented customers from using the services of other rail operators for the transport of freight between Lithuania and Latvia.

Under similar (national) laws, the French Competition Authority fined French National Railways (SNCF) €60.9m for anti-competitive practices following a string of complaints raised by open-access rail-freight operators in 2008 and 2009. The Authority said that Fret SNCF engaged in several practices that hindered or delayed the entry of new operators into the rail-freight sector, and a fine was issued for two separate offences, with an injunction for a third transgression relating to control of information.²⁹

Source: Frontier Economics

3.5 Efficient use of monopoly infrastructure

3.5.1 Efficient pricing

84 Most submissions refer to efficient pricing of the regulated infrastructure as a benefit of declaration that should be taken into account under criterion (d). However, submissions do not generally apply or consider accepted principles and economic practice on what is meant by efficient pricing, or why declaration under the QCA Act is more likely to promote it than a without declaration counterfactual.

Use of price discrimination

85 The QRC argues that (in relation to criterion (a)):³⁰

Aurizon could use its power to discriminate in a number of ways, including by:

- pricing inefficiently, at a level which will maximise its profit rather than maximising the through-put on the CQCN. By adopting this approach, Aurizon could extract monopoly profits from the Service while maintaining prices at levels below the marginal cost at which coal producers would no longer extract their resources...;

²⁸ http://europa.eu/rapid/press-release_IP-15-2940_en.htm

²⁹ <https://www.railjournal.com/index.php/freight/sncf-fined-€609m-for-anti-competitive-behaviour.html>

³⁰ QRC submission, p. 22.

86 This claim is puzzling, at least in the context of the CQCN. For a network with high fixed costs, and customers that have varying elasticities of demand, if unconstrained one would expect that Aurizon’s pricing of the network would:

- a. take account of the cost position of mines. Mines that earn the highest resource rents (net export price less production costs) have the lowest demand elasticity and would pay more towards the recovery of network fixed costs than more marginal mines.
- b. coincide with maximum throughput (if that is defined as all traffic with a willingness-to-pay exceeding marginal costs of access). This is because more marginal mines would pay lower prices compared to a situation where all mines pay the same price. Aurizon would have no incentive (as QRC recognises) to keep users off the network that could pay the incremental costs of serving them.

87 The comparison point of the current declaration and undertaking process, which leads to reference tariffs that do not allow for differentiation between end-users, is much less likely to maximise throughput than a situation where tariffs would be negotiated with a general right of access and fall-back arbitration.

88 Prices set under an arbitration process would generally be expected to address concerns regarding monopoly profits. This is because the prices set would likely need to consider (as per Part IIIA access disputes) the “direct costs of providing access to the service”.³¹ To the extent there is a remaining concern about “monopoly profits” being earned, then as per Section 3.2, this can be assessed using price monitoring under Federal or State laws. The combination of access and price monitoring measures has been the approach preferred by the Productivity Commission (and the Federal Government) in relation to the regulation of airports since 2001. That is, there has been a successful application for Part IIIA service declarations (as well as another that was withdrawn), and these have operated in conjunction with ACCC prices monitoring.³²

Efficient pricing of system capacity

89 A second issue relates to how the current declaration and undertaking process mitigates against the efficient pricing of system capacity.

³¹ ACCC, *Arbitrations A guide to resolution of access disputes under Part IIIA of the Trade Practices Act 1974*, April 2006, p. 27.

³² The Productivity Commission has recently commenced a further inquiry into airports regulation. An overview of the current regulatory regime for airports is provided in its Issues Paper available at: <http://www.pc.gov.au/inquiries/current/airports-2019/issues/airports-issues.pdf> (accessed July 2018). We further note that recent changes to Part IIIA are likely to make it more difficult to apply to non-integrated entities such as airports, but this would not apply to Aurizon.

- 90 The DBCT submission indicates that DBCT does not consider that its facilities meet the part (b) declaration criterion. That is, its facility cannot be readily expanded to total foreseeable demand in the market at least cost: “Significantly, it is not reasonably possible for the capacity of DBCT to be expanded to the extent required to meet total foreseeable demand in the market.”³³
- 91 Since 2011, when the Goonyella to Abbot Point rail extension (GAPE) was completed, Bowen Basin mines located on the Goonyella rail system have been linked to the Newlands rail system and the Adani Abbot Point Terminal. The Goonyella rail system is also connected to the Blackwater rail system, which links southern Bowen Basin mines to terminals at the port of Gladstone. The interconnectedness of the CQCN allows mines within the vicinity of DBCT to use coal handling services at alternative terminals.
- 92 The significance of this debate is that it links closely to the analysis of efficient pricing of track access across Aurizon’s network. Given excess capacity at terminals other than DBCT, efficient prices would need to be set on the basis of maximising network capacity. That is, prices would need to take into account incentives to use spare capacity at a terminal even where that might involve a longer rail haulage. It might involve some rationing (congestion pricing) of access to DBCT.
- 93 The question is whether the current (and future) declaration provides sufficient flexibility to incorporate system-wide pricing which is likely to be most efficient in these circumstances. The current approach of segregating systems with different regulatory asset bases does not, for example, appear to offer the necessary flexibility to set efficient prices.
- 94 In these circumstances, access under the counterfactual is more likely to promote efficient pricing that maximises the supply chain capacity than declaration under the QCA Act.

3.5.2 Non discrimination

- 95 A further concern that is raised is the prospects of anti-competitive discrimination by Aurizon against other above-rail suppliers (and most notably Pacific National). This appears a remote prospect in the absence of QCA declaration. This is because the material lead times for port and rail infrastructure investment relevant to capacity expansion means that access negotiations first occur directly with mining/tenement operators. Any discrimination would reflect the willingness to pay of a mine, not of the rail haulage provider.
- 96 This is readily apparent in the timing of WIRP and GAPE expansions. Rail haulage contracts were negotiated well after the pricing outcomes for the expansion have

³³ DCBT submission, covering letter.

been agreed between Aurizon Network and the customers. End-users with existing access rights for installed capacity will continue to negotiate below rail access and rail haulage independently. Aurizon has provided us with evidence relating to the signing of access contract and the announcement of material rail haulage contracts. This indicates that rail haulage contracts are signed, on average, more than a full year after the access contract (Table 3).

Table 3: Lags between access and haulage contracts

	Service	Customer	Access Contract Date	Haulage Contract Date	Contract Lag (days)	Project First Railings	Above Rail Contract Reference
Aurizon	GAPE	Jellinbah	08-Apr-10	21-Feb-11	319	01-Dec-11	https://www.asx.com.au/asxpdf/20110221/pdf/41wwzm1znsf8cy.pdf
	GAPE	Rio	08-Apr-10	22-Dec-11	623	01-Dec-11	https://www.asx.com.au/asxpdf/20111222/pdf/423gb3ylnjxgbk.pdf
	GAPE	Qcoal	23-Sep-10	12-Feb-18	2699	01-Dec-11	https://www.asx.com.au/asxpdf/20180212/pdf/43rhbc3xm01x3.pdf
	WICET	Cockatoo	05-Sep-11	24-Jul-12	323	17-Apr-15	https://www.asx.com.au/asxpdf/20120724/pdf/427kg5q8lrgg5z.pdf
	WICET	Xstrata	05-Sep-11	14-Mar-13	556	17-Apr-15	https://www.asx.com.au/asxpdf/20130314/pdf/42dn56wj66blkh.pdf
	WICET	Wesfarmers	05-Sep-11	28-Apr-15	1331	17-Apr-15	https://www.asx.com.au/asxpdf/20150428/pdf/42y4kpr9nsh6t.pdf
Pacific National	GAPE	Macarthur	08-Apr-10	01-Jul-10	84	01-Dec-11	https://www.asx.com.au/asxpdf/20100701/pdf/31r38jm5svs96t.pdf
	GAPE	BMA	08-Apr-10	15-Jun-11	433	01-Dec-11	https://www.asx.com.au/asxpdf/20110615/pdf/41z733244n4ny3.pdf
	WICET	Bandana	05-Sep-11	23-Feb-12	171	17-Apr-15	https://www.asx.com.au/asxpdf/20120223/pdf/424jvfw57ki3ck.pdf
Average (excl. QCoal)					440		

Source: Aurizon

97 In a counterfactual, where access is provided under the terms of Part IIIA between the functionally separated network owner and the end users of the service, the pricing principles under s44ZZCA provide constraints on discrimination that would clearly apply in relation to other rail haulage operators:

(b) ...access price structures should:

(i) allow multi-part pricing and price discrimination when it aids efficiency; and

(ii) not allow a vertically integrated access provider to set terms and conditions that discriminate in favour of its downstream operations...

98 There is of course recognition here that mine-based discrimination can increase economic efficiency, but that this is quite different from discrimination in favour of affiliated operations. It is difficult to see that the QCA declaration offers additional benefits in preventing anti-competitive discrimination.

99 The counterfactual would also be expected to have a stronger focus in addressing discrimination which is likely to have a material adverse effect on an access seeker's ability in the rail haulage market. This is in contrast to the apparent *per se* prohibitions on discrimination that appear to prevail under the current regulatory arrangements, which effectively preclude welfare-enhancing commercial

negotiated outcomes. For example, the outcomes for Part IIIA would be expected to be closely aligned to Part XIC where the ACCC guidelines state:³⁴

The ACCC does not consider that any and all differences in terms, conditions or manner of treatment between access seekers amount to ‘discrimination between access seekers’ in all circumstances.

As a guiding principle, differences which lead to outcomes that are consistent with the objective of Part XIC — the long-term interests of end-users — will not be considered by the ACCC as discriminatory.

The ACCC considers that the combined effect of these considerations is that differences would only be considered non-discriminatory by the ACCC in the limited circumstance where they do not undermine the competitive process in downstream markets and the efficient investment in and use of telecommunications infrastructure.

A further relevant consideration is the impact of recent amendments to Section 46 of the CCA. This Section now prohibits conduct that has the effect of substantially lessening competition, which is considered an easier burden to discharge than the old wording which referred to the purpose of conduct, and required a causal link between market power and the ‘taking advantage’ of that market power. While it is too early to conclude that the ACCC would have an enhanced ability to take action against price discrimination (or related forms of vertical conduct, such as refusals to deal) which might lessen competition. However, we do note that the ACCC’s recent guidelines on the new provisions refer in a number of instances to vertical conduct, including refusal to deal, restricting access to an essential input, margin squeezing, and tying/bundling.³⁵

3.6 Efficient investment in monopoly infrastructure

100 That declaration under the QCA Act could reduce incentives to invest does not appear to be debated by access seekers. QRC notes that:

It is possible that declaration may create some disincentives for Aurizon to invest.³⁶

101 QRC further argues that declaration may positively affect investment through a ‘regulated environment’ attracting certain kinds of infrastructure investors. However, it does not explain how this is possible given that any firm that is not

³⁴ ACCC, *Part XIC non-discrimination guidelines ACCC explanatory material relating to the Part XIC anti-discrimination provisions and the form of Statements of Differences*, April 2012, available at: <https://www.accc.gov.au/system/files/ACCC%20explanatory%20material%20on%20Part%20XIC%20non-discrimination%20provisions.pdf>

³⁵ ACCC, *Interim Guidelines on Misuse of Market Power*, October 2017, available at: <https://www.accc.gov.au/system/files/Interim%20guidelines%20for%20misuse%20of%20market%20power%2025%2010%202017.pdf>

³⁶ QRC submission, p. 25.

regulated could always act ‘as if’ it was regulated without the exposure to the downside risk of that regulation.

102 As the QCA is well aware, there is a significant literature which addresses concerns that access regimes increase the investment hurdle rates for regulated access providers. The Productivity Commission’s review of the National Access Regime noted that this arises where regulation is “expected to expropriate above-normal returns but not compensate for below-normal returns” – the problem of asymmetric truncation.³⁷

103 As we have noted, the issue is not necessarily whether access reduces investment incentives, but whether investment incentives under the QCA declaration are improved compared to the postulated counterfactual of Part IIIA and Part IV regulation (including price monitoring). It is difficult to think of reasons why incentives would be improved (or ‘less hindered’) by QCA declaration. The heavy-handed nature of the compulsory undertakings and uniform reference tariffs stand in some contrast to a negotiate-arbitrate approach; this seems very unlikely to inspire more confidence to invest than this alternative.

3.7 Declaration and negotiation costs

104 QRC submits that, while the regime imposes compliance costs on Aurizon, the costs are ‘mitigated’ to a degree as it reduces individual negotiation:

Aurizon Network and its customers will not have to individually negotiate all of the terms of access because the undertaking will govern many aspects of Aurizon’s relationship/obligations with users or access seekers (i.e. there is some efficiency gained by having a single set of terms). This means that the costs of negotiating individual access and settling disputes is likely to be minimised.³⁸

105 If this was a material benefit to Aurizon, then one would expect that it would be likely to maintain a single set of terms regardless of whether the declaration was in force or not. Constraints of the kind imposed by declaration cannot lessen costs, they can only add them, because the access provider could always behave ‘as if’ it was declared even if it was not.

106 Further, there is also scope for users to seek authorisations from the ACCC to share information and collectively bargain to reduce the costs of negotiation (as per the ACCC authorisation of WICET Users³⁹).

³⁷ Productivity Commission, *Review of the National Access Regime*, 2013, p. 100.

³⁸ QRC Submission, p. 26.

³⁹ <https://www.accc.gov.au/public-registers/authorisations-and-notifications-registers/authorisations-register/variou-queensland-coal-producers-using-wiggins-island-coal-terminal-authorisations-a91241>

- 107 In a similar vein, New Hope argue that standard access agreements, which apply to the West Moreton corridor coal access service, had reduced its negotiation costs compared with the 9 months of unsuccessful negotiation with QR.⁴⁰ It is unclear whether this was due to (i) a deliberate policy of delay by QR, or (ii) a one off issue relating to the first negotiation of terms. At the least, it is unclear what benefit QR would have derived from delay, in an environment where there is direct negotiation of terms with users and so no claim of anti-competitive discrimination.
- 108 Rather than contributing to benefits, imposing a high level of standardisation in both pricing and terms potentially involves a cost as it may preclude the negotiation of terms and conditions of access which are more favourable to both parties to the access agreement. Nor are such negotiations likely to prove anti-competitive: where the direct negotiation of access with end users involves non-standard and reasonable terms of access (i.e. under the counterfactual) it would not have any adverse impact on competition in any relevant market.
- 109 We further understand that demands for standardised access often come for existing users who seek equal treatment between them. However, equal treatment has little efficiency basis in circumstances where access is negotiated between track provider and end user (miner) and – because they do not compete in the global seaborne coal market – such terms cannot promote competition.

3.8 State economy, social and environment benefits

- 110 Various claims regarding public benefit are made regarding aspects of indirect benefit from a well-functioning declaration regime. For example:
- a. benefits to the state economy from higher royalties⁴¹ leading to social benefits⁴²
 - b. environmental benefits from carrying more traffic by road⁴³
 - c. economic and regional development⁴⁴
- 111 It is far from clear that these benefits would be discernible or material. All of these points rely on the central assumption that output on rail networks is made higher through declaration. As we have noted, compared to a reasonable benchmark counterfactual, there is little basis for assuming that output would be higher. Aurizon simply has no incentive to restrict output in situations where it is able to negotiate prices with mines and mines can afford to pay their incremental costs of

⁴⁰ South-West Producers' submission, p. 53.

⁴¹ South-West Producers' submission, p. 51.

⁴² QRC submission, p. 27.

⁴³ Pacific National submission, p.4.

⁴⁴ QRC submission, p. 26.

access. In fact, a system that allowed for (a) more negotiation of individual rates and (b) pricing that better reflected overall system capacity (and shortages in capacity) would be very likely to increase output. The counterfactual is more likely to produce those outcomes.

3.9 National consistency

112 A further source of costs that could also be considered is that declaration under a state-based regime imposes costs from reduced national consistency. This is not likely to be in the public interest, unless there are some special benefits from a Queensland-specific regime. In particular, regard should be had to:

- a. Bulk freight rail operators on the CQCN operate around Australia.
- b. There is a significant degree of common ownership between coal mines in the CQCN and mine in the Hunter Valley, which is regulated under Part IIIA.

113 Of course, the ability to certify regimes as ‘effective’ is allowed under Part IIIA and this option has been taken by the Queensland Government. However, this does not obviate benefits from greater consistency. There are material differences in the operation of Part IIIA and QCA declaration, and while the obvious costs are simply those direct costs associated with management of multiple regimes, further costs may arise where the Queensland regime imposes far higher costs on access providers (and to some extent users) than the national access regime.

3.10 Overall qualitative assessment of the benefits from declaration

114 The ultimate conclusion of our analysis is straightforward. This conclusion is that most of the evidence and argument submitted by stakeholders suggests that benefits come from access (or increased access), and not declaration under the QCA Act. No stakeholder appears to have considered seriously the alternative or counterfactual to QCA declaration. We find that adopting Aurizon’s generic regulatory model as the alternative would predominantly achieve the same or comparable benefits from declaration without the material costs and efficiency losses identified in Aurizon’s initial response to the QCA Staff Issues paper. A key difference between the QCA declaration and the alternative regulatory model is that the alternative is more amenable to commercially-negotiated solutions which are likely to enhance economic welfare.

115 The net effect of these considerations is that it is far from clear from the material before the QCA that criterion (d) would be satisfied.

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