Queensland Competition Authority

Consolidated draft decision

Aurizon Network 2014 draft access undertaking Volume III—Pricing & tariffs

December 2015

We wish to acknowledge the contribution of the following staff to this report:			
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15 PRICING ARRANGEMENTS FOR RAIL ACCESS

Aurizon Network proposed a number of major changes to existing pricing arrangements in its 2014 DAU. We consider that some of these changes would add further complexity to existing pricing arrangements leading to adverse and unclear consequences for some customers.

As outlined in our January 2015 initial draft decision, and consistent with our views on the application of the factors set out in section 138(2) of the QCA Act, we consider that Aurizon Network should undertake a comprehensive review of existing pricing arrangements prior to UT5 supported by full stakeholder consultation. This review should clarify the effects on customers of any proposed changes and the development of transitional arrangements to deal with them.

15.1 Introduction

The purpose of this chapter is to set out the legislative framework applying to pricing arrangements and to our consideration of all pricing matters set out in this Volume, and to address higher level issues about pricing arrangements. This chapter should also be read in conjunction with Chapter 2 (Legislative Framework) which provides an overview of the application of the legislative framework.

Aurizon Network proposed a number of changes to existing pricing arrangements in its 2014 DAU including:

- rebalancing its tariff structure by significantly increasing the incremental capacity charge (AT₂ reference tariff) in various systems (together with a number of measures to address the potential adverse implications of this rebalancing)
- changing the arrangements for the incremental maintenance charge (AT₁ reference tariff) to minimise its variability and incorporate this tariff component in the revenue cap
- modifying take-or-pay arrangements, including the adoption of operator capping and special arrangements for UT1 access holders to address perceived greater take-or-pay costs and risks for UT1 as compared with post-UT1 access holders
- introducing alternative approaches to the pricing of new train services, including expansions and new spur lines connected to the CQCN.

The existing pricing arrangements have been in place since UT1 and have become more complex through time as they have been adapted to new issues. These arrangements are overdue for review and simplification. However, we consider that some of the changes proposed by Aurizon Network add further complexity to these arrangements

We therefore consider that, prior to any major changes to existing pricing arrangements, Aurizon Network should carry out a comprehensive review of existing pricing arrangements supported by full stakeholder consultation.

15.2 Legislative framework for pricing arrangements

When considering the pricing and tariff arrangements in the 2014 DAU, we are required to have regard to each of the factors in section 138(2), including the object of Part 5 (section 69E) and the pricing principles in section 168A.

We have set out a detailed analysis of the legislative framework for our consolidated draft decision in Chapter 2 (Legislative Framework) and this has informed our analysis of the pricing and tariff arrangements.

Under section 138(2) of the QCA Act, we may approve the 2014 DAU (including reference tariffs for WIRP) only if we consider it appropriate to do so having regard to each of the factors in section 138(2) of the QCA Act.

When having regard to the factors contained in section 138(2) of the QCA Act, we must apply a weighting to each factor that we consider is appropriate. Our weighting is based on the practical relevance of the factor to our decision and the issue under consideration. We also have to balance the factors, as we see appropriate, consistent with this weighting.

The factors within the QCA Act that we consider warrant more weight in our consolidated draft decision on pricing arrangements are:

- Sections 138(2)(a),(b),(d),(e),(g) and (h) should be given more weight.
- Sections 138(2)(c) and (f) should be given less weight as these provisions are not relevant in this case.

For the pricing issues—Chapters 15 to 19—we have considered the application of section 138(2) in the manner set out in Chapter 2 (Legislative Framework). We highlight some points that are particularly relevant to pricing and tariff arrangements below, noting that our comments below should also be read in conjunction with our analysis set out in Chapter 2.

Object of Part 5 of the QCA Act

Section 138(2)(a) of the QCA Act requires us to have regard to, among other matters, the object of Part 5 (in section 69E of the QCA Act). This matter is discussed in section 2.5 of Chapter 2. We identified, for example, that there are a number of interconnected aspects to ensuring economically efficient outcomes for the operation of, use of and investment in, the CQCN.

Relevantly, efficiency also has static (productive and allocative) and dynamic dimensions.

In the context of the pricing arrangements in the 2014 DAU, the object of Part 5 would be promoted if, for example:

- the efficient costs of infrastructure are appropriately reflected in the reference tariffs for access holders, promoting static (both allocative and productive) and dynamic efficiency
- the efficient costs of infrastructure are allocated appropriately between the relevant access seeker and access holders, promoting allocative efficiency
- the pricing principles provide appropriate incentives for improved productivity and investment in the CQCN, promoting productive efficiency.

Such requirements would promote the economically efficient operation of, use of and investment in, significant infrastructure by which services are provided, with the effect of promoting effective competition in upstream and downstream markets.

The legitimate business interests of Aurizon Network

Section 138(2)(b) of the QCA Act requires us to have regard to the legitimate business interests of Aurizon Network. This matter is discussed in section 2.6 of Chapter 2.

Pricing arrangements should ensure that Aurizon Network has appropriate incentives to maintain, improve and invest in the efficient provision of the CQCN. Prices should be set to generate expected revenue for the service that is at least enough to meet the efficient costs of

providing access to the service and include a return on investment commensurate with the regulatory and commercial risks involved.

Public interest

Section 138(2)(d) of the QCA Act requires us to have regard to the public interest, including the public interest in having competition in markets. This matter is discussed in section 2.7 of Chapter 2.

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

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

Interest of access seekers and access holders

Section 138(2)(e) of the QCA Act requires us to have regard to the interests of persons who may seek access to the service. We also consider that the rights of existing access holders are relevant under section 138(2)(h), to the extent they are not already access seekers under section 138(2)(e). This matter is discussed in section 2.8 of Chapter 2.

We consider it in the access seekers' interest for pricing principles to be transparent, fair and certain. Such a framework will inspire confidence in the users of the system. Access seekers need to be confident that they can compete on a level playing field with entities that are related to Aurizon Network. Access seekers' interests are served by pricing arrangements where any unwarranted impacts on customers in terms of risk, cost and take-or-pay effects is minimised.

For the pricing arrangements applied, we consider the interests of current and future access seekers, as well as access holders, will best be served where:

- the relevant access holders and access seekers pay access prices that generate expected
 revenue for the service that is no more than sufficient to meet the efficient costs of
 providing access to the service and include a return on investment commensurate with the
 regulatory and commercial risks involved
- the unwarranted adverse consequences to certain customers of particular risk, cost, pricing or take-or-pay effects is minimised, particularly where this adversely impacts on effective competition.

Pricing principles in section 168A of the QCA Act

Section 138(2)(g) of the QCA Act requires us to have regard to the pricing principles in section 168(A) of the QCA Act. Of these pricing principles:

- (a) section 168A(a) requires that prices should generate expected revenue sufficient to meet the efficient costs of providing access and include a return on investment commensurate with the regulatory and commercial risks involved
- (b) section 168A(b) relates to multi-part pricing and allows price discrimination where it aids efficiency

- (c) section 168A(c) requires that prices should not allow a related access provider to set terms and conditions that discriminate in favour of the downstream operations of the access provider or a related entity
- (d) section 168A(d) requires that prices should provide incentives to reduce costs or improve productivity.

The intent of the pricing principles is to provide a transparent framework for determining price limits, the structure of access charges and dealing with issues of price discrimination. We consider the concept of efficient cost and the allocation of costs particularly relevant for the pricing arrangements. This matter is discussed in section 2.9 of Chapter 2.

Efficient costs

Sections 138(2)(g) and 168A(a) of the QCA Act require that we have regard to certain pricing principles, including that the price for access to the declared service should generate expected revenue that is at least enough to meet the efficient costs of providing access to the service and include a return on investment commensurate with regulatory and commercial risks involved.

Pricing arrangements for the 2014 DAU should ensure Aurizon Network is able to recover at least its efficient costs. As noted in Chapter 2, the intent of the words 'at least' was to ensure that the relevant measure of cost is not short-run marginal cost, but is rather a measure of cost that enables Aurizon Network to recover its efficient costs over the longer run. The intention is not to enable Aurizon Network to set prices that are inefficiently high.

As identified in Chapter 2, section 168A(a) of the QCA Act refers to the 'efficient costs' of providing a service but does not specify how those costs are to be measured. Identifying what makes an efficient cost is not a straightforward task and there are a number of ways efficient costs can be measured or estimated.

Allocation of costs

For cost allocation, we must have regard to sections 168A(b) and (c) of the QCA Act in the context of pricing principles, and section 137(1A)(b) in the context of Aurizon Network as a 'related access provider'—namely an access provider that not only owns or operates the declared service, but also provides, or proposes to provide, access to the service to itself or a related body corporate.

Section 168A(b) allows for multi-part pricing and price discrimination, when it aids efficiency. In this context, we must consider whether the proposed tariff arrangements for the 2014 DAU provide appropriate price signals to access seekers and holders for the efficient use of infrastructure in the CQCN and whether there is a clear case for price discrimination. The appropriate allocation of costs is a key consideration in developing equitable allowable revenue for each rail system in the CQCN.

Sections 137(1A)(b) and 168A(c) of the QCA Act require that Aurizon Network's access undertaking includes provisions to prevent Aurizon Network from recovering, via the access price, costs that are not reasonably attributable to the provision of the service. We therefore need to be satisfied that the 2014 DAU pricing arrangements provide neither a competitive advantage nor a competitive disadvantage for Aurizon Network's related parties.

Other issues the QCA considers relevant

Under section 138(2)(h) of the QCA Act, one of the statutory factors 'any other issues the authority considers relevant'. While we have discretion on such issues, we must exercise that discretion appropriately and have regard to the policy and purpose of the QCA Act.

We have taken into account the following additional issues under section 138(2)(h) of the QCA Act:

- the extent to which the 2010 AU should be used as a benchmark in order to minimise commercial uncertainty
- appropriate allocation of risk between different stakeholders (where not already addressed by section 138(2))
- interests of access holders given that they are affected by pricing arrangements and are not specifically identified under section 138(2)
- need for transparency and predictability—the pricing arrangements should be transparent, simple and predictable to ensure all stakeholders understand how costs are allocated and access charges derived. Stability and predictability are likely to promote confidence in the regulatory arrangements and economic efficiency by reducing uncertainty associated with long-term investment decisions
- market conditions—as the CQCN continues to face globally competitive conditions, a
 balance has to be struck between preserving individual stakeholders' business interests and
 promoting the public interest (i.e., ensuring the CQCN's medium- to long-term competitive
 position in global coal markets).

We also considered the following additional issues in the specific context of the proposed WIRP pricing arrangements:

- the historic level and extent of customer engagement by Aurizon Network, including representations made
- historic expectations regarding the appropriate regulatory framework, including the extent to which the pricing principles approved in the 2010 AU should be used as a benchmark for the WIRP infrastructure
- appropriate allocation of risk between different stakeholders (where not already addressed by section 138(2))
- the possibility of shifting existing volumes to WIRP infrastructure.

Lastly, we note that section 138(2)(f) of the QCA Act requires us to have regard to the effect of excluding existing assets for pricing purposes. This issue may emerge on a case by case basis where, for example, demand circumstances change and assets become stranded.

Other relevant considerations

We also note section 137 of the QCA Act contains two relevant provisions for the pricing arrangements:

- section 137(1A)(a) requires that an access undertaking for a service owned or operated by a
 related access provider must include provisions for identifying, preventing and remedying
 conduct of the related access provider that unfairly differentiates in a material way between
 access seekers or users. The definition of 'material way' in the same section clarifies that this
 concept is directed at differentiation that may materially adversely affect competition
- section 137(1A)(b) says that an access provider must not recover, through the price of access
 to the service, costs that are not reasonably attributable to the provision of the service. This
 provision implies that prices should not be set so as to result in cross-subsidies between
 different users.

15.3 Consideration of appropriate pricing arrangements

Our initial draft decision found there was a strong case for a comprehensive review of existing pricing arrangements prior to UT5 with the aims of simplifying the reference tariff structure and making individual users more accountable for their use of contracted capacity.

In making this assessment, we considered:

- the effectiveness of existing pricing arrangements
- relevant criteria for evaluating pricing arrangements to be used in future access undertakings.

15.3.1 Issues with existing tariff arrangements

Complexity of existing tariff arrangements

In our initial draft decision we found that the existing five-part tariff structure and different generations of take-or-pay arrangements have the effect of making pricing in the CQCN complex. The existing reference tariff structure, which was developed in UT1 when a price cap was in place, is now overly complex, with implications for a range of pricing and policy arrangements.

Cost reflectivity and efficient pricing signals

The existing five-part tariff structure is more complex than, for example a two-part tariff approach. This is particularly evident in the current context where incremental tariff components (AT_1 and AT_2) have, in the main, been escalated by the CPI since their introduction in $UT1^1$, making it difficult to assess whether the existing tariff structure is providing effective price signals.

Under the current pricing arrangements, a key objective is to ensure that users are subject to the costs they impose on the system. If the existing multi-part tariff system results in tariff components that are not cost reflective, then the resulting price signals are likely to deliver adverse outcomes to users.

Cost allocation and common cost contribution

Costs not attributable to incremental tariff components are split between two tariff components $(AT_3 \text{ and } AT_4)^2$ to generate a distance taper in access charges. The distance taper results in the average cost per net tonne kilometre declining as haul length increases.

The distance taper was implemented with the objective of compensating longer haul mines which may have a lesser ability to contribute to the common costs. This was considered to potentially encourage development of the Queensland mining industry, resulting in greater use of capacity and potentially lower charges for all users.³

A similar 'capacity to pay' principle has also been applied in the treatment of mine specific infrastructure, with a lower contribution to common costs for mines with higher private infrastructure costs (under the 2010 AU treatment) or longer spur lines (via the distance discount in Aurizon Network's proposed 2014 DAU). We consider that the ongoing application

¹ The exception to this is the 10 per cent uplift to AT₁ that occurred in 2007 as part of the approval of Aurizon Network Maintenance Cost Draft Amending Access Undertaking (QCA 2007(b)).

 $^{^{2}}$ Of which the $\mathrm{AT_{4}}$ tariff component does not vary with distance as it is levied in terms of net tonnes.

³ QCA 2000: 58-59.

of this principle and its alignment with medium- and longer-term objectives of the CQCN needs to be reviewed.

In the context of the regulatory framework for the CQCN, an additional consideration is the historical treatment of customer-specific access lines (spur lines) for regulatory pricing purposes.

Incentives for capacity use

There are also issues with the existing take-or-pay arrangements. Various take-or-pay vintages apply to access holders depending on when particular access agreements were executed. This leads to potential inequities among different access holders, in particular between UT1 and post-UT1 access holders.

We are concerned that existing take-or-pay arrangements do not make all individual users fully accountable for use of their capacity entitlements. This is because under existing pricing arrangements:

- all reference tariff components are calculated on the basis of forecast rather than contracted volumes, and forecasts continue to be below contract⁴
- application of the system trigger test means an individual user that rails below contract in a
 particular year will not be levied a take-or-pay charge if the total actual usage relating to a
 particular system reference tariff exceeds the annual forecast
- the tariff capping mechanism will also limit the take-or-pay liabilities of individual users to the proportional amount required to meet the revenue cap.

In its 2013 DAU submission, Aurizon Network also raised similar concerns with respect to the accountability of individual users for capacity consumption under existing take-or-pay arrangements:

While Aurizon Network remains concerned about the accountability of individual users for capacity consumption via the system test on take or pay, it has not proposed any major changes for UT4, given the complexities that this would create with multiple 'generations' of take or pay. This issue will likely be revisited in future undertakings, when all UT1 access agreements have expired. ⁵

15.3.2 Consideration of appropriate pricing arrangements

Taking into account regulatory principles and medium term objectives for the CQCN, there is a strong case for simplification of the reference tariff structure for the CQCN. The tariff structure should aim to:

- provide appropriate signals to users regarding the cost of holding capacity and therefore contribute to the efficient use of infrastructure
- recover costs in a way that minimises distortions on the production decisions of mines
- ensure that customers face the full economic costs of their decisions.

A two-part tariff structure made up of a fixed charge and a variable charge is a potential alternative to the existing CQCN multi-part tariff structure. This is a common arrangement used in many regulatory contexts in Australia, including by rail access providers in other jurisdictions including HVCN.

⁴ Aurizon Network, 2013 DAU, sub. 3: 11.

⁵ Aurizon Network, 2013 DAU, sub. 2: 18.

The variable charge is normally equated to the marginal cost of supply with reference to either the short-run or long-run marginal cost of supply, depending on context. Normally, the variable charge is based on those costs that vary with usage (i.e. variable costs), although it might also signal the scarcity of available capacity, if network capacity is constrained. Therefore, the variable charge may also include:

- costs associated with congestion
- capital costs associated with the expansion of capacity.⁶

The fixed charge is set to recover the remainder of the costs that cannot be directly attributed and is usually levied in a way that minimises the distortion of customers' capacity decisions, having regard to fairness between customers. This fixed component could be based on contracted capacity (e.g. charged on a contracted train path basis) and, as a result, would not vary with actual usage. This is a more stringent form of take-or-pay arrangement, providing greater accountability for access holders for the use of their contracted capacity.

The take-or-pay arrangements must provide an effective price signal to all access holders regarding their consumption of supply chain capacity. Removing the take-or-pay trigger test would ensure that individual users are made fully accountable for railings below contract in a particular year. However, given that users that hold capacity entitlements under UT1 and UT2 access agreements retain associated take-or-pay arrangements irrespective of the terms of the prevailing access undertaking, removal of the take-or-pay trigger test in the short-term may result in further inequities between access holders.

We consider that there is long term merit in considering the simplification of pricing structures and take-or-pay arrangements for the CQCN.

15.4 Stakeholders' comments

15.4.1 Aurizon Network

Aurizon Network acknowledged the merits of having a more detailed strategic review of pricing arrangements for the CQCN prior to the commencement of UT5. Aurizon Network said that it is willing to engage with stakeholders in that process beyond approval of UT4.⁷

In addition, Aurizon Network accepted a number of our initial draft decisions on the basis that they would be included as part of this review, including:

- the CCC calculation for existing train services⁸
- the AT₁ reference tariff and the inclusion of this in the revenue cap framework⁹
- the AT₂ reference tariff.¹⁰

Aurizon Network said it agreed that there was merit in simplifying the pricing arrangements and making individual users more accountable for their use of contracted capacity. ¹¹

 $^{^6}$ Variable costs that include this capital component are generally referred to as long run marginal costs.

⁷ Aurizon Network, 2014 DAU, sub. 82: 245.

⁸ Aurizon Network, 2014 DAU, sub. 82: 248.

⁹ Aurizon Network, 2014 DAU, sub. 82: 248–249, 258.

¹⁰ Aurizon Network, 2014 DAU, sub. 82: 245.

¹¹ Aurizon Network, 2014 DAU, sub. 82: 214.

Aurizon Network agreed that a pricing structure more closely aligned with the HVCN arrangements may be more appropriate for the CQCN. However, Aurizon Network said the HVCN access charge arrangements were not significantly simpler than for the CQCN. ¹²

Aurizon Network said that the existing reference tariff pricing structure accurately reflected the costs a train service imposes on the network.¹³ Aurizon Network said the basic principles underlying reference tariffs in the CQCN remains sound, in particular by:

- providing efficient price signals associated with incremental costs of access
- providing a distance taper to encourage development of the Queensland mining industry.

Aurizon Network said the recovery of allowable revenues and the presentation of access charges could nevertheless draw upon the principles of the HVCN arrangements, and other arrangements under a revenue cap form of regulation (e.g. DBCT), in a manner which retains the existing, efficient price signals.

Aurizon Network reiterated the importance of developing an efficient and sustainable pricing solution for electric traction as a matter of priority. Aurizon Network said that while the establishment of sustainable pricing arrangements for electric assets was not considered in its 2014 DAU, this issue should be considered as part of a comprehensive review of the existing tariff structure.

Aurizon Network said a possible tariff structure could comprise a non-take-or-pay charge, a take-or-pay charge and an electric charge. This could be developed in a way that preserves the current pricing methodology (including the distance taper) and retains the reference train concept. However, Aurizon Network said that in order to protect its legitimate business interests, all of the tariff components would need to be included in the revenue cap arrangements.¹⁵

15.4.2 Other stakeholders

The QRC, Asciano, BMA and Vale supported the review of existing pricing arrangements through a detailed consultation process prior to UT5. 16

Asciano supported the initial draft decision's position that the existing tariff structure and take-or-pay arrangements are unnecessarily complex. Asciano supported the initial draft decision position to review the tariff structure and take-or-pay as part of the next access undertaking process, and rejected Aurizon Network's proposed UT4 changes to tariff structure and take-or-pay approaches.¹⁷

Aurizon Operations said changes to existing pricing arrangements should balance stability and predictability against simplicity. It said decisions to enter into commercial arrangements were underpinned by the principle of stability and predictability of existing pricing arrangements. Accordingly, the QCA should only contemplate changes where it identifies a material market

¹² Aurizon Network said the HVCN has multiple pricing zones and 15 variants based on differing service characteristics. In contrast, the CQCN has a base service characteristic – the reference train.

¹³ Aurizon Network, 2014 DAU, sub. 82: 245.

¹⁴ Aurizon Network, 2014 DAU, sub. 82: 216.

¹⁵ Aurizon Network, 2014 DAU, sub. 82: 217.

¹⁶ QRC, 2014 DAU, sub. 84: 33–34; Asciano, 2014 DAU, sub. 76: 7; BMA, 2014 DAU, sub. 78: 9; Vale, 2014 DAU, sub. 79: 5.

¹⁷ Asciano, 2014 DAU, sub. 76: 7.

failure or where there would be material and demonstrated efficiency gains¹⁸. Aurizon Operations did not support the introduction of a fixed cost pricing regime and associated take-or-pay changes to existing access arrangements.¹⁹

BMA supported a full review of the tariff structure for UT5 given the complexity of the existing system. BMA considered that careful consultation should be undertaken with industry to avoid unintended commercial consequences. In BMA's view, the existing system does not provide appropriate pricing signals as, for example:

- AT₂ is not achieving its aim of effectively pricing incremental paths and should be removed
- AT₁ is a crude tool for linking network activity and maintenance costs, particularly where actual activity diverges from forecast.²⁰

The QRC considered that Aurizon Network should undertake an early consultation process in relation to key pricing issues for UT5:

- the impact of changes across different users
- the impacts of the different 'generations' of take-or-pay and whether these create impediments to implementing changes
- what behaviours and outcomes the new arrangements should seek to achieve and methods for balancing conflicting objectives
- ways in which Aurizon Network could provide sufficient transparency to allow stakeholders to make informed decisions.

The QRC said it broadly supported cost-reflective pricing, whereby reference tariff structures aim to reflect the costs imposed on the system by users, and take-or-pay terms aim to ensure that contracts involve a genuine commitment to pay the associated costs of capacity. However, the QRC considered that these aims should be balanced against other considerations, including the costs of complexity, and the uncertainty created by major reforms to pricing frameworks. ²¹

Vale supported the QCA's approach that further consultation with all stakeholders should occur as part of a complete review of the pricing framework, rather than adjustments to particular items in UT4.

15.5 QCA analysis

Longer-term review of pricing arrangements

We note Aurizon Network's and other stakeholders' agreement with the concept of a pricing and tariff review, with the objective of simplifying the pricing arrangements and making individual users more accountable for their use of contracted capacity. We broadly agree with Aurizon Network's suggestions for the scope of the review including the basic principles underlying reference tariffs, take-or-pay arrangements and the need to review electric traction tariffs.

²¹ QRC, 2014 DAU, sub. 84: 34.

¹⁸ Aurizon Operations, 2014 DAU, sub. 93: 24–25.

¹⁹ Aurizon Operations, 2014 DAU, sub. 93: 24–25.

²⁰ BMA, 2014 DAU, sub. 78: 9.

As noted above, we received some suggestions from stakeholders' submissions (e.g. from Aurizon Network and BMA) about how the tariff structures and take-or-pay arrangements could be improved.

We note the suggestions from QRC and Vale that a consultative process be adopted, and that consideration should be given to, among other things, the impacts on different users.

The existing tariff and take-or-pay arrangements were introduced in UT1 to achieve a number of objectives. We consider that the existing pricing structure and take-or-pay arrangements need to be reviewed to ensure they align with medium- and longer-term objectives for the CQCN, including:

- supporting productive and efficient use of existing infrastructure and providing appropriate signals for expansion
- ensuring that Aurizon Network recovers its efficient costs
- promoting transparency and simplicity (without inducing distortions)
- ensuring that users pay a cost reflective price for access to the CQCN.

The review should take account of other considerations, including the implications of different generations of take-or-pay that may prevail in the medium-term, and the effects on customers of potential pricing reforms.

Aurizon Network should consider a more strategic approach to the development of pricing arrangements for UT5 that includes full stakeholder consultation, the identification of the effects on customers of any proposed changes, and the development of appropriate transitional arrangements to deal with them.

We have concerns that one effect of Aurizon Network's proposed changes is to make the pricing arrangements more complex, resulting in adverse and unclear consequences for some customers. Given this, we do not on balance consider that many of the changes proposed by Aurizon Network in the 2014 DAU are appropriate.

We consider that making changes that increase the complexity of the pricing arrangements for the 2014 DAU is not desirable, and that it is preferable to make changes in a more considered manner as part of the longer-term review for the next access undertaking. This is consistent with the application of section 138(2)(h) of the QCA Act, relating to matters affecting access holders as well as addressing the need for simplicity and clarity.

We consider this approach to be consistent with Aurizon Network's legitimate business interests (section 138(2)(b) of the QCA Act). That is, the consolidated draft decision as outlined in this volume continues to ensure Aurizon Network is able to recover at least its efficient costs throughout the 2014 DAU period. It is also in the interests of access seekers and holders as it should minimise the level of tariff re-balances which may be needed to transition to a longer-term pricing arrangement.

16 PRICING PRINCIPLES

Part 6 of Aurizon Network's 2014 DAU sets out the pricing principles Aurizon Network proposes to apply when developing access charges. In our view these principles should seek to protect users of the CQCN from unfair differentiation and inefficient price discrimination, provide access seekers with greater certainty about how Aurizon Network will negotiate and set access charges, facilitate access charges that are at least enough to meet Aurizon Network's efficient costs of providing access, and include a return on investment commensurate with the regulatory and commercial risks involved.

Part 6 of the 2014 DAU also sets out the processes to identify or develop reference tariffs for new train services. Such new services can include expansions and/or new spur lines connected to the CQCN.

Our consolidated draft decision is to refuse to approve Part 6 of Aurizon Network's 2014 DAU. Our key concerns with Aurizon Network's proposal are as follows:

- The high-level pricing principles, as drafted, result in a pricing regime that is not appropriate—we have proposed to clarify and strengthen the boundaries for, and the conditions of, how access charges are negotiated, and to set out effective mechanisms to comply with the obligations under the QCA Act.
- The application of Aurizon Network's proposed expansion pricing framework requires
 clarification and could cause existing users to bear an inappropriately high level of expansion
 financial risks—we have proposed amendments to make the expansion pricing framework
 sufficiently flexible to be able to account for expansion specific characteristics and better
 allocate risk.
- The revised approach to pricing train services that use new spur lines inappropriately
 increases the complexity of the pricing regime for limited benefits—we have largely retained
 the 2010 AU approach for pricing train services that use new spur lines but have proposed a
 few amendments to address stakeholder concerns and to make this approach consistent with
 the expansion pricing framework.
- The revised provisions inappropriately reduce regulatory oversight of the negotiation of commercial terms—we have proposed to reinstate and refine the 2010 AU access condition provisions to strengthen regulatory oversight.

Overall, we consider it appropriate that amendments are made to Part 6 of the 2014 DAU so that the pricing obligations are credible and effective, and the pricing regime facilitates efficient and equitable outcomes. The detailed drafting of Part 6 attached to this consolidated draft decision shows all of the amendments that we consider are appropriate to address our concerns.

16.1 Introduction

The pricing principles in the access undertaking are a set of general rules Aurizon Network proposes to apply when setting access charges for train services operating on the CQCN.

The setting of access charges is a critical issue, given Aurizon Network owns and operates the monopoly below-rail infrastructure and is part of a vertically integrated entity that competes in the provision of above-rail haulage services. Traditionally, the pricing principles in the access undertaking have sought to:

- facilitate access charges reflective of Aurizon Network's efficient costs and provide Aurizon
 Network with an appropriate return on investment
- provide access seekers with some certainty about how Aurizon Network will negotiate and set prices for access to the network
- allow third-party train operators to compete with Aurizon Network's related above-rail operator on a level playing field.

16.2 Overview

16.2.1 Aurizon Network's proposal

Part 6 of the 2014 DAU specifies a set of pricing principles Aurizon Network proposes to apply when establishing access charges.

At a high level, the 2014 DAU pricing principles are generally unchanged from the 2010 AU. In its 2013 DAU supporting material, Aurizon Network said its overarching pricing objective was to provide appropriate signals to influence efficient network use and investment. Aurizon Network also emphasised the importance of having sufficient pricing flexibility to adapt to the growth and development of the CQCN, and to other relevant changes that may occur.

The 2014 DAU has four pricing principles:

- (a) price differentiation—defines principles to limit price differentiation among users
- (b) pricing limits—establishes upper and lower limits for access charges
- (c) rail infrastructure utilisation—provides for Aurizon Network to vary access charges when available capacity is limited (applies to non-coal carrying train services)
- (d) revenue adequacy—provides for Aurizon Network to set prices at a level reflective of its efficient costs and an appropriate return on investment.

In the event they conflict with one another, Aurizon Network proposes to apply them in order of precedence from top to bottom (cl. 6.1(b)).

The main differences between the 2014 DAU and the 2010 AU lie in the redrafting of these high-level pricing principles, which potentially affect their application. The key issues are set out in detail below.

Part 6 of the 2014 DAU also sets out the processes to identify or develop reference tariffs for new coal-carrying train services, including those that involve:

- expansion to the CQCN; and/or
- new mine-specific spur lines connected to the CQCN.

Aurizon Network's proposed approach to pricing expansions is new. The issue of expansion pricing has previously been addressed on a case-by-case basis as it was not covered in previous access undertakings.

For pricing coal-carrying train services utilising new spur lines, Aurizon Network has proposed to revise the assessment and application of the minimum contribution to common costs (CCC).²³

²² Aurizon Network, 2013 DAU, sub. 2: 189–190.

²³ Common costs are costs incurred by Aurizon Network that cannot be assigned directly to a particular train service.

16.2.2 Key issues for consideration

Stakeholders said in initial consultations that while Aurizon Network had made some positive changes in the 2014 DAU with respect to pricing principles, they did not consider Aurizon Network had addressed all major issues raised in their submissions on the 2013 DAU. Their concerns included:

- the reduced restrictions on price differentiation
- the application of the proposed expansion pricing approach
- the use of DORC-based asset values for pricing
- the negotiation of commercial terms with limited regulatory oversight.

Our initial draft decision was to refuse to approve Part 6 of Aurizon Network's 2014 DAU on the basis that it was not appropriate for us to do so having regard to section 138(2) of the QCA Act. We also identified the way in which we considered, in draft, that the 2014 DAU should be amended. We consulted on our initial draft decision. Consideration has been given to our initial draft decision and submissions received from Aurizon Network and other stakeholders. The key issues are addressed in the following order below: price differentiation; pricing limits; expansion pricing; pricing for train services that utilise new spur lines; and commercial terms.

We also consider it appropriate that 2014 DAU should be amended in the manner set out in our attached CDD amended DAU (see Part 6).

16.3 Price differentiation

16.3.1 Price differentiation principle

Aurizon Network's proposal

Part 6 of the 2014 DAU sets out Aurizon Network's rights and obligations with respect to price differentiation. Aurizon Network said that while these rights and obligations are drafted in a more positive language, the intent remains unchanged from the 2010 AU. ²⁴

In its 2014 DAU, Aurizon Network has not included the following provisions that were previously in the 2010 AU (applied generally to coal- and non-coal-carrying train services) (which we refer to in this section as the 'omitted provisions'):

- the express prohibition for Aurizon Network to set access charges for the purpose of preventing or hindering access by a third party in competition with its related operator
- the ability for an access holder to have its agreed access charge amended in the event of a breach of the price differentiation obligations by Aurizon Network.

Aurizon Network stated while the above 2010 AU provisions have been removed, it has added non-discrimination provisions in Part 2 of the 2014 DAU (cl. 2.2(g)).²⁵

With respect to access holder grievances, Aurizon Network considered this a matter between it and the access holder. Aurizon Network noted that the SAAs have a 'most favoured nation' clause to address this type of issue.²⁶

²⁵ Aurizon Network, 2014 DAU, sub. 3: 94.

²⁴ Aurizon Network, 2014 DAU, sub. 3: 94.

²⁶ Aurizon Network, 2014 DAU, sub. 3: 94.

Summary of our initial draft decision

Our initial draft decision was to refuse to approve Aurizon Network's omission of the omitted provisions. Our full analysis and reasoning is contained in section 16.3.1 of the initial draft decision. We have adopted that analysis and reasoning for the purposes of this consolidated draft decision, subject to the comments below.

In reaching the conclusion in our initial draft decision, our key concern was that Aurizon Network's proposal does not provide sufficient protection for the CQCN access seekers and holders from unfair price discrimination, including Aurizon Network establishing access charges for the purpose of preventing or hindering access by a third party that is in competition with its related operator.

We considered that it would better to clarify Aurizon Network's obligations in relation to access pricing if an express prohibition on unfair price discrimination was also included in Part 6 of the 2014 DAU.

We also proposed that Aurizon Network reinstate the omitted provisions in the 2014 DAU, including the ability for an access holder to have its access charge amended in the event of a breach of the price differentiation principle by Aurizon Network. Price differentiation is relevant to all access seekers and holders. We considered it important that this provision be dealt with in the access undertaking (rather than in the SAAs), as it will provide a way in which to rectify a breach of the price differentiation principle consistently and uniformly across all access seekers and access holders.

We considered that these proposed amendments set out clear boundaries for, and the conditions of, the negotiation of access charges, and establish effective enforcement mechanisms

Stakeholders' comments on our initial draft decision Aurizon Network

Aurizon Network accepted our initial draft decision to include an express prohibition of establishing access charges for train services that discriminate in favour of any related operator on the basis that it does not purposefully discriminate in favour of its related party. Aurizon Network submitted that the QCA Act (s. 168A) allows for price discrimination when it aids efficiency and that this principle should apply regardless of whether the train service is associated with a related party. 8

Aurizon Network agreed with providing an access holder the ability to have their access charge amended in the event of a breach of the price differentiation principle on the basis this charge has an immaterial impact.²⁹ However, Aurizon Network considered inclusion of this drafting in Part 6 of the DAU creates unnecessary duplication, as existing dispute resolution provisions offer access holders a process through which to challenge their access charge.³⁰

²⁷ Aurizon Network, 2014 DAU, sub. 82: 222.

²⁸ Aurizon Network, 2014 DAU, sub. 82: 222.

²⁹ Aurizon Network, 2014 DAU, sub. 82: 223.

³⁰ Aurizon Network, 2014 DAU, sub. 82: 223.

Other stakeholders

The QRC, Vale, Asciano and Anglo American all supported our initial draft decision in regard to price discrimination protections. ³¹ The QRC suggested that Aurizon Network should also be obliged to negotiate in good faith a reasonable access charge with an access seeker where there is a material decrease in cost or risk. ³²

The QRC considered that access holders should be alerted when an access agreement contravenes Part 6 of the access undertaking and where this could result in an access charge being varied. ³³ Asciano noted that, given the confidentiality of access agreements, the likelihood of an access holder having evidence that Aurizon Network has offered a more favourable access charge to another access holder would be low. ³⁴

QCA analysis and consolidated draft decision

After having regard to the criteria listed in section 138(2) of the QCA Act (including section 168A) and reviewing submissions received on the initial draft decision, we refuse to approve Aurizon Network's omission of the omitted provisions. In doing so, we note that we are not assessing the 2014 DAU as against the 2010 AU; rather, we are applying section 138(2) of the QCA Act to the 2014 DAU on a stand-alone basis. However, the 2010 AU is a useful frame of reference for us to identify potential omissions and whether they are material.

In undertaking a gap analysis between the 2014 DAU and the 2010 AU, we identified that the omitted provisions have not been included in the 2014 DAU. We consider that these provisions are of sufficient importance that it would not be appropriate for us to approve the 2014 DAU in the absence of the omitted provisions

Consistent with our initial draft decision, our key concern remains that Aurizon Network's proposal does not provide sufficient protection for the CQCN access seekers and holders from unfair price discrimination, including Aurizon Network establishing access charges for the purpose of preventing or hindering access by a third party that is in competition with its related operator. We consider an undertaking of this nature should provide sufficient protection and it would not be appropriate for us to approve an undertaking without sufficient protection.

We consider that the reinstatement of the omitted provisions is supported by the various factors set out in section 138(2) of the QCA Act in the manner we set out in section 16.3.3 of the initial draft decision, as well as in the following manner:

• While Aurizon Network noted that the pricing principle in section 168A(b) of the QCA Act contemplates price discrimination when it aids efficiency, we are not persuaded that the approach proposed by Aurizon Network would aid efficiency. Moreover, that particular pricing principle is only one factor to which we must have regard under section 138(2) of the QCA Act. A balancing of the various factors set out in section 138(2) is required, as well as a balancing of the pricing principles set out in section 168A itself. Having regard for the following two points, we consider that the reinstatement of the omitted provisions appropriately balances the various factors set out in section 138(2).

³³ QRC, 2014 DAU, sub. 84: 34.

³¹ QRC, 2014 DAU, sub. 84: 34; Vale, 2014 DAU, sub. 79: 4; Asciano, 2014 DAU, sub. 76: 15; Anglo American, 2014 DAU, sub. 95: 12.

³² QRC, 2014 DAU, sub. 84: 34.

³⁴ Asciano, 2014 DAU, sub. 76: 16.

- The object of Part 5 of the QCA Act is promoted by a robust approach to price
 differentiation. Unfair differentiation in pricing may artificially increase the relative costs of
 some access seekers, impeding their ability to compete on merit. Unfair differentiation may
 also distort price signals, resulting in inefficient investment decisions by access seekers and
 access holders.
- A more robust approach to price differentiation, as contemplated by the omitted provisions, places greater constraints on Aurizon Network. We do not consider such constraints to be inconsistent with Aurizon Network's legitimate business interests. We also consider that such constraints are also justifiable in the public interest in having competition in markets (s. 138(2)(d) of the QCA Act) where they are directed at restraining potential misuses of Aurizon Network's market power.

Moreover, we note the mandatory requirements for undertakings set out in section 137(1A) of the QCA Act. The QCA Act provides that an access undertaking for a service owned or operated by a related access provider must include provisions for identifying, preventing and remedying conduct of the related access provider that unfairly differentiates in a material way between access seekers and between end users in various circumstances. Aurizon Network is not permitted to submit an undertaking that does not contain these provisions. We consider that the omitted provisions were previously an integral part of the manner in which Aurizon Network discharged this obligation under UT3.

For all of these reasons, we maintain our view that it is appropriate and consistent with the factors set out in section 138(2) that Aurizon Network should reinstate in the 2014 DAU the omitted provisions, namely the ability for an access holder to have its access charge amended in the event of a breach of the price differentiation principle by Aurizon Network (see cl. 6.2.5 of IDD amended DAU). We consider that this provision is best addressed in the undertaking, not the SAAs, as it affects all stakeholders. As noted in Chapter 8, we consider that there is a strong case for key rights and obligations to be presented in the undertaking (see section 8.5 of this decision). Although existing dispute resolution provisions offer access holders a process through which to challenge their access charges, these provisions do not provide an explicit right to have their access charges amended.

We do not believe it is necessary to include a provision that requires Aurizon Network to negotiate in good faith. The QCA Act (s. 100(1)) provides that Aurizon Network and an access seeker must negotiate in good faith the terms and conditions of an access agreement.

We acknowledge stakeholders concerns in regard to not knowing whether other access holders' access agreements comply with the price differentiation principle due to the confidentiality of access agreements. Transparency in relation to access charges would require access seekers and access holders to collectively take a different view on what is deemed to be confidential information. Given this is unlikely, the option remains for access seekers if they have concerns with their access charges to follow dispute procedures under Part 11. In response to QRC, a process for alerting access holders when an access agreement contravenes Part 6 of the access undertaking would require Aurizon Network or the QCA to release confidential information, which may not be in the interests of other access seekers and access holders.

Consolidated draft decision 16.1

- (1) After considering Part 6 of Aurizon Network's 2014 DAU, our consolidated draft decision is to refuse to approve Aurizon Network's omission of the price differentiation provisions.
- (2) The way in which we consider it is appropriate that Aurizon Network amend its draft access undertaking is to make the following adjustments as set out in clause 6.2 of our CDD amended DAU:
 - (a) Include an express prohibition against Aurizon Network establishing access charges for train services that unfairly differentiate in favour of any (i) related operator, (ii) related competitor, or (iii) third party that has commercial arrangements with a related competitor.
 - (b) Enable an access holder to have its access charge amended in the event that Aurizon Network breaches the price differentiation principle in the 2014 DAU when developing access charges for an access seeker.

We consider it appropriate to make this decision having regard to each of the matters set out in section 138(2) of the QCA Act for the reasons set out in our analysis above.

16.3.2 Coal-carrying train services

Aurizon Network's proposal

Under Aurizon Network's proposed 2014 DAU, reference tariffs are intended to apply to all coal-carrying train services (cl. 6.4.1(c)). The 2014 DAU provides for Aurizon Network to price differentiate between coal-carrying train services—by setting access charges different from the applicable reference tariffs. These differences can arise from:

- the particular train services having different operating characteristics to the reference train services (section 17.6 of this consolidated draft decision addresses these characteristics) (cl. 6.2.2(b)); and/or
- the agreed terms and conditions of access differing from the SAA terms.³⁵

Aurizon Network said the drafting amendments in the 2014 DAU were intended to clarify an existing arrangement provided for under the 2010 AU, which allowed Aurizon Network and an access seeker to negotiate an alternative to the SAA. To the extent non-standard terms in an access agreement gave rise to additional (or lower) costs or risks compared with the reference train service, an access charge different from the reference tariff is permissible in the 2014 DAU.³⁶

Aurizon Network said price differentiation had previously been limited to train services that consumed more network capacity than the reference train service (through a capacity multiplier applied to an AT₂ tariff component).^{37,38} It is contemplating expanding the application to other

³⁵ Under the 2014 DAU, if an access seeker proposed to operate a train service with the same operational characteristics as the relevant reference train service but agreed terms different to the SAA terms, it would be classified as a non-reference train service.

³⁶ Aurizon Network, 2013 DAU, sub. 2: 204.

³⁷ Aurizon Network, 2013 DAU, sub. 2: 202.

areas, including non-compliance with coal dust mitigation requirements and non-standard terms of access (e.g. more lenient take-or-pay arrangements). Aurizon Network emphasised that no party could be compelled to agree an alternative to the SAAs.³⁹

These provisions in the 2014 DAU have implications for the revenue cap regime. In cases where a user was not charged the applicable reference tariff (as a result of agreed non-standard terms), Aurizon Network said we should assess the revenue cap adjustments as if the SAA terms had been contracted. According to Aurizon Network, this would ensure it retained the additional revenue it should be entitled to (or not earn the revenue it was not entitled to) resulting from any cost and risk differences, while other users not involved in the agreement were not affected. The definition of 'expected access revenue' in the 2014 DAU refers to the revenue Aurizon Network is entitled to earn for the provision of access for reference train services. In addition, Aurizon Network retained the take-or-pay provisions in the 2010 AU, which required take-or-pay to be calculated on the basis that Aurizon Network was deemed to have contracted on the relevant SAA terms.

Summary of our initial draft decision

Our initial draft decision was to refuse to approve the additional discretion that Aurizon Network has proposed in differentiating the pricing for coal-carrying train services. Our full analysis and reasoning is contained in section 16.3.1 of the initial draft decision under the heading 'Coal-carrying train services'. We have adopted that analysis and reasoning for the purposes of this consolidated draft decision, subject to the comments below.

We considered it efficient for Aurizon Network and an access seeker to negotiate an alternative to the SAA if the access seeker has specific requirements associated with its access to the CQCN. To the extent this gives rise to measurable differences in costs or risk to Aurizon Network, an access charge reflective of such risk and cost differences is reasonable if both parties agree. As pointed out by Aurizon Network, this was already provided for under the 2010 AU.

Although Aurizon Network largely retained the provisions in the 2010 AU with respect to price differentiation for coal-carrying train services—prohibiting price differentiation other than for cost or risk differences—we were concerned that the non-standard terms agreed between Aurizon Network and an access seeker may have implications for other users as well as the MAR:

- It is possible that the additional risks and costs associated with the non-standard terms could distort Aurizon Network's behaviour beyond pricing. As pointed out by RTCA, Aurizon Network might be incentivised to provide preferential train schedules for a particular user if it stood to lose more from any failure to deliver contracted train paths.
- Aurizon Network could seek to recover additional costs arising from non-standard terms in the MAR. Double counting when assessing Aurizon Network's proposed MAR should be avoided.

To address these concerns, we proposed the following amendments to the 2014 DAU:

³⁸ Train services that consume more network capacity than the reference train service are effectively charged a higher AT_2 tariff component per train path.

³⁹ Aurizon Network, 2013 DAU, sub. 2: 203.

⁴⁰ Aurizon Network, 2013 DAU, sub. 2: 204.

⁴¹ Aurizon Network, 2013 DAU, sub. 2: 205.

⁴² RTCA, 2013 DAU, sub. 73: 83.

- Reinstatement of the UT3 access condition provisions (with appropriate refinements to better balance the interests of various stakeholders) and expand their application to nonstandard access agreements—any non-standard terms agreed between Aurizon Network and an access seeker that have cost and risk implications will be subject to our approval.
- Require Aurizon Network to provide us with a copy of any non-standard agreement within five business days of signing.

We proposed amendments (initial draft decision 16.2) to address concerns about the lack of transparency with regard to non-standard access agreements. We considered that these amendments would enhance the credibility and effectiveness of the pricing obligations in the access undertaking. These amendments would provide for access seekers to negotiate with Aurizon Network, while requiring Aurizon Network to apply the pricing obligations in the access undertaking.

Stakeholders' comments on our initial draft decision Aurizon Network

Aurizon Network disagreed with subjecting any agreed non-standard terms that have cost and risk implications to the QCA for approval.⁴³ Aurizon Network stated that access seekers and access holders already have the ability to dispute non-standard terms via the provisions outlined in both the undertaking and the access agreement. Aurizon Network said that this provision simply increases the regulatory complexity and would lead to unnecessary delays, effectively incentivising Aurizon Network to only offer standard terms. ⁴⁴

Aurizon Network noted that we could use section 103 under the QCA Act to request copies of access agreements with 14 days written notice. Aurizon Network stated that it is not our role to review every access agreement to ensure there is no discriminatory treatment between access holders. Aurizon Network noted that the QCA Act acknowledges that differentiation in appropriate circumstances promotes flexibility to the benefit of access seekers and access holders.

Other stakeholders

The QRC and Anglo American both supported the QCA approving non-standard terms in access agreements. ⁴⁷ The QRC stated that it is important to ensure that any additional costs and risks accepted by Aurizon Network are not borne by parties other than Aurizon Network due to the revenue cap or other regulatory arrangements. ⁴⁸ Anglo American said that it is important these agreements are considered in terms of the impact on the MAR and the obligations imposed on other stakeholders. ⁴⁹

Asciano believed any claim for additional revenue by Aurizon Network under this section must be based on objective evidence and the access seeker should have the right to make submissions if not in agreement on this issue. ⁵⁰

⁴³ Aurizon Network, 2014 DAU, sub. 82: 223.

⁴⁴ Aurizon Network, 2014 DAU, sub. 82: 223.

⁴⁵ Aurizon Network, 2014 DAU, sub. 82: 223.

⁴⁶ Aurizon Network, 2014 DAU, sub. 82: 223.

⁴⁷ QRC, 2014 DAU, sub. 84: 34; Anglo American, 2014 DAU, sub. 95: 14.

⁴⁸ QRC, 2014 DAU, sub. 84: 34.

⁴⁹ Anglo American, 2014 DAU, sub. 95: 14.

⁵⁰ Asciano, 2014 DAU, sub. 76: 16.

QCA analysis and consolidated draft decision

After having regard to the criteria listed in section 138(2) of the QCA Act and reviewing submissions received on the initial draft decision, we refuse to approve the additional discretion in differentiating the pricing for coal-carrying train services.

In the initial draft decision, we focused on the nature of the non-standard terms that could be negotiated between Aurizon Network and access seekers and holders if Aurizon Network retained the additional discretion. We considered the 2014 DAU was deficient in its treatment of access conditions.

In considering the factors in section 138(2) of the QCA Act for the additional discretion in differentiating the pricing for coal-carrying train services, we consider that the interests of access seekers and holders and the public interest outweigh the legitimate business interests of Aurizon Network. We also consider that the objective of Part 5 of the QCA Act is promoted by reducing any incentive or ability for Aurizon Network to favour a related party.

Moreover, although the pricing principles in the QCA Act (s. 168A) allow for price discrimination where it aids efficiency, the pricing principles also require us to not allow an access provider to set terms that allow it to discriminate in favour of a related access holder, except to the extent that the cost of providing access to other operators is higher. We consider that by providing additional discretion in differentiating the pricing for coal-carrying train services, the 2014 DAU has not provided a sufficiently robust framework to provide confidence that it would:

- differentiate between price discrimination that aids efficiency or otherwise
- prevent Aurizon Network setting terms that allowed it to discriminate in favour of a related access holder.

In essence, we do not consider that the approach proposed by Aurizon Network is appropriate in light of the factors set out in section 138(2) of the QCA Act.

Given this, we consider it appropriate that Aurizon Network reinstate the 2010 AU access condition provisions and expand their application to non-standard access agreements. By doing so, the access undertaking would require any non-standard terms agreed between Aurizon Network and an access seeker that have cost and risk implications to be subject to QCA approval. A requirement for QCA approval will mitigate the risk of unfair price differentiation by Aurizon Network. Moreover, there will be greater incentive for Aurizon Network to offer standard terms, or at least only offer non-standard terms where the benefits exceed the costs.

While stakeholders already have the ability to dispute non-standard terms, and we can request access agreements under the QCA Act, we do not believe these provisions offer sufficient security for access holders. Both stakeholders and the QCA would need to be aware that non-standard terms have been agreed to by another party. Our proposed amendments place the onus on Aurizon Network to inform the QCA when non-standard terms have been agreed to.

This amendment allows us to assess if a negotiated agreement is consistent with the approved access undertaking, identify any implications for the MAR to avoid double counting and identify any implications for other users that may arise from non-standard terms. We consider this promotes the object of Part 5 of the QCA Act, and is in the interests of access seekers and access holders, because it reduces the risk of monopoly behaviour being demonstrated through non-standard terms. While we acknowledge Aurizon Network's concerns that this arrangement may increase the regulatory complexity, we consider that our consolidated draft decision appropriately balances Aurizon Network's legitimate business interests with the interests of access seekers, access holders and train operators.

As discussed in section 5.8.4 in this consolidated draft decision, we have reconsidered our position with respect to disclosures of access agreements and, in particular, the disclosure of signed non-standard access agreements within five business days. We consider that this is heavy handed and not necessarily required as we can request such agreements be provided by Aurizon Network at any time under our general information gathering powers.

Consolidated draft decision 16.2

- (1) After considering Part 6 of Aurizon Network's 2014 DAU, our consolidated draft decision is to refuse to approve Aurizon Network's drafting to provide additional discretion in differentiating the pricing for coal-carrying train services.
- (2) The way in which we consider it is appropriate that Aurizon Network amend its draft access undertaking is to reinstate the 2010 AU access condition provisions (with appropriate refinements to better balance the interests of various stakeholders as set out in clause 6.2.3 of our CDD amended DAU) and expand them to require non-standard terms that have cost and risk implications to Aurizon Network to be subject to our approval.

We consider it appropriate to make this decision having regard to each of the matters set out in section 138(2) of the QCA Act for the reasons set out in our analysis above.

16.3.3 Non-coal-carrying train services

Aurizon Network's proposal

In contrast to coal-carrying train services, there is no reference tariff for non-coal traffic. Aurizon Network said reference tariffs were not necessary for non-coal-carrying train services because:

- it would not be in the public interest as revenues are immaterial
- Aurizon Network must still negotiate access charges in accordance with Part 6, hence we
 would continue to have oversight.⁵¹

For non-coal traffic, the application of the price differentiation principle needs to be considered alongside the rail infrastructure utilisation principle.

Rail infrastructure utilisation principle

Aurizon Network's proposed 2014 DAU provides for Aurizon Network to vary access charges for non-coal-carrying train services that serve different markets (for example, transporting a particular commodity type) to maximise commercially viable use of the CQCN (subject to other requirements) (cl. 6.4.1(a)).

If Aurizon Network considers that available capacity is limited, its proposed 2014 DAU provides for it to quote the maximum access charge to non-coal access seekers (cl. 6.4.1(b)).⁵² If the access applications are mutually exclusive⁵³, Aurizon Network has discretion as to whom it

⁵¹ Aurizon Network, 2014 DAU, sub. 3: 112.

The maximum access charge is the relevant reference tariff (adjusted for risk and cost differences) that would have been applied if those particular train services had been coal-carrying trains (cl. 6.4.1(b)(i)).

Mutually exclusive access applications are defined in the 2014 DAU as: 'Access Applications where if Aurizon Network grants Access Rights in respect of one or more of those Access Applications then Aurizon Network

allocates that available capacity to; it can choose not to allocate the capacity to the access seeker willing to pay the maximum access charge.

Under the 2010 AU, the ability to quote the maximum access charge was subject to an assessment by Aurizon Network that an expansion would not be commercially viable. This obligation has been removed in the 2014 DAU.

Price differentiation principle

Aurizon Network's 2014 DAU provides for Aurizon Network to apply an access charge to a non-coal access seeker that varies from those of other access seekers or access holders of a similar nature (for example, transporting the same commodity type), to reflect:

- changes or differences in the cost or risk of providing access
- changes in market circumstances
- limitations on available capacity in accordance with the rail infrastructure utilisation principle (cl. 6.2.3).

While the drafting in Aurizon Network's 2014 DAU is largely similar to the 2010 AU, the definition of a 'change in market circumstances' under the 2014 DAU has been altered to include Aurizon Network's assessment (cl. 12.1). Previously, the definition was based on an objective assessment.

Summary of our initial draft decision

It was our view that establishing reference tariffs for non-coal-carrying train services remains impractical given the wide range of train services involved (e.g. geographical location, commodity type, etc.) and that they represent only a relatively small portion of the CQCN total traffic. We therefore did not object to Aurizon Network's proposal that non-coal-carrying train services do not require reference tariffs.

However, our initial draft decision required that the 2014 DAU provide at least as much protection for non-coal users from price discrimination as provided under the 2010 AU:

- The definition of a 'change in market circumstances' should be based on an objective assessment that could be proved or disputed.
- Aurizon Network needs to first demonstrate the available capacity on the CQCN is limited, and any expansion is commercially infeasible, before it can quote the maximum access charge to non-coal access seekers.

We did not consider that such protection had been provided. For this reason, our initial draft decision was to refuse to approve Aurizon Network's proposed approach to price differentiation for non-coal-carrying train services. Our full analysis and reasoning is contained in section 16.3.1 of the initial draft decision. We adopt that analysis and reasoning for the purposes of this consolidated draft decision, subject to the comments below.

Non-coal access seekers and holders will have the ability to use the dispute process provided in the 2014 DAU if they are concerned the pricing principles in the 2014 DAU have been breached. We considered that our proposed amendments improved the credibility and effectiveness of Aurizon Network's pricing obligations with respect to price differentiation. This is consistent

will have insufficient Available Capacity to grant Access Rights in respect of the remaining Access Applications.'

with the object of Part 5 of the QCA Act and appropriately balances Aurizon Network's legitimate business interests with the interests of access seekers, access holders and train operators.

Stakeholders' comments on our initial draft decision

Aurizon Network

Aurizon Network agreed with our proposed changes, given the likely impact is negligible.⁵⁴

Other stakeholders

Asciano was concerned that non-coal-carrying train services could be disadvantaged and subject to access charges set at the discretion of Aurizon Network. Asciano believed that a non-coal carrying access seeker is unlikely to be able to meet the maximum access charge when compared to a coal-carrying service. Asciano suggested that non-coal services should pay their marginal cost plus a contribution to fixed costs, thus reducing the costs to be borne by coal services. Asciano stated that non-coal access charges broadly reflecting the access charges these services pay on adjoining Queensland Rail networks will be appropriate if these charges reflect at least the marginal cost of operating these train services.

QCA analysis and consolidated draft decision

After having regard to the criteria listed in section 138(2) of the QCA Act and reviewing submissions received on the initial draft decision, we refuse to approve Aurizon Network's approach to pricing for non-coal-carrying train services.

For the purposes of this consolidated draft decision, we adopt the analysis and conclusions from our initial draft decision. We consider that the 2014 DAU should provide at least as much protection for non-coal users against prices that discriminate in favour of the downstream operations of the access provider or a related entity as provided under the 2010 AU. We consider that these amendments are in the interest of non-coal-carrying access seekers. As such, we consider the amendments proposed in the initial draft decision are consistent with section 138(2)(g) and (e) of the QCA Act.

We consider our proposed amendments to the 2014 DAU appropriately balances the various factors set out in section 138(2), as well as balancing the pricing principles set out in section 168A itself.

We note Asciano's concerns about non-coal-carrying train service being charged the maximum access charge. The maximum access charge may only be imposed in cases where Aurizon Network can provide evidence that available capacity is insufficient to satisfy the requests of access right. Asciano's proposals for non-coal-carrying access charges are inconsistent with the rail infrastructure utilisation pricing principle. This principle recognises that allowing different access charges for different classes of users may allocate capacity to those access seekers who value it the most, promoting the efficient use of the network given the existing level of capacity. Thus, we do not consider that Asciano's proposals for non-coal-carrying access charges promote the object of Part 5 of the QCA Act.

⁵⁶ Asciano, 2014 DAU, sub. 76: 17.

⁵⁴ Aurizon Network, 2014 DAU, sub. 82: 224.

⁵⁵ Asciano, 2014 DAU, sub. 76: 17.

⁵⁷ Asciano, 2014 DAU, sub. 76: 17.

⁵⁸ Asciano, 2014 DAU, sub. 76: 17–18.

Consolidated draft decision 16.3

- (1) After considering Part 6 of Aurizon Network's 2014 DAU, our consolidated draft decision is to refuse to approve Aurizon Network's drafting addressed at price differentiation insofar as it applies to non-coal-carrying train services.
- (2) The way in which we consider it is appropriate that Aurizon Network amend its draft access undertaking is to make the following adjustments as set out in clauses 12.1 and 6.7.1(b)(ii) of our CDD amended DAU:
 - (a) Remove the reference to Aurizon Network's assessment from the definition of a 'change in market circumstances'.
 - (b) Require Aurizon Network to demonstrate the available capacity on the CQCN is limited, and any expansion is commercially infeasible, before it can quote the maximum access charge to non-coal access seekers.

We consider it appropriate to make this decision having regard to each of the matters set out in section 138(2) of the QCA Act for the reasons set out in our analysis above.

16.4 Pricing limits

16.4.1 Pricing limits

Aurizon Network's proposal

Pricing limits refer to the ceiling and floor prices for access to the CQCN. For pricing limits, Aurizon Network said the intent of the related 2010 AU provisions has been retained in the 2014 DAU, with the exception of pricing limits for individual train services and combination of train services. ⁵⁹

Similar to the 2010 AU, Aurizon Network's 2014 DAU proposes the access charges for individual train services or combination of train services to be capped between:

- the incremental costs of providing access for the relevant train services
- the stand-alone costs of providing access for the relevant train services (cl. 6.3.2(a)).

The key difference between the 2010 AU and the 2014 DAU lies in Aurizon Network's proposed assessment of stand-alone costs. The 2014 DAU proposes the asset value used to calculate the MAR be based on the DORC methodology in all circumstances, other than where the MAR relates to the aggregate revenue Aurizon Network is entitled to earn across all coal systems (which will remain based on the approved RAB value) (cl. 6.3.3 (e)).

In contrast, the 2010 AU required the use of the approved RAB value in all circumstances unless the RAB value was unavailable, in which case the DORC value of assets could be adopted.

Aurizon Network said this proposed change would provide flexibility in pricing individual train services in the future, as under some special circumstances, DORC-based pricing could enhance efficiency. Aurizon Network provided two examples where the DORC methodology would be appropriate:

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⁵⁹ Aurizon Network, 2013 DAU, sub. 2: 199–200.

- An expansion occurs on a highly depreciated system, which could result in a material price disparity between expanding and existing users, although both types of users utilise the same rail infrastructure and the nature of the services is similar.
- Volumes materially decline on a particular branch line and Aurizon Network recovers revenue from users of the system who do not use that branch line.

Aurizon Network emphasised the use of DORC asset values for pricing individual services would be subject to our approval. Aurizon Network added that its proposed approach does not have any implications for the total revenue that it will earn across all systems (which is still constrained by the RAB value).⁶¹

Summary of our initial draft decision

In our initial draft decision, we refused to approve Aurizon Network's proposal to use a DORC value of assets for establishing the ceiling prices for individual train services or combination of train services. We proposed that Aurizon Network reinstate the relevant 2010 AU provisions: the RAB value is to be used for all circumstances, except where it is unavailable, in which case the DORC value can be adopted.

We had previously rejected Aurizon Network's proposals for asset revaluation on the basis of a DORC methodology. Specifically, in the draft decision on UT2, we said:

If the Authority were to adopt the new DORC valuation in such circumstances, the business would face the prospect of either under- or over-recovering its initial asset valuation; that is, it faces the regulatory risk of either benefiting from windfall gains or suffering from windfall losses.

As this would breach the principle that the business should expect to fully recover its initial asset base, it is not a course of action that the Authority believes is in the best interests of either the regulated business, ... or access seekers and end users of the service.

Given that the DORC approach represents a fundamental change to the pricing regime, we considered Aurizon Network needs to justify this approach in light of the requirements of the QCA Act and from a practical evidence-based standpoint that reflects the circumstances of the CQCN. In this respect, we did not consider Aurizon Network has sufficiently justified the use of the DORC approach.

Further, we considered that the examples provided by Aurizon Network may be inconsistent with other parts of Aurizon Network's 2014 DAU proposal. For example, Aurizon Network's example for pricing limits seems to suggest that it intended to use the DORC approach to allow it to raise access charges for existing users not involved in an expansion.

Notwithstanding Aurizon Network's intent, we had concerns over the drafting of the pricing limits principles because:

- they may provide Aurizon Network with the ability to rebalance access charges across coal systems, subject to an overarching MAR constraint across the CQCN
- it is unclear if the use of the DORC approach requires our approval under Aurizon Network's proposed 2014 DAU.

Our full analysis and reasoning is contained in section 16.4 of the initial draft decision. We have adopted that analysis and reasoning for the purposes of this consolidated draft decision, subject to the comments below.

⁶¹ Aurizon Network, 2013 DAU, sub. 2: 199.

⁶⁰ Aurizon Network, 2013 DAU, sub. 2: 200.

Stakeholders' comments on our initial draft decision

Aurizon Network

Aurizon Network disagreed with our initial draft decision, noting that its proposal does not impact the MAR that Aurizon Network can earn, only the allocation of the MAR between train services, across individual years in the evaluation period or between coal systems. ⁶²

Aurizon Network said that construction costs have changed significantly since the time that the value of the RAB was set (the start of UT1). ⁶³ As such, the value of the RAB is expected to be materially below the stand-alone cost of providing access and, therefore, establishing price limits by reference to the value of the RAB cannot be efficient.

Aurizon Network considered that the 2014 DAU should allow the flexibility to submit more 'customer responsive' and adaptable pricing solutions, promoting the economically efficient use of and investment in the network, consistent with the QCA Act (s. 69E).⁶⁴ In this respect, Aurizon Network provided the following examples:

- development of medium-term pricing proposals to improve asset utilisation
- alignment of revenue recovery to volume ramp-up via revenue smoothing
- transfers of mainline capacity between systems where port destinations are common (e.g. Blackwater and Moura).

Aurizon Network explicitly stated that it does not intend to recalculate access charges on the basis of DORC value. ⁶⁵

Aurizon Network noted that its 2014 DAU required any new or varied reference tariffs—including those linked to a DORC valuation—to be submitted to QCA for approval. 66

Other stakeholders

The QRC and Anglo American supported the initial draft decision to use RAB values when available.⁶⁷ Anglo American said that a DORC valuation is likely to lead to an inaccurate valuation, resulting in under- or over-recovery for Aurizon Network, impacting on both its finances and those of its users.⁶⁸ Anglo American also considered that DORC valuation was not appropriate for regulated monopoly assets where sunk costs are significant.⁶⁹ Anglo American stated that it allows too much discretion to the valuer and that this could drastically alter the tariffs and charges implemented on the network.⁷⁰ Anglo American considered that the RAB value produces a more accurate estimate.⁷¹

QCA analysis and consolidated draft decision

After having regard to the criteria listed in section 138(2) of the QCA Act and reviewing submissions received on the initial draft decision, we refuse to approve Aurizon Network's

⁶² Aurizon Network, 2014 DAU, sub. 82: 224.

⁶³ Aurizon Network, 2014 DAU, sub. 82: 224.

⁶⁴ Aurizon Network, 2014 DAU, sub. 82: 224.

⁶⁵ Aurizon Network, 2014 DAU, sub. 82: 224.

⁶⁶ Aurizon Network, 2014 DAU, sub. 82: 225.

⁶⁷ QRC, 2014 DAU, sub. 84: 34; Anglo American, 2014 DAU, sub. 95: 14.

⁶⁸ Anglo American, 2014 DAU, sub. 95: 14.

⁶⁹ Anglo American, 2014 DAU, sub. 95: 14.

⁷⁰ Anglo American, 2014 DAU, sub. 95: 15.

⁷¹ Anglo American, 2014 DAU, sub. 95: 15.

proposal to use a DORC value of assets for establishing the ceiling prices for individual train services or combination of train services. We propose that Aurizon Network reinstate the relevant 2010 AU provisions.

We said in our initial draft decision that Aurizon Network needed to provide more detailed justification of this approach. In response, Aurizon Network has provided limited detail in outlining examples of the application of the DORC methodology. We do not consider that Aurizon Network has addressed the concerns expressed in our draft decision with sufficient new analysis regarding the potential implications this approach could have on the distribution of the aggregate MAR between the CQCN users.

The example applications of DORC-based pricing limits provided by Aurizon Network are associated with the utilisation of existing assets or protecting Aurizon Network from demand deterioration. We do not consider that increasing the pricing limits is an appropriate way to address demand deterioration and asset stranding risk. Demand deterioration and asset stranding risk are discussed in section 14.3 of this consolidated draft decision.

We recognise that Aurizon Network's proposed assessment of stand-alone costs will not impact the MAR that Aurizon Network can earn. However, the proposal will affect how costs are allocated between access holders. We consider that a reallocation of system costs may have adverse implications for access holders, resulting from an increase in access charges. As such we consider that Aurizon Network's proposal is not consistent with section 138(2)(h) of the QCA Act.

Furthermore, given that the costs recovered from train services or groups of train services through access charges are based on the RAB value, access charges that exceed the RAB-based pricing limits may result in cross-subsidisation between access holders. We therefore do not consider that establishing pricing limits based on different asset valuations to that used to calculate access charges is in the interest of access seekers or access holders. As such, we consider RAB-based pricing limits are consistent with section 138(2)(d),(e) and (h) of the QCA Act.

We consider that a consistent methodology should be used to establish the pricing limits of all access holders, and that this should be consistent with the approach used to calculate access charges and Aurizon Network's aggregate MAR. We consider that the RAB-based pricing limits remain appropriate.

We do not agree with Aurizon Network that establishing price limits by reference to the value of the RAB cannot be efficient where the DORC value of the infrastructure exceeds its corresponding RAB value. Although more flexible prices in certain instances may promote economically efficient use of the network, the price floor and price ceiling are not set at a level that necessarily corresponds to an efficient outcome. That is, an economically efficient outcome may result from access charges falling within (or outside) of RAB-based pricing limits. The price floor and ceiling are primarily set to protect access holders from cross-subsidising other access holders.

We consider that allowing price differentiation, within the bounds of the pricing limits, balances our objectives of promoting the economically efficient operation of the network and promoting effective competition between network users.

We consider our proposed amendments clarify the boundaries of how access charges are negotiated. This is an important part in ensuring that pricing obligations in the 2014 DAU are credible and effective. As such, we consider this is consistent with the object of Part 5 of the

QCA Act, and appropriately balance Aurizon Network's legitimate business interests with the interests of access seekers, access holders and train operators.

Consolidated draft decision 16.4

- (1) After considering Part 6 of Aurizon Network's 2014 DAU, our consolidated draft decision is to refuse to approve Aurizon Network's proposal to use a DORC value of assets for establishing the ceiling prices for individual train services or combination of train services.
- (2) The way in which we consider it is appropriate that Aurizon Network amend its draft access undertaking is to use the RAB value for all circumstances, except where it is unavailable, in which case the DORC value can be adopted (as set out in clause 6.6.3(e) of our CDD amended DAU).

We consider it appropriate to make this decision having regard to each of the matters set out in section 138(2) of the QCA Act for the reasons set out in our analysis above.

16.4.2 Price differentiation and pricing limits

Aurizon Network's proposal

Aurizon Network's 2014 DAU included clarification about how the price differentiation and pricing limits principles may interact with each other.

The 2014 DAU provides that, in the event Aurizon Network charges an access seeker below the relevant incremental costs, it will still be deemed compliant with the pricing limit principle as long as it complies with the price differentiation principle when setting charges for future access seekers that share the same characteristics as the initial access seeker (e.g. transporting the same specified commodity in the same specified geographic area) (cl. 6.3.2(b)).

The 2014 DAU also proposes that Aurizon Network will be considered to have complied with both principles if it has formulated an access charge 'based on a reference tariff' (cl. 6.5.1(b)).

Summary of our initial draft decision

In the initial draft decision, we refused to approve Aurizon Network's proposed provisions about how the price differentiation and pricing limits principles interact with each other. It was our view that Aurizon Network should comply with all pricing principles in the access undertaking, to the extent they do not conflict with each other. As such, we considered it appropriate for Aurizon Network to amend its 2014 DAU to require it to apply both price differentiation and pricing limits principles when establishing access charges, as long as they do not contradict each other.

In the event Aurizon Network charges an access seeker a rate below the relevant incremental costs, we did not consider it should be deemed compliant with the pricing limits principle on the basis that it complies with the price differentiation principle when setting access charges for future access seekers that have similar characteristics. While this was provided for under the 2010 AU, we no longer considered this appropriate given current circumstances.

Charging a user (or a group of users) less than the incremental costs gives rise to cross-subsidisation between users. This is inconsistent with the pricing limits principle in the access undertaking. As such, we proposed to reinstate the aggrieved access holder provision to address a breach of the price differentiation.

We were also concerned by the language used in the 2014 DAU, that Aurizon Network will be considered to have complied with the price differentiation and pricing limits principles if it has formulated an access charge 'based on a reference tariff'. These two principles have broad application beyond the reference tariffs. Hence, for the purpose of providing clarity, we proposed that Aurizon Network remove this provision.

Our full analysis and reasoning is contained in section 16.4 of the initial draft decision under the heading 'Price differentiation and pricing limits'. We have adopted that analysis and reasoning for the purposes of this consolidated draft decision, subject to the comments below.

Stakeholders' comments on our initial draft decision Aurizon Network

Aurizon Network disagreed with our initial draft decision requiring the removal of proposed clause 6.3.2(b) which allows access charges to not comply with the price limits so long as the price differentiation principle is not breached when setting tariffs for future access seekers with similar characteristics. ⁷² Aurizon Network noted that this provision existed in the 2010 AU. ⁷³

Aurizon Network said that we had provided no valid reasons as to why this clause should be deleted, other than a general concern about the potential for cross-subsidisation.⁷⁴ Aurizon Network considered that our initial draft decision would result in system level reference tariffs no longer being acceptable and they would need to be replaced by strictly 'incremental' cost-reflective pricing.⁷⁵ Aurizon Network said that the initial draft decision would require each customer to have its own separate MAR and reference tariff.⁷⁶

As a result, Aurizon Network considered that this proposal works against the efficient operation, use of and investment in the network and undermines the object of Part 5 of the QCA Act. 77

Other stakeholders

The QRC supported our initial draft decision requirement that Aurizon network comply with both pricing limit and price differentiation principles. The QRC did not support Aurizon Network's 2014 DAU proposal that it is deemed to comply with the pricing limits principles where the non-compliant price is applied to all future access seekers with similar characteristics. The QRC considered that such an approach could impose additional costs on other users under a revenue cap. The transfer of t

QCA analysis and consolidated draft decision

It remains our view that Aurizon Network should comply with all pricing principles in the access undertaking, to the extent they do not conflict with each other.

We consider that charging an access holder (or a group of access holders) less than the incremental costs gives rise to cross-subsidisation between network users. If an access charge is set at a level that does not recover incremental costs (below the price limit), then by definition, this will result in cross-subsidisation (as defined in the 2014 DAU) as other access holders will be

⁷² Aurizon Network, 2014 DAU, sub. 82: 225.

⁷³ Aurizon Network, 2014 DAU, sub. 82: 225.

⁷⁴ Aurizon Network, 2014 DAU, sub. 82: 225.

⁷⁵ Aurizon Network, 2014 DAU, sub. 82: 225.

⁷⁶ Aurizon Network, 2014 DAU, sub. 82: 225.

⁷⁷ Aurizon Network, 2014 DAU, sub. 82: 226.

⁷⁸ QRC, 2014 DAU, sub. 84: 35.

⁷⁹ QRC, 2014 DAU, sub. 84: 35.

required to subsidise its incremental costs, given Aurizon Network's revenue adequacy principle.

We do not agree with Aurizon Network that system level reference tariffs will not comply with the price limits principle. We consider that the approach used to establish tariffs provides context for the application of the pricing limits principle and, more specifically, the way in which the incremental and stand-alone costs for a train service are considered. For instance, if a system-based approach is used to calculate a reference tariff for a specified train service, to comply with the pricing limits the train service needs to recover:

- at least the system's incremental costs (as defined in the 2014 DAU) associated with operating that train service
- no more than the stand-alone costs of that system.

New train services associated with an expansion will be subject to their full incremental costs (e.g. through an expansion tariff) and will comply with the pricing limits. While other train services not subject to an expansion tariff will pay the system reference tariff, an existing train service will be subject to a system premium if the system reference tariff is not expected to meet all incremental costs and a minimum contribution to common costs. This approach avoids the need to develop single mine clusters where the incremental costs are not met for existing train services.

Furthermore, the system reference tariffs are not designed to recover more than the standalone costs of the system. In this regard, we consider that the system reference tariff approach is consistent with the pricing limits principle. We therefore do not agree with Aurizon Network that the system level reference tariffs would need to be replaced by 'strictly incremental cost-reflective pricing arrangements'.

The level at which cost-reflectivity is considered could be made more precise than is done at the system level, but this must be balanced with the fact that the administrative complexity associated with the tariff structure is likely to increase. During the 2010 AU process we disbanded cluster tariffs and moved to a system tariff, accepting that removing the clusters will not significantly weaken the cost-reflectivity of the tariffs and that a simplified tariff structure has advantages over a more complex tariff structure.

We consider our proposed amendments improve the clarity of pricing obligations under the 2014 DAU, and hence make these obligations effective and credible. While allowing price differentiation beyond the constraints of the pricing limits may, in certain circumstances, lead to more efficient outcomes, this will result in cross-subsidisation between access holders. We do not consider that this is in the interest of access holders and seekers, promotes effective competition, or promotes the economically efficient operation of the network.

As such, we consider that our proposed amendments are consistent with section 138(2)(d),(e) and (h) of the QCA Act, and the object of Part 5 of the QCA Act.

Consolidated draft decision 16.5

- (1) After considering Part 6 of Aurizon Network's 2014 DAU, our consolidated draft decision is to refuse to approve Aurizon Network's provisions about how the price differentiation and pricing limits principles interact with each other.
- (2) The way in which we consider it is appropriate that Aurizon Network amend its draft access undertaking is to require it to apply both price differentiation and pricing limits principles when establishing access charges, as long as they do not contradict each other.

We consider it appropriate to make this decision having regard to each of the matters set out in section 138(2) of the QCA Act for the reasons set out in our analysis above.

16.5 Expansion pricing

16.5.1 Background

In response to the industry's demand, Aurizon Network proposed a new framework for pricing expansion in its 2014 DAU. Under the 2014 DAU, an expansion is defined as (cl. 12.1):

An extension, enhancement, expansion, augmentation, duplication or replacement of all or part of the Rail Infrastructure that on completion forms part of the Rail Infrastructure, excluding:

- (a) Customer Specific Branch Lines;
- (b) Connecting Infrastructure; and
- (c) any capital expenditure project to the extent that it involves Asset Replacement and Renewal Expenditure.

We support the inclusion of an expansion pricing framework in the 2014 DAU. We consider that it will enhance certainty and transparency with respect to access pricing, to the benefit of access holders and future access seekers considering expansion, including potential future SUFA funders.

Nonetheless, our initial draft decision refused to approve Aurizon Network's proposed approach to expansion pricing in the 2014 DAU as a whole. While we accepted components of Aurizon Network's proposal, we had some concerns about Aurizon Network's proposed approach. To address these concerns, our initial draft decision proposed a number of changes to Aurizon Network's proposed expansion pricing framework.

Our consolidated draft decision draws from the analysis presented in our initial draft decision and subsequent submissions received from stakeholders, as well as our experience with establishing reference tariffs for WIRP train services⁸⁰. While our initial draft decision and the corresponding stakeholder submissions received from stakeholders have considered the theoretical framework of expansion pricing, our assessment of WIRP has provided some context in regard to the practical application.

The supplementary draft decision for WIRP was released following our initial draft decision on the 2014 DAU. Therefore, relevant findings from the WIRP process were not included in our initial draft decision. We did, however, consult on these positions as part of the process for establishing reference tariffs for WIRP train services.

Lessons from WIRP

The process of establishing reference tariffs for WIRP users has highlighted the complexity surrounding the interaction between expansion prices and existing reference tariffs. In particular, there were three key issues identified during the WIRP process that we consider were not adequately addressed in the expansion pricing framework presented in Aurizon Network's 2014 DAU or our initial draft decision:

- Expansion pricing may apply to expansions with substitutable train services.
- Expansions may be incorporated within existing systems.
- Expansions are unique.

Expansion pricing may apply to expansions with substitutable train services

In considering appropriate pricing arrangements for WIRP train services, it became apparent that the ability to isolate the costs and risks associated with an expansion is complicated when train services are substitutable between an existing system and an expansion. When train services are substitutable, even if a separate expansion tariff is established, the substitutability of volumes may have the unintended effect of shifting volume risk associated with an expansion to existing customers.

Expansions may be incorporated within existing systems

Expansions are likely to be interlinked with the capacity provided by existing systems. As such, the benefits or costs associated with an expansion may not be exclusively assigned to expanding users. The allocation of expansion costs and risks may be complex and may require consideration on a case-by-case basis. In such circumstances, it is important to have all relevant access holders and access seekers involved in the decision-making process from the beginning.

Expansions are unique

Each expansion will have unique characteristics that will influence the appropriate pricing approach and the allocation of costs and risks amongst users. As encountered during the WIRP process, a particular issue (in this case substitutable train services) may not be adequately addressed through a mechanistic pricing approach. Furthermore, the willingness of existing users to bear some of the costs and risks of an expansion may differ depending on specific circumstances.

Implications for the expansion pricing framework

In the Aurizon Network 2014 DAU, and our subsequent initial draft decision, the expansion pricing framework contained a specific pricing approach to be applied for allocating expansion costs and risks between users.

It has become apparent that applying a mechanistic expansion pricing approach that defines how expansion costs and risks are to be allocated between expanding and existing users may not:

- be appropriate for expansions that have substitutable train services
- capture the unique and complex characteristics specific to certain expansions.

After having regard to section 138(2) criteria, considering submissions received on the initial draft decision, and assessing the application of these principles in our WIRP supplementary initial draft decision, we consider that the expansion pricing framework should be made sufficiently flexible to be able to account for expansion-specific characteristics.

This consideration will predominantly affect one element of the expansion pricing framework—the process for establishing expansion pricing arrangements. Our consolidated draft decision has given consideration to the entire expansion pricing framework, including:

- the principles underpinning the expansion pricing framework
- the process for approval of expansion pricing arrangements
- the process for establishing expansion pricing arrangements
- the application of expansion pricing arrangements.

Our analysis and consolidated draft decision in regard to each of these elements in the expansion pricing framework are outlined below.

16.5.2 Principles underpinning the expansion pricing framework

Aurizon Network's proposal

Aurizon Network said its proposed framework is underpinned by the following principles:

- The user(s) requiring the expansion should generally pay an access charge that reflects at least the full incremental costs (capital and operating) of providing additional capacity.
- If new/expanding users face a higher cost than existing users, a zero contribution to common costs from expanding users is generally acceptable.
- An allocation of expansion costs to existing users may be appropriate where an expansion has clear benefits to those users.
- Existing users should not experience a material increase in tariffs due to an expansion triggered by access seekers.⁸¹

Summary of our initial draft decision

In our initial draft decision, we outlined our analysis of the principles of Aurizon Network's proposed expansion pricing framework (see table below).

Table 64 QCA analysis of expansion pricing principles

Principles proposed by Aurizon Network	QCA analysis
The user(s) requiring the expansion should generally pay an access charge that reflects at least the full incremental costs (capital and operating) of providing additional capacity.	This principle is based on the premise that a user should bear at least all additional costs associated with its access. This is cost-reflective and is consistent with the pricing limits principle in the 2014 DAU.
	In our view, expanding users should bear the costs and volume risk associated with an expansion. We consider this creates an incentive for expanding users to trigger an expansion only if their incremental earnings (arising from the expansion) are more than needed to cover the associated expansion costs. We consider this to be consistent with the objective of promoting efficient infrastructure investment in the CQCN.
Existing users should not experience a material increase in tariffs due to an expansion triggered by access seekers.	We believe that existing users should not be exposed to a material increase in tariffs due to an expansion triggered by access seekers.
	We consider it unreasonable for the economic viability of a mine that is already operating to be materially negatively impacted by an expansion triggered by other users. Otherwise, it would add another level of

⁸¹ Aurizon Network, 2014 DAU, sub. 3: 98–99.

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Principles proposed by Aurizon Network	QCA analysis
	uncertainty to mine development decisions and would discourage mine development in the CQCN in the long run. It is in the interests of all CQCN users to have a stable profile of access charges over time to reduce uncertainty. This is consistent with the object of Part 5 of the QCA Act, as it provides an environment that is conducive to mine development in the CQCN.
	Further, we note that existing users may have an incentive to oppose expansion projects if they perceived expansions as a threat to the commercial viability of their mines. This could lead to efficient expansions not being undertaken, which is inconsistent with the object of Part 5 of the QCA Act.
If new/expanding users face a higher cost than existing users, a zero contribution to common costs from expanding users is generally acceptable.	We consider existing users will not be made worse off (financially) as long as the expanding users bear the cost and volume risks associated with the expansion.
	In cases where the expanding user's access charges associated with recovering the costs of the expansion are higher than the access charges facing existing users, we consider that a zero contribution to common costs from expanding users is reasonable. This lessens the financial burden of expanding users who are bearing the full incremental expansion costs without making existing users worse off. This view is supported by stakeholders. As such, we believe this helps to encourage expansions and mine development in the CQCN.
	Likewise, we consider expanding users should make a positive common cost contribution if the access charges associated with recovering expansion costs are less than the existing reference tariff. Such a common cost contribution reflects the benefits that expanding users may receive from previous investment and the prior contributions that existing users have made to financing existing capacity.
	We consider our position with respect to common cost contribution appropriately balances the interests of existing and expanding users, and is consistent with the object of Part 5 of the QCA Act.
An allocation of expansion costs to existing users may be appropriate where an	We consider if there is genuine benefit to existing users, then an allocation to these parties will be appropriate. This is consistent with the notion that users pay a price reflective of the service they receive.
expansion has clear benefits to those users.	Our view is Aurizon Network and expanding users should bear the onus of demonstrating that an expansion has clear benefit to existing users to justify a positive allocation of costs to these users. Existing users should also be allowed to comment on any proposed cost allocations.
	We consider this promotes efficient infrastructure investment and appropriately balances the interests of existing and expanding users.

Our initial draft decision accepted Aurizon Network's expansion pricing principles.

Our full analysis and reasoning is contained in section 16.5.3 of the initial draft decision under the heading 'Principles underpinning the expansion pricing framework'. We have adopted that analysis and reasoning for the purposes of this consolidated draft decision, subject to the comments below.

Stakeholders' comments on our initial draft decision

Aurizon Network

Aurizon Network agreed with the expansion pricing principles and reiterated their importance, especially the principle that existing users should not experience a material increase in tariffs due to an expansion triggered by access seekers.⁸²

Other stakeholders

The QRC supported the key expansion pricing principles set out in the initial draft decision.⁸³ Vale agreed with the 'average down/incremental up' pricing principle for new expansions on the rail network as it recognises the costs and risks of the existing users and the value of their initial contribution to establish the network.⁸⁴

Anglo American agreed that Aurizon Network and the expanding users should bear the onus of proving that there has been a clear and definable benefit to existing users, and that existing users should be given the opportunity to comment on the benefits that they might be receiving. BY WIRP Users also understood why this onus of proof should lie with Aurizon Network and expanding users; however, they considered that there are difficulties in being able to demonstrate the benefits of expansion capacity. WIRP Users suggested that we ensure that the degree of benefit is established and independently verified early in the expansion process, and that both existing and expanding users have some involvement in this process.

QCA analysis and consolidated draft decision

We consider that the proposed expansion pricing principles are consistent with the object of Part 5 of the QCA Act. More specifically, we consider that the expansion pricing principles promote economically efficient investment in the network (ss. 69E and 138(2)(a) of the QCA Act) and appropriately balance the legitimate business interests of Aurizon Network and existing and expanding users (s. 138(2)(c), (e) and (h) of the QCA Act).

We consider that the expansion pricing principles promote economically efficient investment in the network, as:

- expanding users have an incentive to trigger an expansion only if their incremental earnings (arising from the expansion) are more than adequate to recover the associated expansion costs
- expanding users that are faced with high expansion costs may not be burdened with a common cost contribution, helping to encourage expansions and mine development in the COCN
- existing users face limited exposure to negative impacts associated with an expansion triggered by other users, limiting the incentive of existing users to oppose expansion projects.

We consider that the expansion pricing principles appropriately balance the interests of all parties, including Aurizon Network's legitimate business interests. Requiring expanding users to

⁸² Aurizon Network, 2014 DAU, sub. 82: 227.

⁸³ QRC, 2014 DAU, sub. 84: 35.

⁸⁴ Vale, 2014 DAU, sub. 79: 4.

⁸⁵ Anglo American, 2014 DAU, sub. 95: 16.

⁸⁶ WIRP Users, 2014 DAU, sub. 77: 12.

⁸⁷ WIRP Users, 2014 DAU, sub. 77: 12.

bear the incremental costs of access and protecting established users from material increases in their access charges is economically efficient and equitable. Similarly, requiring expanding users to make a common cost contribution when access charges are below those of existing users recognises the prior contributions that existing users have made to financing capacity.

In regard to proving that an expansion benefits existing users, we maintain that the onus of proof should lie with Aurizon Network and expanding users. We consider that the degree of benefit should be established and independently verified early in the expansion process. As such, we consider that this information should be provided as part of the pricing proposal for our assessment.

Consolidated draft decision 16.6

- (1) Our consolidated draft decision is to approve Aurizon Network's proposal that:
 - (a) the user(s) requiring the expansion should generally pay an access charge that reflects at least the full incremental costs (capital and operating) of access
 - (b) existing users should not experience a material increase in tariffs due to an expansion triggered by access seekers
 - (c) if new/expanding users face a higher cost than existing users, a zero contribution to common costs from expanding users is generally acceptable
 - (d) an allocation of expansion costs to existing users may be appropriate where an expansion has clear benefits to those users.

We consider it appropriate to make this decision having regard to each of the matters set out in section 138(2) of the QCA Act for the reasons set out in our analysis above.

16.5.3 Process for approval of expansion pricing arrangements

Aurizon Network's proposal

The 2014 DAU proposes that Aurizon Network submit a pricing proposal to us for approval within 80 business days after a Feasibility Study Funding Agreement (feasibility SFA)—for that expansion—becomes unconditional. No party is obliged to enter any arrangements with respect to construction or funding of the expansion prior to the QCA's approval of the pricing proposal.

The purpose of a pricing proposal is to obtain pre-approval of the pricing methodology applicable to an expansion (based on forecast information), prior to entering construction and funding arrangements. This enables potential investors to make an informed decision, and provides more certainty in relation to the pricing outcome.

A pricing proposal should address the cost allocation issue (between the involved access seekers, or in some cases, allocation to existing users), apply the socialisation test, and determine if the expansion should be socialised (where appropriate). The pricing proposal can also include indicative reference tariffs, but an application for approval for new or varied reference tariffs must be made separately (cl. 6.2.4(c)).

Stakeholders will be given the opportunity to comment on the pricing proposal (cl. 6.2.4(d)). The 2014 DAU proposes that the time taken up by the QCA's approval of the pricing proposal will not be considered as a delay on the part of Aurizon Network to trigger any rights or remedies in favour of the access seekers or their customers (cl. 6.2.4(h)(ii)).

Aurizon Network has also proposed that if the feasibility SFA becomes unconditional 12 months before the current access undertaking expires, and the expansion will not be used until the next regulatory period, Aurizon Network may address the expansion pricing as part of the next access undertaking (cl. 6.2.4(n)).

Summary of our initial draft decision

In section 16.5.3 of the initial draft decision under the heading 'Timing of a Pricing Proposal and approval of expansion tariffs', we considered Aurizon Network's proposal. While we appreciated the preference for Aurizon Network, existing access holders and access seekers to have information about the potential pricing arrangement that would apply for a proposed expansion, we were concerned that there will be insufficient reliable information at a feasibility SFA stage.

We considered a pricing proposal for an expansion would be better provided at the conclusion of the feasibility study when there is a significantly higher level of certainty about what costs and volumes would be. For a SUFA project, this is likely to coincide with an application for preapproval of an expansion project.

We also considered that a pricing proposal should contain information regarding the allocation of the expansion costs between existing and expanding users, the results of any socialisation test, the proposed pricing arrangements for the expansion, as well as indicative tariffs consistent with the proposed pricing arrangements. This set of information is highly useful for all parties involved.

We said the socialisation test (if applicable) should be calculated based on forecast costs and forecast volumes as set out in the feasibility study. We proposed amendments to the 2014 DAU allowing us to revise our decisions (subject to section 150F of the QCA Act) if there is a material change in circumstances to the forecast information.

Further, once a pricing proposal is approved, we required Aurizon Network, where feasible, to submit to us a DAAU, based on contracted volumes, to apply for approval of new or varied reference tariffs.

Our full analysis and reasoning is contained in section 16.5.3 of the initial draft decision under the heading 'Timing of a Pricing Proposal and approval of expansion tariffs'. We have adopted that analysis and reasoning for the purposes of this consolidated draft decision, subject to the comments below.

Stakeholders' comments on our initial draft decision Aurizon Network

Aurizon Network acknowledged that the inputs required for any pricing analysis will change to a certain extent from when parties commit to the project to when it is commissioned for use. However, Aurizon Network said that a key benefit of the pricing proposal is that it will facilitate regulatory pre-approval of the 'methodology' by which expansion prices will be calculated. He are not noted that while a binding decision with respect to the methodology could be made, the actual reference tariffs paid will reflect the final costs of the expansion.

Aurizon Network considered that delaying the provision of the pricing proposal until the end of the feasibility stage will create unnecessary delays in the project timeline. Aurizon Network said

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⁸⁸ Aurizon Network, 2014 DAU, sub. 82: 235.

⁸⁹ Aurizon Network, 2014 DAU, sub. 82: 235.

the majority of information will be available for assessment at the feasibility SFA stage—the volume of the expansion is locked down and costs known to a prefeasibility standard. ⁹⁰ Aurizon Network said that submitting a pricing proposal within 80 business days after a feasibility SFA provides ample time for a transparent consultation process and provides SUFA customers with more timely information, which should assist them to attract funding. ⁹¹

Aurizon Network disagreed with allowing us to revise any decisions if there is a material change in circumstances. Aurizon Network considered this will negate the pricing proposal's objective of improving transparency and creating a degree of certainty around the pricing outcomes of an expansion. Aurizon Network said the pricing proposal will be visible and transparent to all stakeholders, and the QCA will be well placed to make an informed, binding decision. Aurizon Network said that this proposal may be acceptable if the ability to revise a decision is limited to an agreed set of circumstances and a materiality threshold specified.

Aurizon Network did not believe the requirement to submit a DAAU based on contracted volumes to be a material change. However, Aurizon Network recommended the explicit reference that the DAAU be submitted on the basis of '100% of contracted volumes' be removed. However, Page 196

Other stakeholders

Vale said that the pricing principles and common cost allocation of a project should be considered at the same time as the QCA assesses the financial risks so to provide greater certainty to existing and new users. ⁹⁷ Vale also considered that this will ensure that future submissions are not able to progressively shift the risk profile of the project. ⁹⁸

QCA analysis and consolidated draft decision

After considering submissions received on the initial draft decision, and assessing comments having regard to the criteria listed in section 138(2) of the QCA Act, we propose no change to our initial draft decision to require the pricing proposal to be submitted to us as part of the feasibility study report.

The pricing proposal should contain information regarding the allocation of the expansion costs between existing and expanding users, the proposed pricing arrangements for the expansion, results of any socialisation test (where applicable), as well as indicative tariffs consistent with the proposed pricing arrangements.

As set out in more detail in the subsequent section, Aurizon Network may propose either a consensus, customised, or endorsed pricing approach, as part of a pricing proposal, for QCA approval. Where relevant, the pricing proposal should outline consultation undertaken with existing users that are affected by the pricing approach.

Following the approval of a pricing proposal, Aurizon Network is required to submit to us a DAAU to apply for approval of new or varied reference tariffs, where feasible. Given that the

⁹⁰ Aurizon Network, 2014 DAU, sub. 82: 235–236.

⁹¹ Aurizon Network, 2014 DAU, sub. 82: 236.

⁹² Aurizon Network, 2014 DAU, sub. 82: 236.

⁹³ Aurizon Network, 2014 DAU, sub. 82: 236.

⁹⁴ Aurizon Network, 2014 DAU, sub. 82: 236.

⁹⁵ Aurizon Network, 2014 DAU, sub. 82: 236–237.

⁹⁶ Aurizon Network, 2014 DAU, sub. 82: 236–237.

⁹⁷ Vale, 2014 DAU, sub. 79: 5–6.

⁹⁸ Vale, 2014 DAU, sub. 79: 6.

proposed pricing arrangements may not require a separate expansion tariff being established for expanding users (see section 16.5.4), we no longer consider it appropriate to require the DAAU to be based on contracted volumes. Rather, we consider that a DAAU should be consistent with the pricing arrangement approved as part of the pricing proposal (for instance, if a pricing proposal with a separate expansion tariff is approved then the corresponding DAAU should be based on contracted volumes).

An objective of the pricing proposal is to provide expansion funders and expanding users with some certainty about the pricing outcomes of an expansion. While we acknowledge Aurizon Network's preference for approving the pricing proposal following the pre-feasibility stage, we remain concerned that there may be insufficient information available at this stage to unconditionally approve a pricing proposal. Accordingly, we propose to amend the 2014 DAU to require the pricing proposal to be submitted to us as part of the feasibility study report.

The timing of a pricing proposal needs to be coordinated with the expansion approval process. The feasibility study requires a detailed cost estimate for the proposed expansion with a ± 10 per cent level of accuracy and a detailed assessment of technical and operating requirements of the proposed expansion. We consider that this level of accuracy is necessary for us to confidently approve a pricing proposal and to provide a sufficient level of certainty to expanding users, as well as existing users where relevant. We consider that this is in the interest of existing and expanding users (s. 138(2)(e) and (h) of the QCA Act).

This level of information may not necessarily be available at the pre-feasibility study phase. Therefore, we remain of the view that a pricing proposal for an expansion would be better provided at the conclusion of the feasibility study when there is a significantly higher level of certainty about the expansion's costs and volumes.

We consider that it remains appropriate for us to revise any decision to approve a pricing proposal or expansion tariff if there is a material change in circumstances. This provides certainty and sufficient security for existing and expanding users and users that may be affected by the socialisation of an expansion tariff. We consider that this is in the interests of existing and expanding users (s. 138(2)(e) and (h) of the QCA Act).

We consider that our amendments appropriately balance Aurizon Network's legitimate business interests with the interests of access seekers, access holders and other relevant parties.

Consolidated draft decision 16.7

- (1) After considering relevant clauses of Aurizon Network's 2014 DAU, our consolidated draft decision is to refuse to approve the provisions with respect to the pricing proposal.
- (2) We consider it appropriate that Aurizon Network amend the draft access undertaking (as set out in clause 6.4 of our CDD amended DAU) to:
 - (a) provide a pricing proposal as part of the feasibility study report for an expansion that includes information regarding the allocation of the expansion costs between existing and expanding users, the proposed pricing arrangements for the expansion, the results of the socialisation test (where applicable), as well as indicative tariffs consistent with the proposed pricing arrangements.
 - (b) calculate the pricing proposal socialisation test (if applicable) based on forecast costs and forecast volumes as set out in the feasibility study. The QCA is allowed to revise any decisions with respect to pricing arrangements for an expansion if there is a material change in circumstances.
 - (c) upon the QCA's approval of a pricing proposal, require Aurizon Network to, where feasible, submit to the QCA a DAAU to apply for approval of a new or varied reference tariffs.

We consider it appropriate to make this decision having regard to each of the matters set out in section 138(2) of the QCA Act for the reasons set out in our analysis above.

16.5.4 Process for establishing expansion pricing arrangements

Overview

Establishing the expansion pricing arrangements involves determining how expansion costs and volume risks are shared amongst expanding users and affected existing users (collectively, the 'expansion stakeholders'). This entails the following:

- Determining the allocation of expansion costs between expansion stakeholders:
 - The expansion pricing principles require that expanding users bear the costs associated with an expansion. However, where an existing user benefits from an expansion, then an allocation of costs to existing users may be appropriate.
- Determining the extent to which existing users are exposed to (or compensated for) the volume risk of expanding users:
 - Various pricing options (e.g. socialised pricing, a system premium, or a separate reference tariff) will influence the extent that existing users are exposed to the volume risk of an expansion, or compensate them for that level of exposure. Given the way reference tariffs and take-or-pay liabilities are calculated under the 2014 DAU, existing users would be exposed to the volume risk of expanding users if an expansion is socialised into an existing system.

During the WIRP process, it became apparent that applying a mechanistic pricing approach (such as the approaches proposed in the 2014 DAU and our initial draft decision) to define how expansion costs and risks are to be allocated between users may not be appropriate for

expansions with substitutable train services and may not capture unique and complex characteristics specific to certain expansions.

Limitations of applying a mechanistic pricing approach

Implementing a mechanistic pricing approach has two key limitations.

First, where an expansion contains substitutable train services, the existing users' exposure to the volume risk of an expansion may not be adequately addressed under a mechanistic pricing approach. Substitutable train services provide expanding users with the ability to substitute train services from the existing system on to the expansion at the detriment of existing users. This issue was identified in our WIRP draft decision.

Under a socialised price or system premium approach, non-WIRP customers are exposed to volume risks associated with WIRP. On this basis, establishing a separate reference tariff (with separate take-or-pay arrangements and revenue cap) for WIRP train services would normally provide greater protection for non-WIRP customers from this volume risk. However, this protection is compromised when WIRP access holders have WIRP and non-WIRP train service entitlements and these are substitutable. 99

Determining whether existing users may experience a material increase in tariffs from an expansion with substitutable train services will need to be considered on a case-by-case basis. A decision should be based on a number of factors specific to that expansion, including the level of substitutability associated with an expansion and the willingness and appropriateness of existing users to bear such volume risk.

We therefore do not consider that a mechanistic approach to establishing expansion prices is in the interests of existing users for expansions that contain substitutable train services. Furthermore, such an arrangement may not comply with the expansion pricing principles in certain instances.

Aurizon Network's 2014 DAU requires that, to the extent that train services have operated, access charges are based on the highest applicable reference tariff on a \$/nt basis for the applicable train service entitlement (cl. 2.2 (e) of Schedule F). For an expansion with substitutable train services and a higher separate expansion tariff, an expanding user will utilise its expansion train service entitlements before it utilises its existing train service entitlements. This will result in existing users being exposed to the volume risk of an expansion.

Second, a mechanistic pricing approach may not capture the unique and complex characteristics specific to certain expansions. The interaction between existing systems and expansions may require consideration on a case-by-case basis. For instance, an expansion may have some spillover benefits for existing users. The extent to which existing users may be prepared to pay for such benefits or be exposed to (or compensated for) the volume risk of an expansion may vary for each expansion.

A mechanistic pricing approach fails to address expansion specific considerations. This may result in an outcome that is less than optimal. For instance:

- Under an expansion pricing approach that allows for socialisation between expansion tariffs
 and existing reference tariffs, existing users could ultimately bear significantly higher access
 charges over time if the expanding users failed to fully utilise the new capacity.
- Under a separate reference tariff arrangement with a fixed cost take-or-pay, the willingness
 of existing users to socialise an expansion is not considered, which in certain instances could

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⁹⁹ QCA, 2015(c): 51.

reduce the attractiveness of an expansion for expanding users. Stakeholders' comments on our initial draft decision noted that in some instances socialisation of an expansion with an existing system could be beneficial to all expansion stakeholders.

We therefore do not consider that exclusively implementing a mechanistic approach to establishing expansion prices is in the interests of existing or expanding users. Furthermore, a mechanistic pricing approach may not promote economically efficient investment in the network. As such, we do not consider that exclusively implementing a mechanistic pricing approach is consistent with section 138(2)(e) and (h) of the QCA Act and the object of Part 5 of the QCA Act.

Amendments to the expansion pricing approach

We consider that a multifaceted approach—including a consensus pricing approach, an endorsed pricing approach and a customised pricing approach—be adopted for establishing expansion prices. The figure below outlines our proposed expansion pricing approval process. We consider that, for the reasons outlined below, this approach balances the interests of existing and expanding users and is consistent with the object of Part 5 of the QCA Act.

Aurizon Network seeks to procure a consensus among expansion stakeholders Consensus Consensus not achieved achieved Expansion contains Expansion does not contain substitutable train services substitutable train services Consensus **Customised pricing Endorsed pricing** pricing approach approach approach Pricing Proposal for QCA approval

Figure 6 The QCA's proposed expansion pricing approval process

Given the limitations of applying a mechanistic pricing approach, and drawing from stakeholder submissions, we consider that the process for establishing the expansion pricing approach should be made sufficiently flexible to be able to account for expansion specific characteristics. We consider that this can be addressed by providing scope for Aurizon Network to achieve a consensus among expansion stakeholders for the way in which expansion costs and risks are to be allocated between the expansion stakeholders. In particular:

- a consensus pricing approach for an expansion with substitutable train services will require Aurizon Network to achieve a consensus between expansion stakeholders on their respective exposure to volume risk
- a consensus pricing approach can potentially identify the willingness of non-expanding users to pay for benefits, or accept volume risks, associated with an expansion as against an

alternative approach where the QCA mandates an appropriate sharing of benefits and risks (potentially in the absence of accurate information).

We consider that providing Aurizon Network with an opportunity to reach a consensus with expansion stakeholders would allow expansion prices to more efficiently reflect the specific characteristic of that expansion, while also encouraging the involvement of all affected parties throughout the expansion approval process.

We consider that a more flexible expansion pricing approach that better reflects and identifies expansion stakeholders' views of costs and risks may also promote efficient investment in expanding the CQCN. As such, we consider that allowing for a consensus pricing approach is consistent with section 138(2) of the QCA Act and the object of Part 5 of the QCA Act.

While we consider that allowing Aurizon Network to achieve a consensus among expansion stakeholders will improve the expansion pricing framework, we acknowledge that a consensus may not always result in an optimal outcome. For instance:

- Attempting to reach a consensus may simply delay an expansion where the interests of users do not align in a manner conducive to a consensual outcome.
- An expansion with no substitutable train services may benefit from simply adopting an endorsed pricing approach.
- Certain expansion stakeholders may see wider strategic benefits in delaying an expansion if this could delay competition in related markets.

Given that a consensus pricing approach may not always result in an optimal outcome (or may result in delay), a requirement for Aurizon Network to always achieve a consensus for establishing expansion prices may lead to efficient expansions not being undertaken or being delayed. This is inconsistent with the object of Part 5 of the QCA Act and is not in the interests of expanding users.

We therefore consider that, in cases where Aurizon Network is unable to achieve a consensus within the specified time (or QCA agrees that a consensus cannot be achieved), then Aurizon Network is able to propose a pricing approach that does not require expansion stakeholders to reach a consensus. This could either take the form of an outcome based on a pre-determined 'mechanistic' methodology that is applied to the expansion (i.e., an endorsed pricing approach) or an outcome that is a bespoke solution to the particular expansion (i.e., a customised pricing approach). As noted in section 16.5.3, stakeholders will be given the opportunity to comment on the pricing proposal.

A mechanistic pricing approach may be used to establish expansion prices for an expansion that does not contain substitutable train services—where the volume risk associated with that expansion can be confined to expansion users. Where this is the case, we consider that an 'endorsed' expansion pricing approach should be submitted as part of the pricing proposal. This provides expanding users with certainty and transparency on what we consider to be an appropriate expansion pricing approach.

A mechanistic expansion pricing approach was presented in Aurizon Network's 2014 DAU. We proposed amendments to this approach in our initial draft decision for consultation with stakeholders. Our proposed 'endorsed' expansion pricing approach has been informed by our initial draft decision and subsequent submission from stakeholders.

As noted above, a mechanistic pricing approach may not be appropriate for expansions that contain substitutable train services. Determining the implications of an expansion with

substitutable train services for existing users will need to be considered on a case-by-case basis as the volume risk associated with that expansion cannot be confined to expansion users. As such, where Aurizon Network does not achieve a consensus among expansion stakeholders for an expansion with substitutable train services, we will assess the expansion pricing approach on a case-by-case basis. While we acknowledge that providing expanding users with certainty and transparency in regards to pricing expansions is important, we also consider that this needs to be balanced with providing existing users with certainty that they will not be adversely impacted by an expansion.

The consensus pricing approach, customised pricing approach and endorsed pricing approach are further outlined below.

Consolidated draft decision 16.8

- (1) After considering relevant clauses of Aurizon Network's 2014 DAU, our consolidated draft decision is to refuse to approve Aurizon Network's proposed expansion pricing framework.
- (2) The way in which we consider it appropriate for Aurizon Network to amend its 2014 DAU is to require (as set out in clause 6.4 of Part 6 of our CDD amended DAU):
 - (a) Aurizon Network to approach expansion stakeholders in good faith to seek to facilitate a consensus (consistent with the expansion pricing principles) on the way in which expansion costs and volume risks are allocated. If Aurizon Network facilitates a consensus, the pricing proposal is to be based on consensus pricing approach. If Aurizon Network cannot facilitate a consensus, the pricing proposal is to be based on:
 - a 'customised' pricing approach considered on a case-by-case basis, where the expanding user(s) have substitutable train service entitlements in the existing system; or
 - (ii) an 'endorsed' pricing approach where the expanding user(s) does not have substitutable train service entitlements in the existing system.

We consider it appropriate to make this decision having regard to each of the matters set out in section 138(2) of the QCA Act for the reasons set out in our analysis above.

Consensus pricing approach

We consider that it is appropriate to encourage Aurizon Network to engage with all expansion stakeholders to seek to reach a consensus on how:

- expansion costs are allocated between expansion stakeholders
- volume risks of an expansion are apportioned between expansion stakeholders.

Various approaches are available to allocate expansion costs and risks between users, including socialised pricing, a system premium, or a separate reference tariff. Providing scope for Aurizon Network to achieve a consensus with expansion stakeholders on the approach and terms (e.g. a socialisation test) to be adopted will enable the expansion pricing framework to be sufficiently flexible to account for expansion-specific characteristics.

As such, we consider that such an approach provides greater flexibility for expansion stakeholders to work with Aurizon Network to identify a solution that better accommodates the

interests of all expansion stakeholders. In favouring a consensus approach, we recognise that a mechanistic approach may not be appropriate if there is scope for the industry to achieve its own optimal solution. Furthermore, such a process will provide an incentive and mechanism for expansion stakeholders to identify the costs/benefits and risks associated with an expansion, assisting the identification of an optimal outcome.

Given that Aurizon Network is required to submit the pricing proposal and will need to disclose information to expansion stakeholders to enable them to identify their respective costs/benefits and risks, we consider that it should be the responsibility of Aurizon Network to seek to facilitate a consensus on behalf of expansion stakeholders. Therefore, Aurizon Network is to approach expanding users and existing users in good faith to seek to facilitate a consensus pricing approach to submit as part of the pricing proposal (see cl. 6.4.2 of our marked-up 2014 DAU).

In considering the benefits of a consensus, we are also mindful of the risks of arrangements or understandings arising between competitors that could give rise to concerns under the cartel provisions (or, for that matter, other provisions) of Part IV of the Competition and Consumer Act 2010 (Cth). For this reason, we are not proposing that a consensus would involve competitors developing a proposal that they would then present this to Aurizon Network. Rather, we think Aurizon Network should develop a proposal following consultation with individual stakeholders. However, we note that there are mechanisms and structures that could be adopted by stakeholders that would allow a joint proposal to be developed without raising competition concerns—and our approach is intended to be sufficiently flexible to allow any such approach to occur.

While a consensus pricing approach allows for more flexibility in how expansion prices are set, we are still required to assess Aurizon Network's pricing proposal having regard to the factors in section 138(2) of the QCA Act. Even if a consensus were achieved, we consider that such a consensus would need to be 'appropriate' with regard to the factors set out in section 138(2) of the QCA Act.

We have outlined a framework for a consensus pricing approach that we consider is appropriate, after having regard for section 138(2) of the QCA Act.

Compliance with the expansion pricing principles

We consider that a consensus should comply with the expansion pricing principles and, accordingly, that this should be identified by Aurizon Network in the pricing proposal. As discussed in section 16.5.2, we consider that the expansion pricing principles promote economically efficient investment in the network (ss. 69E and 138(2)(a) of the QCA Act) and appropriately balance the legitimate business interests of Aurizon Network and existing and expanding users (s. 138(2)(c), (e) and (h) of the QCA Act).

In addition to the expansion pricing principles, we consider that a consensus pricing approach should comply with the pricing principles outlined in Part 6 of the DAU.

Timing for reaching a consensus

Given the unique characteristics of expansions, the need for expansion stakeholders to obtain and analyse relevant information, and the different incentives for expansion stakeholders to reach consensus, the exact time required for Aurizon Network to facilitate a consensus for expansion prices will vary between expansions. Therefore, we believe it is important for the process to have sufficient flexibility to allow for different periods of time for different expansions (although with guidance regarding an appropriate time frame for the achievement of a consensus and appropriate oversight).

However, the timing of a consensus pricing approach will still need to coincide with the greater expansion approval process and should not result in unnecessary delays (particularly if any expansion stakeholders had any incentive to cause delays). We have therefore suggested a time frame that coincides with the overall expansion appraisal process. The proposed pricing arrangement will need to be presented as part of the pricing proposal for our assessment. We also consider that the QCA requires adequate time to assess the resulting pricing proposal within the expansion approval timeframes.

At a minimum, there should be sufficient information in which to begin the facilitation of a consensus with expansion stakeholders following the pre-feasibility study, however, in certain instances Aurizon Network may be able to begin the facilitation process prior to this stage. We consider that the facilitation of a consensus should then be finalised in time to provide a pricing proposal to the QCA as part of the feasibility study report. We consider that this should provide expanding and existing users with adequate time to reach a consensus in most instances.

We may participate in any consultation processes undertaken by Aurizon Network. If a consensus has not been concluded by the completion of the feasibility study, Aurizon Network may consult with us in regards to whether further time should be allocated to facilitate a consensus. We will have regard to the views of both expanding and existing users when deciding on whether to extend the consultation timeframe. Aurizon Network and expansion stakeholders are also able to notify the QCA that consensus will not be achieved for the pricing proposal—with Aurizon Network then submitting either a customised or endorsed pricing approach as part of the pricing proposal.

As discussed below, we consider that where an expansion has substitutable train services or existing users derive some benefit from an expansion, existing users and expanding users have an incentive to attempt to reach a consensus.

We consider that allowing expanding and existing users a greater ability to determine the timeframe for reaching agreement, subject to QCA oversight, provides users with the best opportunity to achieve a consensus. Furthermore, it limits the ability of external parties to delay the expansion approval process. As such, we consider that this is in the interest of both existing and expanding users and supports the efficient investment in expanding the CQCN.

We therefore consider that allowing Aurizon Network and expanding and existing users the ability to determine the timeframe for reaching a consensus pricing approach, subject to QCA oversight, is consistent with section 138(2) of the QCA Act and the object of Part 5 of the QCA Act.

Nature of consensus

We consider that a consensus should involve all expansion stakeholders.

As noted above, we consider that an agreed pricing approach should comply with the expansion pricing principles. Only having agreement from a majority of the affected existing users may result in an outcome that is not in the interests of certain existing users. Under certain circumstances, this may result in an outcome that is not consistent with the expansion pricing principles. Nor do we consider that this is in the interests of existing users.

Where all users are unable to reach consensus on a suitable pricing approach, a customised or endorsed expansion pricing approach can instead be adopted. We consider that requiring a consensus among all expansion stakeholders will appropriately balance the interests of all affected parties.

Incentive to reach a consensus

In certain instances, a consensus may not be achievable for existing and expanding users. However, where an expansion has substitutable train services or existing users derive some benefit of value from an expansion, we consider that there are incentives for both existing and expanding users to attempt to reach consensus on the pricing approach.

For an expansion with substitutable train services, if a consensus cannot be reached between existing and expanding users we will need to consider whether to approve a customised pricing approach or whether to reject the approach and require amendments. The customised pricing approach, or our subsequent proposed amendments, may result in an outcome which is less desirable, for either the expanding users or existing users, than if the users had reached consensus.

When assessing a customised pricing arrangement, we will have regard to the willingness and appropriateness of existing users to bear some of the costs associated with an expansion. Where existing users are prepared to pay for benefits associated with an expansion, or are prepared to be exposed to (or compensated for) the volume risk of an expansion, it is in the interests of existing users to reach a consensus with expanding users. While there may be the perceived incentive for existing users to free ride from an expansion, not reaching a consensus risks existing users being subjected to an outcome which is less desirable than a consensus pricing approach.

Where a customised pricing approach is submitted as part of the pricing proposal, we consider that it is appropriate to have regard to whether affected existing users were consulted. We do not consider that simply allocating costs or risks of an expansion to existing users is in the interests of existing users. Therefore, we consider that there is an incentive to at least consult with affected existing users when proposing a pricing approach that exposes existing users to some of the risks, or recovers some of the costs, associated with the expansion.

Given that new access seekers will be required to pay the existing reference tariff that is highest on a nt basis, existing users that believe they will derive some benefit from utilising the additional capacity provided by the expansion may also have an incentive to share some of the costs or risks of the expansion.

We recognise that in some instances, due to factors beyond expansion pricing, there may not be commercial incentives for existing and expanding users to reach a consensus on an expansion pricing arrangement. Where this is the case, Aurizon Network is able to submit a customised or endorsed pricing approach and we will have regard to the appropriateness of existing users to bear some of the costs associated with an expansion.

Customised pricing approach

We consider that where expansion stakeholders cannot reach consensus on an expansion pricing approach, a 'customised' expansion pricing approach is appropriate for expansions that contain substitutable train services.

We acknowledge that expanding users and Aurizon Network may have a preference for certainty in regard to an appropriate pricing approach for allocating the costs and risks of an expansion amongst expanding and existing users. However, for expansions with substitutable train services, a mechanistic approach does not provide an appropriate level of assurance to existing users that they will not be adversely affected by higher access charges due to the expansion.

Therefore, to balance the interests of existing and expanding users, we will consider a customised expansion pricing approach on a case-by-case basis.

The customised pricing approach should include a proposed methodology for allocating costs and a methodology for apportioning volume risk between existing and expanding users. For substitutable train services, the methodology for apportioning volume risk will have implications for both existing and expanding users.

There are various approaches available for expanding users to apportion the volume risk associated with the substitutable train services. For instance, the customised pricing approach may propose a separate expansion tariff and an approach for setting the volumes of an expanding user's forecast tonnage in the existing system—to limit the substitutability of the expansion—for pricing purposes. Alternatively, the customised pricing approach may propose a different approach for apportioning volume risk (e.g. socialised pricing or a system premium).

Stakeholders will be given the opportunity to comment on the pricing proposal. We will make our decision with regard to the information provided, from both expanding and existing users. In doing so, we will consider:

- the identified views of the expansion stakeholders during the consultation process undertaken by Aurizon Network in the initial attempts to facilitate a consensus
- section 138(2) of the QCA Act—we may only approve the pricing proposal if we consider it appropriate to do so having regard to each of the factors specified in section 138(2) of the QCA Act
- expansion pricing principles—we consider that expansion prices should comply with the
 expansion pricing principles presented in section 16.5.2. We consider that the expansion
 pricing principles promote economically efficient investment in the network (ss. 69E and
 138(2)(a) of the QCA Act) and appropriately balance the legitimate business interests of
 Aurizon Network and expanding and existing users (s. 138(2)(c), (e) and (h) of the QCA Act)
- pricing principles outlined in Part 6 of the 2014 DAU
- the information put before us at the time, including:
 - reasoning for the proposed pricing approach
 - evidence of how an expansion provides benefits to existing users
 - evidence of consultation with relevant existing users.

Endorsed pricing approach

We consider that where expansion stakeholders cannot reach consensus on an expansion pricing approach, an 'endorsed' expansion pricing approach is appropriate for expansions that do not contain substitutable train services. We would expect the number of expansions that do not have substitutable train services to decrease overtime—due to the increased integration of the network. However, this pricing approach provides a methodology for allocating expansion costs and risks between users where expanding users cannot agree on a pricing approach with other affected users.

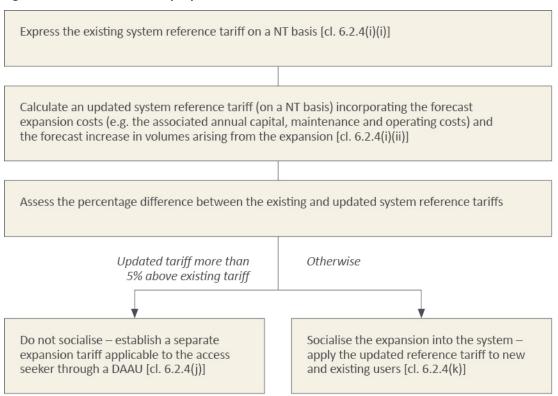
Our proposed endorsed pricing approach has been informed by Aurizon Network's 2014 DAU, our initial draft decision and subsequent submission from stakeholders. Our analysis and consolidated draft decisions in regard to the endorsed pricing approach is outlined below.

Aurizon Network's proposal

Aurizon Network's proposed expansion pricing approach in the 2014 DAU allowed socialisation between an expansion and an existing system, as well as socialisation between different expansions, where it was considered appropriate to do so. The 2014 DAU featured a socialisation test to determine whether an expansion should be socialised with an existing system or another expansion.

The proposed socialisation test in the 2014 DAU is presented in the figure below, assuming the relevant coal system has only one reference tariff, which is the system reference tariff, and the expansion is not expected to benefit existing users of the system (i.e. no cost allocation to existing users is required).

Figure 7 Aurizon Network's proposed socialisation test in the 2014 DAU



Aurizon Network said an expansion tariff does not include a contribution to common costs of the system—meaning, in cases where a separate expansion tariff is established, expanding users will not be required to pay more than the full incremental costs arising from their access to the CQCN. ¹⁰⁰

Allocation of costs

Where existing users gain a clear benefit from the expansion, the 2014 DAU proposes that Aurizon Network will allocate part of the expansion costs to existing users (cl. 6.2.4(b)(i)). The existing reference tariffs (the system reference tariff and other existing expansion tariffs) will be adjusted accordingly prior to the socialisation test. This proposed allocation of costs will be featured in the pricing proposal.

¹⁰⁰ Aurizon Network, 2014 DAU, sub. 3: 99.

Socialisation test

The 2014 DAU proposes the socialisation test will be undertaken on a forward-looking basis, where the test results for each quarter, beginning from the commencement of the service until the peak point for contracted access of the expansion, are considered.

When there is more than one existing reference tariff, for the purpose of the socialisation test, the 2014 DAU requires the benchmark to be the existing reference tariff that is highest on a nt basis (referred to as the 'highest reference tariff' in the 2014 DAU):

- where there is no existing expansion tariff, the system reference tariff is the highest reference tariff (as is the case in the example above)
- where the system has more than one reference tariff, the tariff that is highest on a nt basis will be used as the benchmark.

If the test establishes socialisation as appropriate, the expansion costs will be socialised with the costs associated with the highest reference tariff. The 2014 DAU provides for the expansion tariff to socialise with the next highest reference tariff if this socialisation does not lead to the next highest reference tariff increasing by more than five per cent (on a nt basis)—that is, if it passes the socialisation test.

The 2014 DAU proposes that an expansion tariff has a maximum life of 10 years. This implies all expansions will be eventually socialised with the system reference tariff.

Aurizon Network said that once an expansion tariff has been socialised with another tariff, the costs associated with these two tariffs cannot be separated in the future—that is, once socialised, always socialised. ¹⁰¹

Summary of our initial draft decision

Our initial draft decision refused to approve Aurizon Network's proposed expansion pricing approach in the 2014 DAU. Particularly, we were concerned Aurizon Network's proposed approach does not sufficiently take into account uncertainties associated with an expansion and may unintentionally cause existing users to bear a significant part of an expansion's financial risks.

Given the way reference tariffs and take-or-pay liabilities are calculated under the 2014 DAU, existing users could ultimately bear significantly higher access charges over time in the case of a socialised tariff if the expanding users failed to fully utilise the new capacity. While the intent of the socialisation test is consistent with the expansion pricing principles, it does not necessarily lead to outcomes that satisfy these principles in practice.

'Fixed cost' take-or-pay approach

In our initial draft decision we considered that one of the more practical ways to make expanding users bear the costs and risk associated with an expansion, is to implement 'fixed cost' take-or-pay arrangements for expanding users. The proposed fixed cost take-or-pay regime is effectively a more stringent form of the existing take-or-pay arrangements with features including:

• the AT₂ to AT₄ tariffs, and AT₅ if an expansion involves electric infrastructure, calculated on the basis of contracted volumes

¹⁰¹ Aurizon Network, 2014 DAU, sub. 3: 100.

- in addition to the AT₂ to AT₄ tariffs, the AT₅ tariff becomes part of the take-or-pay arrangements
- the take-or-pay trigger applied on an individual user level (against their individual contracted volumes) rather than on a system level (against the system gtk forecast)
- no adjustments arising from capping mechanisms.

We considered that in cases where a separate expansion tariff is established, a fixed cost takeor-pay regime will result in each expanding user's volume risk being largely confined to its own contracted volume, and not to those of other expanding users.

Socialisation with existing users

We proposed not to socialise any expansions within an existing system reference tariff for the 2014 DAU period.

We considered that the implementation of a fixed cost take-or-pay regime has to be considered alongside the revenue cap regime and take-or-pay arrangements that are in place for existing users, including:

- the reference tariff calculated on the basis of forecast volumes, rather than contracted volumes
- an access holder's take-or-pay liability depending on the system forecast volume and its individual contracted volume.

We considered it unsustainable and overly complex for two groups of users to pay the same tariff (in the case where an expansion is socialised), but with one group (expanding users) bearing a more stringent take-or-pay regime than the other (existing users). It creates an asymmetric transfer of risk that disadvantages the expanding users who, under a 'fixed cost' take-or-pay regime, will be bearing most of the costs and risk associated with the expansion.

We were not proposing to move existing users to a fixed cost take-or-pay regime. Therefore, the socialisation of an expansion with the system reference tariff was precluded.

Accordingly, our initial draft decision proposed the following:

- A separate expansion tariff, based on contracted volumes, will be established in the event that an expansion is triggered.
- Aurizon Network is required to implement a fixed cost take-or-pay regime, based on contracted volumes, for users paying an expansion tariff—each user's AT₂ to AT₄ tariffs, and AT₅ if an expansion involves electric infrastructure, will not vary with its actual usage, except in the event of Aurizon Network Cause.
- If the incremental costs associated with providing access for expanding users are lower on a
 nt basis than the system reference tariff, a positive common cost contribution will be
 included in the expansion tariff so that the expansion tariff aligns with the system reference
 tariff on a nt basis. Otherwise, users paying an expansion tariff will not be required to make
 any contribution to common cost. To be clear, our position was that the reference tariff
 applicable to an expanding user should not be lower than an existing reference tariff on a
 unit basis.

Our full analysis and reasoning is contained in section 16.5.3 of the initial draft decision under the heading 'Application of the socialisation test in the 2014 DAU'. We have adopted that analysis and reasoning for the purposes of this consolidated draft decision, subject to the comments below.

Socialisation between expanding users

We considered socialisation between expansions should be permitted (if it passes the approved form of socialisation test) as long as a fixed cost take-or-pay regime is applied to the users involved.

In regard to the proposed socialisation test, our initial draft decision:

- refused to accept Aurizon Network's proposed materiality threshold of five percent in the socialisation test
- refused to accept the 10-year expiration of expansion tariffs.

Our full analysis and reasoning is contained in section 16.5.3 of the initial draft decision under the heading 'Application of the socialisation test in the 2014 DAU'. We have adopted that analysis and reasoning for the purposes of this consolidated draft decision, subject to the comments below.

Proposed materiality threshold

While we acknowledged the intention of a meaningful materiality threshold, we considered the five per cent threshold proposed by Aurizon Network arbitrary, and that it may be preferable to allow for some level of judgement to be applied in assessing the need for a new expansion tariff.

When the expansion is expected to result in a decline of another expansion tariff, we considered there is a clear case for socialisation because:

- it provides users that are already paying an expansion tariff with a potential decrease of access charges over time, and accelerate the merging of reference tariffs
- it provides a contribution from new expanding users, where their own expansion costs are
 relatively small, to pay off old expansions to reflect the benefits these new users may receive
 from previous investment.
- it has the administrative benefit of minimising the number of tariffs to be developed.

Where socialisation is expected to raise an existing expansion reference tariff, we considered that it is best dealt with on a case-by-case basis (whether to socialise or not socialise) and recognise that the onus should be on the expanding users and Aurizon Network to justify the merit of socialisation.

Our full analysis and reasoning is contained in section 16.5.3 of the initial draft decision under the heading 'Five per cent criterion for socialisation'. We have adopted that analysis and reasoning for the purposes of this consolidated draft decision, subject to the comments below.

10-year expiration of expansion tariffs

We acknowledged that for the ease of administration there may be a benefit to Aurizon Network in having expansion tariffs expire after 10 years, and it is in Aurizon Network's interest to socialise to avoid asset stranding risk.

However, we did not consider Aurizon Network has made a strong case from an efficiency or fairness perspective for why an expansion should be automatically socialised after 10 years. We considered that an automatic expiry of an expansion tariff does not have sufficient regard to the potential pricing impacts on the existing access holders and could lead to an inefficient or inequitable pricing arrangement. We considered that there are sufficient other mechanisms in the regulatory framework to deal with issues of asset stranding risk.

In the event that a system has more than one expansion tariff, we considered an annual review—re-running the socialisation test based on latest information—is more appropriate to determine if two expansion tariffs should be socialised.

Our full analysis and reasoning is contained in section 16.5.3 of the initial draft decision under the heading '10-year expiration of expansion tariffs'. We have adopted that analysis and reasoning for the purposes of this consolidated draft decision, subject to the comments below.

Stakeholders' comments on our initial draft decision Aurizon Network

Fixed cost take-or-pay approach and not allowing socialisation with existing users

Aurizon Network said that our proposal (as set out in the initial draft decision) is inconsistent with the object of Part 5 of the QCA Act and fails to take proper regard of section 138 of the QCA Act. ¹⁰² Aurizon Network considered that it will discourage investment in rail infrastructure supporting new mines, which would constrain the scope for increasing competition in the coal export market. ¹⁰³

Aurizon Network believed our proposal (as set out in the initial draft decision) is skewed in favour of existing users and discriminates against expanding users on the basis of timing of entry. Aurizon Network is concerned that our approach will create materially different outcomes between existing and expanding users and create additional barriers to entry. Aurizon Network said that our approach will also create material differences between expanding users with long and short hauls. 106

Aurizon Network suggested such a material restructure of the pricing framework be considered as part of the long-term tariff review. Aurizon Network's specific comments on our proposed approach (as set out in the initial draft decision) are outlined in the table below.

Table 65 Aurizon Network's comments on the application of the fixed cost take-or-pay approach in our initial draft decision

Issues	Aurizon Network's comments
Socialisation between existing and expanding users	Expansions should not be automatically quarantined from the existing system, as it may be appropriate to socialise them in certain instances. ¹⁰⁷ To the extent that expansion lowers average costs to all users, it is inefficient to maintain a separate pricing arrangement for expansion customers. ¹⁰⁸
	The initial draft decision provides an unbalanced view of the socialisation argument. In some instances existing users will benefit from a reduced access charge and a greater capacity of the network (in the event that expanding users under-rail). Socialisation's key benefit is sharing the impacts of volume fluctuations between all users. There is no reason that any user will systematically under or over rail over the

¹⁰² Aurizon Network, 2014 DAU, sub. 82: 226–227.

¹⁰³ Aurizon Network, 2014 DAU, sub. 82: 230.

¹⁰⁴ Aurizon Network, 2014 DAU, sub. 82: 228.

¹⁰⁵ Aurizon Network, 2014 DAU, sub. 82: 228.

¹⁰⁶ Aurizon Network, 2014 DAU, sub. 82: 230.

¹⁰⁷ Aurizon Network, 2014 DAU, sub. 82: 229.

¹⁰⁸ Aurizon Network, 2014 DAU, sub. 82: 232.

¹⁰⁹ Aurizon Network, 2014 DAU, sub. 82: 228.

¹¹⁰ Aurizon Network, 2014 DAU, sub. 82: 228.

¹¹¹ Aurizon Network, 2014 DAU, sub. 82: 228.

Issues	Aurizon Network's comments
	long run, if the volume forecast is unbiased. ¹¹² Furthermore, the pricing arrangement for expansions will be assessed by the QCA on a case-by-case basis. ¹¹³
The common cost contribution methodology for expanding users	The approach for calculating an expanding user's common cost contribution may result in circumstances where a contribution would be triggered purely due to the fact that existing and expanding users' tariffs are calculated on a different volume basis. 114
	Aurizon Network agreed with expanding users not contributing to common costs where the expansion tariff is higher than the existing users' tariff. 115
Allocation of risk to existing and expanding users	Quarantining existing users from volume risk associated with expanding users, while exposing expanding users to the volume risk of existing users through common cost contributions, is an asymmetric allocation of risk. ¹¹⁶ This does not promote effective competition, or encourage efficient investment in the network.
	To address this asymmetric allocation of risk, Aurizon Network suggested:
	basing the common cost contribution on a comparison of existing and expanding users' prices (\$/nt) with respect to contract volumes, or
	 setting the common cost contribution with reference to a formula or 'unit rate', such that the expanding users liability with respect to the volumes of existing users is limited.
	The initial draft decision creates significant asset stranding risk for expansion projects, as the volume risk associated with expansions are shared among a smaller group. 118
	Rather than requiring all expansions to be quarantined, the non-performance risk of expanding users may be more appropriately addressed through greater security requirements and aligning pricing to contracted volume ramp up profile. 119
	Expansions may be triggered by a well established incumbent looking to increase output. ¹²⁰ Although the risk of non-performance relative to the contract would be lower, the same stringent expansion pricing principles would apply.
The complexity of the pricing framework	The pricing framework within the CQCN would become further fragmented and complex as a result of the initial draft decision—the more a coal system becomes fragmented, the more complex and arbitrary the cost allocations become. ¹²¹ This is particularly relevant where an expansion is fully integrated within a multi-user coal system, as it is practically impossible to differentiate between the costs different users impose upon the common infrastructure. ¹²² Furthermore, the distribution of benefits becomes obfuscated where an expansion occurs on the common mainline corridor. ¹²³
Aurizon Network Cause	If charges are based on contracted volumes and adjusted for Aurizon Network Cause, Aurizon Network's revenue cap will effectively guarantee a revenue cap adjustment to recover Aurizon Network Cause (as there will always be some degree of Aurizon Network Cause). 124 Aurizon Network considered that this may be significant and contrary to its business interest. 125

¹¹² Aurizon Network, 2014 DAU, sub. 82: 228.

¹¹³ Aurizon Network, 2014 DAU, sub. 82: 229.

¹¹⁴ Aurizon Network, 2014 DAU, sub. 82: 231.

¹¹⁵ Aurizon Network, 2014 DAU, sub. 82: 231.

¹¹⁶ Aurizon Network, 2014 DAU, sub. 82: 227.

¹¹⁷ Aurizon Network, 2014 DAU, sub. 82: 232.

¹¹⁸ Aurizon Network, 2014 DAU, sub. 82: 229.

¹¹⁹ Aurizon Network, 2014 DAU, sub. 82: 228.

¹²⁰ Aurizon Network, 2014 DAU, sub. 82: 228.

¹²¹ Aurizon Network, 2014 DAU, sub. 82: 228.

Aurizon Network, 2014 DAU, sub. 82: 228.

¹²³ Aurizon Network, 2014 DAU, sub. 82: 228.

¹²⁴ Aurizon Network, 2014 DAU, sub. 82: 230.

¹²⁵ Aurizon Network, 2014 DAU, sub. 82: 230.

Socialisation between expanding users

Aurizon Network considered that, where appropriate, expansions should be socialised with other expansions. However, the scope of the socialisation test should be widened to allow socialisation with the existing system where appropriate. 127

Proposed materiality threshold

Aurizon Network considered that a defined materiality threshold has considerable merit for the purpose of establishing an expansion tariff, as it provides greater transparency and certainty. ¹²⁸ Aurizon Network said this would not prevent the QCA from assessing each pricing proposal on a case-by-case basis. ¹²⁹

10-year expiration of expansion tariffs

Aurizon Network agreed that the socialisation test should be re-run on an annual basis to take the latest information into account. ¹³⁰

Aurizon Network maintained that an expansion should be socialised with the existing system after a set period of time, stating that the ten year expiration was agreed with QRC and was included to balance the interests of existing and new users. ¹³¹ Aurizon Network considered it is fair and reasonable that expansion tariffs expire after ten years, regardless of the identity of the funder. ¹³² Aurizon Network said this arrangement promotes transparency and is likely to make third party investment more attractive. Aurizon Network considered that indefinitely quarantined expansions from the existing system creates material discrepancies between existing and expansion customers, and exposes expansion customers to more stringent pricing conditions than the existing system, and asymmetric volume risk. ¹³³

Other stakeholders

Fixed cost take-or-pay approach and not allowing socialisation with existing users

The QRC broadly supported the expansion pricing approach proposed by Aurizon Network in the 2014 DAU, with an expectation that we would review forecast expansion costs and volumes prior to approving a pricing proposal—and not approve socialisation until adequate evidence was available.¹³⁴

Anglo American asked for further clarification as to how the tariff components (AT_1 to AT_5) are built up for an expansion tariff. Specific comments made by other stakeholders on our proposed approach are outlined in the table below.

¹²⁸ Aurizon Network, 2014 DAU, sub. 82: 234.

¹²⁹ Aurizon Network, 2014 DAU, sub. 82: 234.

¹³⁰ Aurizon Network, 2014 DAU, sub. 82: 234.

¹³¹ Aurizon Network, 2014 DAU, sub. 82: 235.

¹³² Aurizon Network, 2014 DAU, sub. 82: 235.

¹³³ Aurizon Network, 2014 DAU, sub. 82: 235.

¹³⁴ QRC, 2014 DAU, sub. 84: 35.

¹³⁵ Anglo American, 2014 DAU, sub. 95: 17.

Table 66 Stakeholder's comments on the application of the fixed cost take-or-pay approach in our initial draft decision

Issues	Comments
Socialisation between existing and expanding users	Anglo American and QCoal supported socialisation between the expanding and existing users where appropriate. ¹³⁶ Anglo American considered that socialisation is appropriate where an expansion creates a lower expansion tariff than the existing reference tariff. ¹³⁷ QCoal considered that socialisation may be appropriate where existing access holders benefit from expansions or where the difference between existing and expanding users is small. ¹³⁸
	Asciano supported our methodology for socialising expansions, but was concerned that it may result in existing access holders being subject to higher tariffs to pay for new expansion costs that they may not benefit from. ¹³⁹
	WIRP Users supported existing users not being adversely impacted by an increase in capacity. However, WIRP Users suggested that existing users are likely to gain from an expansion through non-capacity impacts, such as increases in resilience and availability. WIRP Users did not consider the benefits of the fixed cost take-or-pay regime to be sufficiently great that expansions should be quarantined. Have
	Vale suggested establishing a separate expansion volume forecast to calculate the expansion tariff and take-or-pay—similar to the methodology used for existing users. This methodology could be used to determine whether an expansion tariff should be socialised. Aurizon Operations said we could assess an alternative approach whereby only those expansion costs above the level of the system price are quarantined to expanding users. 144
The common cost contribution methodology for expanding users	The QRC and WIRP Users submitted that a common cost contribution from an expanding user could be triggered due solely to the fact that the tariffs are calculated on a different basis—the expansion tariff is based on contracted volumes, whereas existing users is based on forecast volumes. ¹⁴⁵ The QRC said the common cost contribution assessment should be based on a comparison of the existing and expanding users' unit costs (rather than tariffs). ¹⁴⁶
	Anglo American said that even where an expansion results in an expansion tariff that is higher than the existing reference tariff, it is appropriate for expanding users to make a common cost contribution. ¹⁴⁷ Anglo American questioned how the reference tariff adjustment process is going to be implemented. ¹⁴⁸
	BMA considered that further clarity is required in relation to how the decision to not contribute to common cost of an existing system will be reviewed over the project life. 149
Allocation of risk to existing and	Stakeholders noted that expanding users will face a different risk profile to existing users as a result of the initial draft decision's expansion pricing approach:
expanding users	expanding users are more exposed to individual short term volume risk due to the

¹³⁶ Anglo American, 2014 DAU, sub. 95: 17; QCoal, 2014 DAU, sub. 80: 3.

¹³⁷Anglo American, 2014 DAU, sub. 95: 17.

¹³⁸ QCoal, 2014 DAU, sub. 80: 3.

¹³⁹ Asciano, 2014 DAU, sub. 76: 17.

¹⁴⁰ WIRP Users, 2014 DAU, sub. 77: 6.

¹⁴¹ WIRP Users, 2014 DAU, sub. 77: 6.

¹⁴² WIRP Users, 2014 DAU, sub. 77: 11.

¹⁴³ Vale, 2014 DAU, sub. 79: 5.

¹⁴⁴ Aurizon Operations, 2014 DAU, sub. 93: 23.

¹⁴⁵ QRC, 2014 DAU, sub. 84: 37; WIRP Users, 2014 DAU, sub. 77: 6.

¹⁴⁶ QRC, 2014 DAU, sub. 84: 38.

¹⁴⁷ Anglo American, 2014 DAU, sub. 95: 17.

¹⁴⁸ Anglo American, 2014 DAU, sub. 95: 17.

¹⁴⁹ BMA, 2014 DAU, sub. 78: 6.

Issues	Comments
	proposed take-or-pay terms
	expanding users are less exposed to short term volume risk of other users due to the proposed take-or-pay terms
	 expanding users are exposed to significant default risk given that each expansion is likely to involve a small number of customers, all of which are sourcing tonnages from new mines or expansion projects.
	As a result of these different risk profiles, the QRC considered that the proposed common cost contribution arrangement is inequitable. HIS WIRP Users questioned why expanding users should be exposed to volume risk on the existing system through the common cost contribution arrangement given that volume risks of the expansion are confined to expanding users. HIS WIRP Users questioned why
The complexity of the pricing framework	The QRC stated a preference for simplicity, avoiding the creation of numerous pricing groups. ¹⁵³ QCoal believes that consideration should be given to the costs and benefits of managing two or more 'systems' within the same physical track. ¹⁵⁴ Vale was also concerned that the initial draft decision generates greater complexity and could provide an impediment for the ability to trade capacity. ¹⁵⁵ WIRP Users questioned how the holder of expansion capacity could trade that capacity to the holder of non-expansion capacity. ¹⁵⁶
	WIRP Users said that existing and expanding users will be affected both operationally and financially by decisions taken in relation to the other system. WIRP Users suggested this may be problematic if both existing and expanding users are excluded from decisions which relate to the other. WIRP Users said that expanding users should be protected from having their capacity transferred to the existing system and that the complexity of monitoring these issues is another reason to resist the creation of separate expansion systems. 158
	BMA considers that further clarity is required in relation to how sustaining capital expenditure will be dealt with post expansion—including how it will be capitalised across multiple systems that share the same infrastructure. Description QCoal also considers that managing multiple tariff regimes within one network must be resolved, including the apportionment of sustaining capital, operations and maintenance costs, renewals and transfers.

Socialisation between expanding users

Asciano believed that any socialisation of expansion costs needs to be substantiated prior to it being socialised. BMA was concerned that, if the socialisation test is a simple comparison of two tariffs on a dollar per tonne basis, socialisation will only occur when the tariffs of the longer haul expanding users are roughly equal to the tariffs of the shorter haul existing users. 162

¹⁵⁰ WIRP Users, 2014 DAU, sub. 77: 10; Asciano, 2014 DAU, sub. 76: 17; QRC, 2014 DAU, sub. 84: 16–17.

¹⁵¹ QRC, 2014 DAU, sub. 84: 36.

¹⁵² WIRP Users, 2014 DAU, sub. 77: 9.

¹⁵³ QRC, 2014 DAU, sub. 84: 36.

¹⁵⁴ QCoal, 2014 DAU, sub. 80: 3.

¹⁵⁵ Vale, 2014 DAU, sub. 79: 5.

¹⁵⁶ WIRP Users, 2014 DAU, sub. 77: 8.

¹⁵⁷ WIRP Users, 2014 DAU, sub. 77: 8.

¹⁵⁸ WIRP Users, 2014 DAU, sub. 77: 11.

¹⁵⁹ BMA, 2014 DAU, sub. 78: 5.

¹⁶⁰ QCoal, 2014 DAU, sub. 80: 3.

¹⁶¹ Asciano, 2014 DAU, sub. 76: 17.

¹⁶² BMA, 2014 DAU, sub. 78: 6.

Proposed materiality threshold

The QRC was comfortable with the approach presented in the initial draft decision, given that the question of socialisation will be settled through a pricing proposal, and this will occur relatively early in the expansion process. ¹⁶³

10-year expiration of expansion tariffs

A number of stakeholders submitted that the expansion pricing framework should include an expiration of expansion tariffs. The QRC and WIRP Users supported a maximum term for expansion tariffs of 10 years. The QRC believed this is sufficient to demonstrate the viability of the expansion and the socialisation of the depreciated asset represents an acceptable risk for the existing users. The QRC and WIRP Users also considered maximum term provision will be a mechanism to reduce complexity over time. Aurizon Operations believed there may be benefit in fully socialising expansion costs after being subject to the system price for five consecutive years. Aurizon Operations considered that the expansion pricing framework under the IDD does not recognise the previous contribution to common cost made by expanding users over time.

QCA analysis and consolidated draft decision

Our consolidated draft decision is to refuse to approve Aurizon Network's proposed expansion pricing approach in the 2014 DAU. We remain concerned that Aurizon Network's proposed approach does not sufficiently take into account uncertainties associated with an expansion and may unintentionally cause existing users to bear an inappropriately high level of an expansion's financial risks.

As noted above, we believe that the expansion pricing principles are consistent with the object of Part 5 of the QCA Act and take proper regard of section 138(2) of the QCA Act. As such, our view is that the endorsed expansion pricing approach should uphold these expansion pricing principles.

Given the way reference tariffs and take-or-pay liabilities are calculated under the 2014 DAU, existing users could ultimately bear significantly higher access charges over time in the case of a socialised tariff if the expanding users failed to fully utilise the new capacity. While the intent of Aurizon Network's proposed expansion pricing approach is consistent with the expansion pricing principles, it does not necessarily lead to outcomes that satisfy these principles in practice.

As such, we consider that Aurizon Network's expansion pricing approach is not appropriate for an endorsed expansion pricing approach. Although risks to existing users may be reduced through more scrutiny of forecast railings and costs, they are not eradicated. For instance, we consider that the forecast increase in volumes for mines with planned capacity expansion projects are likely to have a higher level of uncertainty when compared with the established production levels of other mines. Therefore, even with more stringent assessments of an expansion's forecast costs and railings, we believe that Aurizon Network's approach will not necessarily maintain the expansion pricing principles.

¹⁶³ QRC, 2014 DAU, sub. 84: 38.

¹⁶⁴ QRC, 2014 DAU, sub. 84: 38; WIRP Users, 2014 DAU, sub. 77: 8.

¹⁶⁵ QRC, 2014 DAUD, sub. 84: 38.

¹⁶⁶ QRC, 2014 DAU, sub. 84: 38; WIRP Users, 2014 DAU, sub. 77: 8.

¹⁶⁷ Aurizon Operations, 2014 DAU, sub. 93: 24.

¹⁶⁸ Aurizon Operations, 2014 DAU, sub. 93: 24.

Fixed cost take-or-pay approach and not allowing socialisation with existing users

After considering submissions received on the initial draft decision, and assessing comments having regard to the criteria listed in section 138(2) of the QCA Act, we consider that a fixed cost take-or-pay approach, based on contracted volumes, remains appropriate for the endorsed expansion pricing approach.

We consider that implementing a fixed cost take-or-pay arrangement makes expanding users bear the costs and risk associated with an expansion, and each user within the expanding group pays its allocated costs. For expansions that involve more than one expanding user, it is likely that the users will have different ramp-up profiles. We consider it is likely to be in the interests of access seekers (within the expanding group) to have a fixed cost take-or-pay arrangement so that any particular expanding user will not bear the volume risks associated with other users' production ramp-up. We consider that a fixed cost take-or-pay arrangement may also assist with socialisation between expanding users, where production ramp-up could otherwise be a barrier. Furthermore, we consider that a fixed cost take-or-pay arrangement allocates risks and costs associated with an expansion in accordance with our expansion pricing principles. As such, we consider our proposed approach is consistent with section 138(2) of the QCA Act and the object of Part 5 of the QCA Act.

However, we have proposed to amend the methodology for determining the common cost contribution for expanding users. This proposed amendment is outlined below.

Apart from the calculation of tariffs on the basis of contracted rather than forecast volumes, the methodology for calculating the expansion tariffs remains the same as that currently used to calculate existing tariffs. As such, we do not consider that expansion tariffs will create material differences between expanding users with long and short hauls as they are calculated with reference to the cost drivers (e.g. nt and gtk) of each train service.

Socialisation between existing and expanding users

As noted above, we consider the fixed cost take-or-pay arrangements to be appropriate for the endorsed pricing approach for expansions. Therefore, socialisation must be considered in regard to these arrangements.

Given that the take-or-pay arrangements for expanding users will be different to those of existing users, we do not consider that it is appropriate to socialise expansions with the existing system. Under the fixed cost take-or-pay arrangement, existing users' reference tariffs and take-or-pay arrangements are based on forecast volumes, whereas expanding users' reference tariffs and take-or-pay arrangements are based on contracted volumes.

The socialisation of an expansion within an existing system will result in an asymmetric transfer of risk that further disadvantages the expanding users—existing and expanding users pay the same tariff (in the case where an expansion is socialised), but with expanding users bearing a more stringent take-or-pay regime than existing users. We therefore do not consider such an asymmetric allocation of system costs or volume risk is in the interest of expanding users.

Furthermore, under the expansion pricing framework, a socialised outcome with relevant existing users may be realised through a consensus pricing approach.

The common cost contribution methodology for expanding users

The common cost contribution (CCC) methodology will calculate the common costs to be recovered from expanding users. If the expansion tariff is lower than the system reference tariff

on a \$/nt basis¹⁶⁹, the costs to be recovered from expanding users will include a CCC component. The CCC is to be based on the system reference tariff. This is consistent with the system tariff arrangement currently in place in the CQCN, where cost-reflectivity is applied at the system level.

We consider that the CCC associated with the AT_1 to AT_4 tariffs should be calculated independently of the CCC associated with the AT_5 tariff. The AT_5 tariff is calculated independently from the other tariffs and is solely based on the costs of electric assets. We consider that not calculating the corresponding CCC for these tariff groups independently may distort an access seeker's decision of whether to operate electric or diesel train services. We do not consider that this would be consistent with the object of Part 5 of the QCA Act.

The proposed CCC is to be calculated each year, as part of the annual setting of tariffs in Schedule F. The proposed CCC is calculated to align the expansion tariff with the system reference tariff on a \$/nt basis, using the characteristics of the new expansion (e.g. contracted nt and gtk). The expansion tariff for each train service is then calculated with reference to its specific cost drivers (e.g. nt and gtk). As such, we do not consider that the common cost contribution discriminates between longer and shorter haul users within an expansion.

We note Aurizon Network's and stakeholders' concerns that a CCC from an expanding user could be triggered due solely to the fact that the tariffs are calculated on a different volume basis. We agree that it is appropriate to amend our initial draft decision such that the CCC is determined with respect to contract volumes in the existing system and the expansion tariff. That is, a CCC methodology will compare the expansion tariff and the system reference tariff on a \$ per contracted nt basis.

We consider that this approach for calculating an expanding user's CCC is consistent with the object of Part 5 of the QCA Act, as an expansion may be triggered based on an existing user's contracted volumes. Furthermore, the CCC of expanding users is no longer exposed to the short-term forecast volume fluctuations of existing users. We consider that this more appropriately balances the interests of existing and expanding users.

As such, we consider that the our amended approach for calculating the CCC is consistent with section 138(2) and the object of Part 5 of the QCA Act.

Allocation of risk to existing and expanding users

We acknowledge that existing users and expanding users will face a different risk profile under our endorsed expansion pricing framework. First, the fixed cost take-or-pay arrangement exposes expanding users more to their individual short-term volume risk. Second, the fixed cost take-or-pay arrangement does not expose expanding users to short-term volume risk of other users. We consider that this allocation of risk is necessary in order to comply with the expansion pricing principles.

Noting these risk allocation differences and our proposed amendment to the CCC, we do not consider that our expansion pricing framework is inequitable. Our proposed endorsed expansion pricing approach needs to be considered with regard to the greater expansion pricing framework. We consider that on the whole our proposed approach to expansion pricing balances the interests of existing and expanding users. Furthermore, our proposed amendment for calculating common costs no longer exposes expanding users to the short-term volume risk

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¹⁶⁹ Using the characteristics of the new access rights (i.e. distance travelled, gross tonnes, net tonnes, electric/non-electric).

of the existing system (as the common cost contribution methodology is based on contracted volumes).

We consider that stranded asset risks (and default risks of individual expanding users) associated with an expansion are better assessed and factored into the expansion approval process—not addressed through the allocation of risks and costs once the expansion is finalised. The stranded asset risk of an expansion should be considered as part of the pre-approval stage in the expansion process (see Chapter 12). We do not consider it appropriate to use socialisation as a way to address the asset stranding risk of an expansion. This may provide expanding users and Aurizon Network with an incentive to invest in an expansion with significant asset stranding risk. We do not consider that this is consistent with the object of Part 5 of the QCA Act.

Under Aurizon Network's proposed 2014 DAU approach the short-term volume risks of each individual expanding user may affect other expanding users. This may have significant implications for expanding users, particularly where each expanding user has different ramp-up profile or there are fewer users to share the short-term volume risk. This may complicate the expansion approval process as the approval process would need to factor in how absorbing the short-term volume risk of other expanding users will affect the default risk of each expanding users.

We believe the fixed cost take-or-pay arrangement is appropriate for all expanding users, whether a new user of the CQCN or a well established incumbent looking to increase output. This approach is not introduced to address the different risk profiles associated with expanding users, but rather provide an approach for reasonably allocating the costs and risks associated with an expansion.

The complexity of the pricing framework

We acknowledge stakeholders' preference for simplicity in regards to the expansion pricing framework. Our view is that the establishment of a separate expansion tariff will not make the pricing arrangement significantly more complex for users. We note that socialisation between expansions is allowed, where appropriate. Furthermore, under the expansion pricing framework, a socialised outcome with relevant existing users may be realised through a consensus pricing approach.

We acknowledge that the users of an expansion may be affected by the decisions relating to the existing system, and vice versa. While the expansion and existing system will have separate tariffs, they remain in the same CQCN system. All system users, whether existing or expanding, will be included in those decisions that affect the operation of the system. We consider that the capacity baseline will help to monitor existing capacity (and its utilisation).

We do not consider that the expansion tariff will be an impediment for trading capacity. The existing system and the expansion will have a certain amount of capacity. Users are essentially paying for the use of that capacity. Capacity can be traded through the short-term capacity transfer mechanism, whether from the existing system or from the expansion.

The proposed allocation of renewals associated with an expansion is to be submitted to the QCA for approval as part of the pricing proposal.

Aurizon Network Cause

While more stringent take-or-pay conditions may result in revenue cap adjustments for expanding users to recover Aurizon Network Cause, we do not consider that this is sufficient reason not to implement the fixed cost take-or-pay arrangement. The same outcome would

occur if there is some degree of Aurizon Network Cause and existing users continually realised their forecast railings.

The revenue cap guarantees that Aurizon Network is able to generate sufficient revenue. Therefore, we consider that the endorsed pricing arrangement balances the interests of Aurizon Network, existing and expanding users.

Consolidated draft decision 16.9

- (1) After considering relevant clauses of Aurizon Network's 2014 DAU, our consolidated draft decision is to refuse to approve Aurizon Network's proposed expansion pricing framework.
- (2) The way in which we consider it appropriate for Aurizon Network to amend its 2014 DAU is to make the 'endorsed' pricing approach entail the following (as set out in clause 6.4.4 of our CDD amended DAU):
 - (a) A separate expansion tariff, based on contracted volumes, will be established in the event that an expansion is triggered.
 - (b) Aurizon Network is required to implement a 'fixed cost' take-or-pay regime, based on contracted volumes, for users paying an expansion tariff.
 - (c) If the incremental costs associated with providing access for expanding users are lower on a \$ per contracted nt basis than the system reference tariff, a positive common cost contribution will be included in the expansion tariff, to align the expansion tariff with the system reference tariff on a contracted nt basis. Otherwise, users paying an expansion tariff will not be required to make any contribution to common cost.

We consider it appropriate to make this decision having regard to each of the matters set out in section 138(2) of the QCA Act for the reasons set out in our analysis above.

Socialisation between expanding users

We consider that socialisation between expanding users remains appropriate, given that they are faced with the same pricing arrangements. That is, where there is an existing expansion tariff in the system, and another expansion is triggered, socialisation between the two expansions (with a fixed cost take-or-pay regime applied to all expanding users) is appropriate if it complies with the approved form of socialisation test (see cl. 6.4.4 of our CDD amended DAU). We consider that socialisation, where appropriate, has the potential to result in benefits for existing and expanding users and thus is consistent with section 138(2) and the object of Part 5 in the QCA Act.

The proposed expansion costs will be assessed and substantiated in the pricing proposal prior to socialisation.

We consider that the socialisation test associated with the AT_1 to AT_4 tariffs should be considered independently of the socialisation test associated with the AT_5 tariff. The AT_5 tariff is calculated independently from the other tariffs and is solely based on the costs of electric assets. Our view is that not considering the socialisation for these tariff groups independently may distort an access seeker's decision of whether to operate electric or diesel train services. We do not consider that this would be consistent with the object of Part 5 of the QCA Act.

Consistent with the system tariff arrangement, where socialisation is appropriate for an expansion it is the entire expansion that is to be socialised and not just certain expanding users. Therefore, socialisation of an expansion is to be based on the expansion tariff, not the individual tariffs faced by individual expanding users.

The expansion tariff will be calculated on the basis of total expansion costs and contracted volumes. Although the expansion tariff is applied to all expanding users, expanding users will pay different amounts on a \$/nt basis subject to the differences of individual train services (including distance). Therefore, we do not consider that the socialisation of expansions discriminates between longer and shorter haul users.

Proposed materiality threshold

After considering submissions received on the initial draft decision, and assessing comments having regard to the criteria listed in section 138(2) of the QCA Act, we found no reason to change our initial draft decision to refuse to approve Aurizon Network's proposed materiality threshold of five percent in the socialisation test.

Given that an expansion could have significant pricing impacts on another expanding user, we do not consider that it is appropriate to make a decision on the socialisation of an expansion based on an arbitrary benchmark—such as the five per cent threshold proposed by Aurizon Network.

We do not consider that implementing a materiality threshold will provide greater transparency or certainty, as each pricing proposal will be reviewed regardless of whether the threshold is met. Furthermore, given the broad definition of expansion in the access undertaking, we believe that it is appropriate to provide existing users with an opportunity to make submissions on a pricing proposal prior to assessing the socialisation of an expansion.

10-year expiration of expansion tariffs

After considering submissions received on the initial draft decision, and assessing comments having regard to the criteria listed in section 138(2) of the QCA Act, we found no reason to change our initial draft decision to refuse to approve Aurizon Network's proposed 10-year expiration of expansion tariffs.

As noted above, we do not consider that socialisation between existing and expanding users is appropriate given that they face different pricing arrangements. Furthermore, under the proposed expansion pricing framework, an expiration of expansion tariffs may be realised through a consensus pricing approach.

Given that expansions could have material pricing impacts on other expansions if socialised, we consider that expansions should only be socialised when they adhere to the approved form of socialisation test. We do not consider that the expansion pricing principles should only be adhered to for a certain period of time. An automatic expiration of expansion tariffs could potentially result in circumstances not consistent with the expansion pricing principles.

Furthermore, we do not consider Aurizon Network has made a strong case from an efficiency or fairness perspective for why an expansion should be automatically socialised after 10 years.

An expanding user's contribution to the expansion's common use infrastructure costs is recognised over time through the return of capital component in the allowed revenue for an expansion.

Consolidated draft decision 16.10

- (1) After considering relevant clauses of Aurizon Network's 2014 DAU, our consolidated draft decision is refuse to approve Aurizon Network's proposed five per cent criterion for socialisation and 10-year expiration of expansion tariffs in the endorsed pricing approach.
- (2) The way in which we consider it is appropriate that Aurizon Network amend the draft access undertaking is as follows (as set out in Part 6 of our CDD amended DAU):
 - (a) If socialisation of a new expansion with the highest expansion tariff (the existing expansion tariff that is highest on the nt basis) leads to lower tariff on a unit basis, these costs will be socialised.
 - (b) If socialisation leads to an increase in the highest expansion tariff, the QCA will consider on a case-by-case basis whether to socialise or to establish a separate expansion tariff for this new expansion.
 - (c) To undertake an annual review, by re-running the socialisation test based on latest information, to determine if expansion tariffs should be socialised where more than one expansion tariff exists for a system.

We consider it appropriate to make these decisions having regard to each of the matters set out in section 138(2) of the QCA Act for the reasons set out in our analysis above.

16.5.5 Application of expansion pricing arrangement

Post-expansion access seekers

Aurizon Network's proposal

Aurizon Network's proposal ensured the reference tariff applicable to the new expanding users will not be below those of the existing users (including users already paying the expansion tariffs).

Summary of our initial draft decision

Our initial draft decision accepted that where a system has multiple reference tariffs (due to previous expansions), the reference tariff used to establish access charges for post-expansion access seekers should be the existing reference tariff that is highest on a nt basis.

Our full analysis and reasoning is contained in section 16.5.3 of the initial draft decision under the heading 'Post-expansion access seekers'. We have adopted that analysis and reasoning for the purposes of this consolidated draft decision, subject to the comments below.

Stakeholders' comments on our initial draft decision

Aurizon Network

Aurizon Network submitted that it could agree with our initial draft decision, subject to an amendment which allows expansion tariffs to be socialised with system tariffs where doing so does not result in a material increase in price for existing users. ¹⁷⁰

¹⁷⁰ Aurizon Network, 2014 DAU, sub. 82: 235.

Other stakeholders

The QRC and WIRP Users agreed that post expansion access seekers should pay the expansion tariff. 171

QCA analysis and consolidated draft decision

After considering submissions received on the initial draft decision, and assessing comments having regard to the criteria listed in section 138(2) of the QCA Act, we found no reason to change our initial draft decision to approve Aurizon Network's proposed pricing approach for post-expansion access seekers.

We remain of the view that the reference tariff used to establish access charges for new access seekers should be the existing reference tariff that is highest on a nt basis. That is, a new user is to pay the reference tariff that incurs the highest dollar per nt cost for the specific characteristics of the new access rights.

Our position is driven by two factors:

- Access seekers will be prevented from inefficiently seeking to delay their entry into the market to 'free-ride' on expansions triggered and underwritten by existing users.
- Users that are already paying an expansion tariff will be provided with a potential decrease of access charges over time.

We consider this facilitates efficient and equitable outcomes for all users of the CQCN and appropriately balances the interests of existing and expanding users. As such, we consider that our proposal is consistent with the object of Part 5 of the QCA Act and section 138(2)(e) and (h).

Consolidated draft decision 16.11

(1) After considering relevant clauses of Aurizon Network's 2014 DAU, our consolidated draft decision is to approve Aurizon Network's proposal that, where a system has multiple reference tariffs (due to previous expansions), the reference tariff used to establish access charges for new access seekers should be the existing reference tariff that is highest on a nt basis.

We consider it appropriate to make this decision having regard to each of the matters set out in section 138(2) of the QCA Act for the reasons set out in our analysis above.

Expansions funded by Aurizon Network at the regulatory WACC Aurizon Network's proposal

The expansion pricing framework in the 2014 DAU applies to all expansions not funded by Aurizon Network at the regulatory WACC.

The 2014 DAU proposes that, in cases where a party seeks access rights for train services requiring an expansion and Aurizon Network agrees to fund it at the regulatory WACC, the expansion will be socialised into the system (cl. 6.2.4(a)). Effectively, this means Aurizon Network will apply an updated system reference tariff—incorporating the expansion costs and new forecast volumes—to the access seeker (who triggers the expansion) as well as the existing users. This socialisation is undertaken regardless of its pricing impacts on existing users.

¹⁷¹ QRC, 2014 DAU, sub. 84: 38–39; WIRP Users, 2014 DAU, sub. 77: 10–11.

Summary of our initial draft decision

Our initial draft decision refused to approve Aurizon Network's proposal to exclude any capital expenditure it funds at the regulated WACC from consideration of an expansion tariff. We considered socialisation of all new investment is in Aurizon Network's interest, as it potentially broadens the customer base for the recovery of capital expenditure (and other related costs) and has the administrative benefit of minimising the number of tariffs to be developed. We also note that stakeholders have expressed concerns regarding socialisation of expansions.

While we acknowledged Aurizon Network's preference is generally to socialise new capital expenditure, we did not consider that this will always be in the interests of existing access holders. We note that significant and unanticipated cost increases for existing access holders, regardless of the source of funding, may have commercial implications for existing miners. For this reason, we considered it appropriate to subject all expansions to the expansion pricing treatment we have proposed above, regardless of its funding source.

Our full analysis and reasoning is contained in section 16.5.3 of the initial draft decision under the heading 'Expansion funded by Aurizon Network at regulatory WACC'. We have adopted that analysis and reasoning for the purposes of this consolidated draft decision, subject to the comments below.

Stakeholders' comments on our initial draft decision

Aurizon Network

Aurizon Network agreed with the initial draft decision, subject to Aurizon Network being exempt from any form of funding obligation—as there is no option to assess the risk and potential pricing outcomes of expansion that Aurizon Network are obligated to fund. Aurizon Network believed that it will not fund expansions under standard terms unless they can be socialised, as the regulated WACC does not compensate for the level of exposure to asset stranding and/or third-party credit risk. Aurizon

Other stakeholders

The QRC supported the initial draft decision as it protects existing users from adverse impacts of high cost expansions. ¹⁷⁴ The QRC understands Aurizon Network's concern that it needs some mechanism to address risks in the case where it is obliged to invest in an expansion at the WACC (and an expansion tariff will apply). ¹⁷⁵ However, the QRC considered that excluding capital expenditure funded at the regulated WACC from consideration of an expansion tariff is inappropriate and undoes many of the protections which Part 6 is intended to provide. ¹⁷⁶

QCA analysis and consolidated draft decision

We remain of the view that it is appropriate to subject all expansions to the expansion pricing framework we have proposed above, regardless of the funding source. This results in equal treatment of all expansions, and increases transparency with respect to pricing. This is consistent with the object of Part 5 and appropriately balances Aurizon Network's legitimate business interests with the interests of access seekers, access holders and train operators.

¹⁷⁵ QRC, 2014 DAU, sub. 84: 39.

¹⁷² Aurizon Network, 2014 DAU, sub. 82: 237.

¹⁷³ Aurizon Network, 2014 DAU, sub. 82: 237.

¹⁷⁴ QRC, 2014 DAU, sub. 84: 39.

¹⁷⁶ QRC, 2014 DAU, sub. 84: 39.

We note that Aurizon Network said that it believes it will not fund expansions under standard terms unless they can be socialised. This is a decision for Aurizon Network to make. However, under the proposed expansion pricing framework, a socialised outcome with relevant existing users may be realised through a consensus pricing approach.

Consolidated draft decision 16.12

- (1) After considering relevant clauses of Aurizon Network's 2014 DAU, our consolidated draft decision is to refuse to approve the 2014 DAU providing an exception to the consideration of an expansion tariff for expansions funded by Aurizon Network at the regulatory WACC.
- (2) The way in which we consider it is appropriate that Aurizon Network amend the draft access undertaking is to omit this exception, as set out in Part 6 of our CDD amended DAU.

We consider it appropriate to make this decision having regard to each of the matters set out in section 138(2) of the QCA Act for the reasons set out in our analysis above.

16.6 New mine-specific spur lines

16.6.1 Aurizon Network's proposal

Part 6 of the 2014 DAU proposes that, for new coal-carrying train services involving a spur line (either funded privately or by Aurizon Network) connected to the CQCN in the 2014 DAU period or beyond, the access charge for the access seeker be based on, either (see following section for the relevant definitions):

- the applicable existing reference tariff (e.g. a system reference tariff or an existing expansion tariff) less a distance discount (which may be zero), in cases where the existing reference tariff is above the access seeker's minimum revenue contribution (MRC) on a nt basis; or
- a varied reference tariff based on the access seeker's MRC.

The exception is where a new expansion tariff is being proposed as part of the access application. The 2014 DAU proposes the reference tariff applicable to the access seeker be the new expansion tariff.

The key principle underpinning Aurizon Network's proposal is that customers should pay an access charge that at least covers the incremental costs of providing them access to the CQCN.¹⁷⁷ In cases where an expansion is triggered by an access seeker, an access charge based on a new expansion tariff is consistent with this principle. Likewise, where an expansion is not required, the MRC concept results in the applicable reference tariff at least recovering the incremental costs of providing the new access rights, as well as a contribution to the common costs.

Minimum revenue contribution and distance discount

Under the 2014 DAU, the MRC of an access seeker is calculated on the basis of the applicable existing AT_1 reference tariff input plus the higher of:

¹⁷⁷ Aurizon Network, 2013 DAU, sub. 2: 217.

- (a) other incremental costs (to the extent not covered by the AT₁ tariff input) incurred by Aurizon Network as a consequence of providing access to the access seeker; or
- (b) the AT₂ input plus 25 per cent of both the AT₃ and AT₄ inputs of the relevant existing reference tariff.

Effectively, the MRC forms the floor price for an access seeker.¹⁷⁸ In cases where the applicable existing reference tariff is above the MRC, the access seeker pays the existing reference tariff less a distance discount. Aurizon Network said its intent is that, given an access seeker paying at least the MRC is already covering the incremental costs associated with its access, any additional contribution to the recovery of the MAR (also known as the CCC) should depend on that party's capacity to pay. ¹⁷⁹

Aurizon Network considered a user's capacity to pay is negatively related to:

- the length of the mine-specific spur line
- the mainline haul length from the loading facility to the unloading facility.

The distance discount formula is presented in the box below.

¹⁷⁹ Aurizon Network, 2013 DAU, sub. 2: 227–228.

¹⁷⁸ Aurizon Network, 2013 DAU, sub. 2: 226.

¹⁸⁰ Aurizon Network, 2013 DAU, sub. 2: 227–228.

Box 5: Distance discount

The distance discount formula in the 2014 DAU is a product of three components, taking into account each of the factors above (cl. 6.2.5(b)):

$$\begin{split} \{ART-MRC\} * \left\{ &Min\left(1, \frac{Max[SL_{lower}, SL_{actual}] - SL_{lower}}{SL_{upper} - SL_{lower}}\right) \right\} \\ * \left\{ &Min\left(1, \frac{ML_{actual}}{ML_{ave}}\right) \right\} \end{split}$$

- $\{ART MRC\}$
 - The total discount is capped at the difference between the applicable existing reference tariff (ART) and the MRC (meaning all access seekers pay at least their MRCs).
- $\left\{Min\left(1, \frac{Max[SL_{lower}, SL_{actual}] SL_{lower}}{SL_{upper} SL_{lower}}\right)\right\}$
 - This bracket varies between 0 and 1. A mine that has a spur line shorter or equal to 25km obtains no discount (the bracket equals 0 if $SL_{actual} \leq SL_{lower} = 25$ km). The discount increases with spur length, up to a maximum of 100km (the bracket equals 1 if $SL_{actual} \geq SL_{upper} = 100$ km).
- $\left\{Min\left(1, \frac{ML_{actual}}{ML_{ave}}\right)\right\}$
 - This bracket varies between 0 and 1. The discount increases with the mainline haul length of the mine, up to a maximum of the system average (the bracket equals 1 if $ML_{actual} \ge ML_{ave}$). ¹⁸¹

2010 AU pricing approach

The 2010 AU specified the reference tariff for new coal-carrying train services would be the higher of (2010 AU, Schedule F, cl. 4.1.2):

- (a) The Reference Tariff for the relevant Individual Coal System Infrastructure; or
- (b) The sum of ... Private Incremental Costs (if any), the Incremental Costs of using any Rail Infrastructure specifically related to the new coal carrying Train Service and the required minimum Common Cost contribution ...
- (c) provided that the Access Charge payable to QR Network for the operation of that new coal carrying Train Service is calculated as the applicable Reference Tariff less the Private Incremental costs (if any).

The minimum CCC was defined as the sum of the system reference tariff's AT₂ plus 50 per cent of AT₃ inputs (2010 AU, Schedule F, Part B, cl. 4.1.3).

Aurizon Network said one of the key problems with the 2010 AU approach is that it required the disclosure of private infrastructure costs (see cl. 4.1.2 (b) above). ¹⁸² Information disclosure had not been an issue previously, given Aurizon Network had built mine-specific infrastructure on behalf of customers under Access Facilitation Deeds (AFDs). However, Aurizon Network said it no longer offers AFDs (mines are typically required to fund and own their mine-specific

¹⁸¹ Aurizon Network, 2013 DAU, sub. 2: 227–228.

¹⁸² Aurizon Network, 2013 DAU, sub. 2: 223.

infrastructure) and it has had problems obtaining information about private incremental costs from miners who funded their own spur lines. The 2014 DAU addresses this issue because the assessment of an access seeker's MRC does not require such information.

16.6.2 Summary of our initial draft decision

Our initial draft decision refused to approve Aurizon Network's proposed pricing approach for new train services utilising a mine-specific spur line connected to the CQCN in the 2014 DAU period or beyond. We proposed the following amendments to Part 6 of the 2014 DAU:

- Define the MRC as the AT₁ tariff plus other incremental costs (to the extent not covered by the AT₁ tariff and other agreements between Aurizon Network and an access seeker) of providing access (calculated on the basis of forecast nt), but excluding any mine-specific spur line costs irrespective of infrastructure ownership.
- Remove the distance discount—if an access seeker's MRC is above the applicable existing
 reference tariff, the reference tariff applicable to this access seeker will be based on its MRC.
 Otherwise, this access seeker pays the existing reference tariff.

2010 AU pricing approach

The intent of the 2010 AU approach was to not determine a user's access charge on the basis of how its spur line had been funded. Under the 2010 AU approach, the dollar per nt amount compared to the system reference tariff should be the same regardless of the infrastructure ownership—mine-specific spur line costs would either be classified as private incremental costs or incremental costs borne by Aurizon Network. This meant the decision to apply the system reference tariff or a new reference tariff would be independent of how a spur line was funded.

Nevertheless, in practice, the 2010 AU approach has not resulted in equal pricing treatments. This is because, by definition, private infrastructure is not part of the declared service and the associated costs cannot be included in the RAB and the MAR. In contrast, the costs of spur lines funded under AFDs (hence owned by Aurizon Network) have been included in the regulatory accounts to form part of system reference tariffs.

Further, information disclosure (due to the reference to private incremental costs) associated with the 2010 AU approach is an issue, as pointed out by Aurizon Network.

Moreover, private incremental costs are not subject to an independent assessment of prudency. Given that paying the minimum CCC lowers a mine's production costs relative to paying the system reference tariff (holding everything else constant), the 2010 AU approach might create a perverse incentive for mines with private infrastructure to inflate their reported private incremental costs.

Minimum revenue contribution

We considered a viable alternative to the 2010 AU approach is to set out a pricing approach that disregards the value (and its related operating and maintenance costs) of a mine-specific spur line, irrespective of how it has been funded. This means that instead of treating a private spur line as if it had been owned by Aurizon Network (hence taking such costs into account when establishing reference tariffs), this alternative approach treats all spur lines as privately owned (hence disregarding the associated costs).

¹⁸³ Aurizon Network, 2013 DAU, sub. 2: 223.

This has the advantage of ensuring equal pricing outcomes and not requiring information about private infrastructure costs.

We considered the MRC concept proposed by Aurizon Network largely aligns with this. However, we were concerned that the drafting of the 2014 DAU is unclear whether the MRC should include the costs of a mine-specific spur line where it has been funded by Aurizon Network. We considered that for clarity purposes the drafting should be amended to exclude mine-specific spur line costs in all circumstances for new train services.

We also did not consider it necessary to establish a minimum level of CCC. We considered that:

- in cases where incremental costs associated with providing access for an access seeker are
 higher than the reference tariffs facing existing users, it is reasonable for the access seeker
 to make no CCC. The reference tariff applicable to this access seeker will be a varied
 reference tariff based on the party's MRC.
- if the applicable existing reference tariff is higher than the incremental costs, the existing reference tariff will be applied to the access seeker.

We considered existing users will not be made worse off (financially) as long as an access seeker covers at least the incremental costs associated with its access. Reflecting this, we considered it appropriate to define the MRC as the AT₁ tariff of the applicable reference tariff plus other incremental costs (to the extent not covered by the AT₁ tariff and other agreements between Aurizon Network and the access seeker) of providing access (calculated on the basis of forecast nt), excluding any reference to mine-specific spur line costs irrespective of infrastructure ownership.

Distance discount

We did not consider that Aurizon Network provided sufficient analysis to justify applying a distance discount for new train services involving spur lines connected in the 2014 DAU period or beyond. We considered applying a distance discount for new train services would substantially increase the complexity of the pricing regime.

We considered that the current structure of reference tariffs already gives rise to a distance taper effect. We were not convinced there is a need to strengthen the distance taper effect by applying a distance discount for new train services.

We recognised that since the MAR includes the costs associated with existing spur lines funded under AFDs, it may seem unreasonable for new users with private infrastructure to pay the full reference tariffs. However, given that the proportion of the MAR attributable to mine-specific spur lines was identified to be less than 10 per cent and expected to fall over time, we did not consider it sufficiently substantial to justify the inclusion of a distance discount.

Our initial draft decision was to remove the distance discount in the 2014 DAU.

Our full analysis and reasoning is contained in section 16.6 of the initial draft decision. We adopt that analysis and reasoning for the purposes of this consolidated draft decision, subject to the comments below.

16.6.3 Stakeholders' comments on our initial draft decision

Aurizon Network

Minimum revenue contribution

Aurizon Network disagreed with removing the minimum CCC element from the MRC calculation, stating that it will be entirely possible that a new train service's MRC would be limited to its incremental maintenance costs only (i.e. AT₁). Aurizon Network considered this outcome to be conceptually flawed as it would mean that the train service would make no contribution to fixed costs within the system. 185

Distance discount

Aurizon Network disagreed with our recommendation to remove the distance discount, stating that this will create material price discrimination. Aurizon Network said mine-specific infrastructure costs have previously been included in the RAB and socialised among all users through the system reference tariff. Therefore, Aurizon Network considered that under our proposal, new access seekers will be required to fund their own mine-specific infrastructure costs, and make a contribution towards the mine-specific infrastructure costs of all existing users via their access charges.

Aurizon Network believed that this outcome is unlikely to promote effective competition in upand downstream markets and therefore would be inconsistent with the object of Part 5 of the QCA Act. Aurizon Network said that failure to consider a reasonable treatment for new access seekers discriminates in favour of existing users. ¹⁸⁷ Aurizon Network considered the distance discount to be an economically efficient and reasonable way to ensure that new customers are not unfairly discriminated against. ¹⁸⁸ Aurizon Network stated that we have not provided any compelling evidence to justify why the distance discount is inappropriate.

Aurizon Network said it is prepared to re-assess the spur length limits if stakeholders believe this would be appropriate. 189

Other stakeholders

Given spur lines of existing users are included in the RAB, BMA considered under our proposed approach new users would effectively be cross subsidising existing users as a new mine's spur is excluded from the RAB yet they are charged the full reference tariff. BMA considered that this approach would not appropriately balance the interests of access seekers and access holders. B191

BMA's preferred approach is to price new spurs using the CCC formula agreed in the 2010 AU. BMA disagreed that Aurizon Network had difficulty obtaining information on the private costs of the mine specific infrastructure. BMA said that this information can be audited and independently assessed in the same manner that Aurizon Network's capital expenditure is

¹⁸⁴ Aurizon Network, 2014 DAU, sub. 82: 238.

¹⁸⁵ Aurizon Network, 2014 DAU, sub. 82: 239.

¹⁸⁶ Aurizon Network, 2014 DAU, sub. 82: 237.

¹⁸⁷ Aurizon Network, 2014 DAU, sub. 82: 238.

¹⁸⁸ Aurizon Network, 2014 DAU, sub. 82: 238.

¹⁸⁹ Aurizon Network, 2014 DAU, sub. 82: 238.

¹⁹⁰ BMA, 2014 DAU, sub. 78: 4.

¹⁹¹ BMA, 2014 DAU, sub. 78: 4.

assessed. 192 BMA contended that the new train services that do not involve mainline expansion should be required to make a CCC. 193

The QRC considered that 10 per cent of the MAR is material. The QRC did not share our concerns regarding complexity in regard to Aurizon Network's proposal. ¹⁹⁴ The QRC suggested that either Aurizon Network's proposal should be approved or the 2010 AU approach should be retained until the review of reference tariff components has been completed. ¹⁹⁵

16.6.4 QCA analysis and consolidated draft decision

Our consolidated draft decision is to refuse to approve Aurizon Network's 2014 DAU proposed pricing approach for new train services utilising a mine-specific spur line connected to the CQCN.

We consider it appropriate that the 2014 DAU is amended to reinstate the 2010 AU pricing approach, with further amendments to address information disclosure concerns and to make this approach consistent with the expansion pricing framework.

Our analysis is set out below.

Distance discount

Aurizon Network's approach seeks to provide a discount to new train services that reflects the inclusion of existing spur lines in the RAB without the 2010 AU requirement for disclosure of spur line costs. While we accept there is a case for a discount (given the RAB includes existing spur lines funded by Aurizon Network), the distance discount is based on a formula that is not necessarily based on costs. We are unsure if the distance discount would lead to efficient prices that are consistent with the object of Part 5 of the QCA Act. Aurizon Network has not provided evidence to show that its proposed distance discount formula (including the associated parameters), would yield a more efficient outcome than the 2010 AU approach.

Further, our analysis indicated that any particular user could be paying significantly different prices depending on whether the 2010 AU or Aurizon Network's 2014 DAU methodologies were applied. For example, for a new mine with a spur line of less than 25 kilometres there would be no distance discount despite private incremental costs that could lead to a significant discount under 2010 AU approach. Alternatively, the distance discount may result in access seekers receiving a larger discount than they would otherwise under the 2010 AU approach.

We do not consider that this is in the interests of access seekers or access holders given that the formula has the potential to result in users paying different prices for access. We consider that it is generally in the interests of access seekers and the public interests to have consistent pricing methodologies across regulatory periods, unless there is a strong justification for change. As such, we do not consider that Aurizon Network's approach is consistent with s.138(2)(d), (e) and (h) of the QCA Act. We also consider that such an approach results in price discrimination that does not necessarily aid efficiency, so is inconsistent with section 168A(b).

¹⁹³ BMA, 2014 DAU, sub. 78: 3.

¹⁹² BMA, 2014 DAU, sub. 78: 3.

¹⁹⁴ QRC, 2014 DAU, sub. 84: 40.

¹⁹⁵ QRC, 2014 DAU, sub. 84: 40.

2010 AU pricing approach

We note that an advantage of Aurizon Network's proposed approach is that it does not require the disclosure of spur line private incremental costs. We consider that this is better addressed through amendments to the 2010 AU approach.

We propose to amend the 2010 AU approach to require private incremental costs to be independently assessed for efficiency/prudency prior to such costs being considered as part of the assessment of a new train service's reference tariff. This amendment would address the information disclosure concerns and the lack of an independent prudency assessment for private incremental costs.

Under our proposed approach an access seeker can choose whether it wants to submit its private incremental costs for review—if not, the private incremental costs will be deemed to be nil.

We consider that this amendment to the 2010 AU balances the interests of access holders and access seekers and is consistent with the object of Part 5 of the Act.

We remain of the view that—if Aurizon Network decides to fund a spur line in the future—Aurizon Network should recover the associated costs through a separate agreement with the relevant mine, rather than through the reference tariff.

New coal-carrying train services that trigger a new expansion

We consider that the proposed pricing approach for new train services utilising a mine-specific spur line needs to be consistently applied across all users. We consider that this is in the interest of access seekers and is consistent with the object of Part 5 of the QCA Act. Therefore, where appropriate, we consider that the private infrastructure costs of expanding users should be taken into consideration when establishing access charges for expanding users.

Consistent with the expansion pricing principles (see section 16.5.2 of this decision), we consider that access seekers should pay, at a minimum, an access charge that reflects its share of incremental costs associated with the new coal-carrying train service. For an expanding user, this will include the incremental costs associated with the expansion.

For access charges to be applied consistently across all users, the minimum revenue contribution should be set at the same level for all access seekers. Therefore, we consider that the minimum revenue contribution for all new train services should be calculated as the sum of the incremental costs of access not arising from an expansion and the higher of either: any applicable expansion costs; or the sum of AT₂ and fifty percent of AT₃ of the relevant reference tariff (which is equivalent to the minimum CCC in the 2010 AU approach).

Consistent with our pricing approach for new train services utilising a mine-specific spur line that do not require an expansion, we consider that expanding users should also obtain a discount (from the applicable reference tariff) for private infrastructure costs. However, a discount should only apply to the extent that access charges at least recover the minimum revenue contribution.

Specifically, to ensure that the proposed pricing approach for new train services utilising a mine-specific spur is consistently applied for all users, an access seeker will pay an access charge reflecting the higher of (on a \$/nt basis):

the system reference tariff less the discount for private incremental costs

- the minimum revenue contribution—which is calculated as the sum of the incremental cost of access not arising from an expansion and the higher of:
 - AT₂ and 50% of AT₃ of the applicable reference tariff
 - any applicable expansion costs.

We also consider that the access charges associated with AT_1 to AT_4 tariffs for new train services should be calculated independently of the access charges associated with the AT_5 tariff. The AT_5 tariff is calculated independently from the other tariffs and is solely based on the costs of electric assets. We consider that not calculating the corresponding access charges for these tariff groups independently may distort an access seeker's decision of whether to operate electric or diesel train services. We do not consider that this would be consistent with the object of Part 5 of the QCA Act.

We consider that these amendments to the pricing approach for new mine-specific spur lines are consistent with the object of Part 5 of the QCA Act, and appropriately balance the interests of access seekers and access holders.

Consolidated draft decision 16.13

- (1) After considering relevant clauses of Aurizon Network's 2014 DAU, our consolidated draft decision is to refuse to approve Aurizon Network's proposed pricing approach for new train services utilising a mine-specific spur line connected to the CQCN.
- (2) The way in which we consider it is appropriate that Aurizon Network amend its draft access undertaking is to reinstate the 2010 AU pricing approach, with further amendments (as set out in clause 6.3 of our CDD amended DAU) to:
 - (a) address information disclosure concerns
 - (b) make it consistent with the expansion pricing framework for expanding users.

We consider it appropriate to make this decision having regard to each of the matters set out in section 138(2) of the QCA Act for the reasons set out in our analysis above.

16.7 Commercial terms

16.7.1 Aurizon Network's proposal

The 2014 DAU provides for Aurizon Network to negotiate non-standard arrangements (commercial terms) in relation to access rights requiring an expansion or a mine-specific spur line to be funded by Aurizon Network (cl. 6.9).

Under the 2010 AU, Aurizon Network was required to demonstrate access conditions were necessary to mitigate its exposure to additional financial risks associated with the development of an expansion or a mine-specific line, and any non-standard arrangements were subject to our approval.

Summary of our initial draft decision

Our initial draft decision refused to approve Aurizon Network's proposed commercial term provisions in the 2014 DAU. We were concerned that the proposed provisions are much more relaxed than the 2010 AU access condition provisions and could potentially be misused to allow Aurizon Network to engage in monopoly rent-seeking behaviour.

The QCA cannot oblige Aurizon Network to fund an expansion unless that requirement is imposed on Aurizon Network by a voluntary access undertaking such as 2014 DAU.

Expansion funding can be sourced externally through a SUFA. However, given the transaction costs associated with a SUFA—especially as it is generally untested—there will be expansions of the CQCN that Aurizon Network is in the best position to fund. In such circumstances, Aurizon Network has significant bargaining power when negotiating with access seekers that require those expansions. Moreover, as pointed out by stakeholders, the commercial term provisions could potentially be misused to set terms and conditions that discriminate in favour of a related operator.

It was our view that, given Aurizon Network's unique position as the sole operator of the CQCN, commercial terms should only be permitted if the intent is to mitigate its exposure to financial risks associated with funding an expansion. The onus should be on Aurizon Network to demonstrate the financial risks are legitimate and the proposed commercial terms are necessary to mitigate these risks.

Reflecting this, we proposed amendments to the 2014 DAU to reinstate the 2010 AU access condition provisions, with further amendments to:

- simplify the drafting
- expand its application to all non-standard terms that have cost and risk implications for Aurizon Network—our approval will be required if Aurizon Network intends to charge an access charge that varies from the applicable reference tariff
- provide that if the QCA refuses to approve some or all access conditions, Aurizon Network
 can enter into negotiations for a separate arrangement with access seekers that will be
 regarded as entirely outside of the scope of the access undertaking, and will be subject to
 Division 5 of Part 5 of the QCA Act.

16.7.2 Stakeholders' comments on our initial draft decision

Aurizon Network

Aurizon Network disagreed with expanding the application of commercial terms to all non-standard terms that have cost and risk implications. ¹⁹⁶ Aurizon Network stated that conditions relating to funding are better treated separately to varied terms of access agreements and having the one mechanism for both sets of circumstances is inappropriate. ¹⁹⁷

Aurizon Network noted that under our proposal, if access seekers reach a mutually satisfactory funding arrangement with any other funder, the parties are free to enter into that arrangement without regulatory approval. However, any funding arrangement with Aurizon Network involves a period of material delay and regulatory risk. Aurizon Network did not believe this can be justified by the claim that user funding is not fully effective as a competitive alternative to funding by Aurizon Network. Aurizon Network questioned how restrictions in the funding market provide an outcome that best meets the requirements of section 138(2) of the QCA Act. Act.

¹⁹⁶ Aurizon Network, 2014 DAU, sub. 82: 239.

¹⁹⁷ Aurizon Network, 2014 DAU, sub. 82: 239.

¹⁹⁸ Aurizon Network, 2014 DAU, sub. 82: 240.

¹⁹⁹ Aurizon Network, 2014 DAU, sub. 82: 240.

²⁰⁰ Aurizon Network, 2014 DAU, sub. 82: 240.

Aurizon Network said that it is customary for a business operator to take advantage of its strengths—such as its understanding of the business of investing and operating railway networks in Central Queensland—and this should not be a concern to the regulator. 201

Aurizon Network considered that any assessment should be conducted solely on the agreed access conditions and only commence once that agreement is reached. 202 Aurizon Network questioned the relevance of assessing of the access conditions originally proposed, as the agreed access conditions would differ following the negotiation process between the parties.²⁰³

Aurizon Network considered that the option to undertake negotiations outside of the access undertaking, for a separate arrangement with access seekers, should be available from the start of the access conditions process. ²⁰⁴ Aurizon Network considered that this has the benefit of no delays or regulatory risk associated with the approval process-especially where the commercial terms agreed with access seekers would not have been approved through the current process.²⁰⁵ Aurizon Network said that this better meets the criteria of section 138(2) of the QCA Act. 206

Aurizon Network considered that provision 6.13.3(g)(iii) of our proposed changes to the 2014 DAU is unclear. 207

Other stakeholders

The QRC supported our proposal, which largely reinstates, but simplifies, the access conditions clause of the 2010 AU. 208 The QRC considered that this helps to ensure Aurizon Network does not abuse its substantial advantage and significant bargaining power when negotiating access conditions for projects.²⁰⁹ The QRC said that a SUFA is complex, untested and involves significant transaction costs. 210

Voluntary funding obligation

The QRC supported that Aurizon Network should provide a genuine voluntary funding obligation in order to signal a willingness to work with the CQCN coal supply chain for its collective economic benefit. This is particularly critical for small to medium-sized projects, which will be unsuitable for funding through the SUFA, at least until the SUFA is settled and tested. ²¹¹ The QRC also supported that Aurizon Network commit to developing tax-efficient financing options for access seekers and third party financiers for small to medium expansion projects. ²¹²

QCA analysis and consolidated draft decision 16.7.3

We consider regulatory oversight plays a pivotal role in ensuring Aurizon Network does not leverage its unique position to extract monopoly rents and provide its related parties an unfair commercial advantage over their respective competitors. We consider that this is in the

²⁰¹ Aurizon Network, 2014 DAU, sub. 82: 240.

²⁰² Aurizon Network, 2014 DAU, sub. 82: 241.

²⁰³ Aurizon Network, 2014 DAU, sub. 82: 241.

²⁰⁴ Aurizon Network, 2014 DAU, sub. 82: 241.

²⁰⁵ Aurizon Network, 2014 DAU, sub. 82: 241.

²⁰⁶ Aurizon Network, 2014 DAU, sub. 82: 241.

²⁰⁷ Aurizon Network, 2014 DAU, sub. 82: 242. ²⁰⁸ QRC, 2014 DAU, sub. 84: 40.

²⁰⁹ QRC, 2014 DAU, sub. 84: 40.

²¹⁰ QRC, 2014 DAU, sub. 84: 40.

²¹¹ QRC, 2014 DAU, sub. 84: 40.

²¹² QRC, 2014 DAU, sub. 84: 40.

interests of access seekers (s. 138 (2)(e) of the QCA Act) and is consistent with Part 5 of the QCA Act.

The SUFA is designed to limit Aurizon Network's monopoly power in regards to funding expansions. However, the SUFA is yet to be tested in the CQCN. Therefore, the extent to which the SUFA is able limit Aurizon Network's monopoly power in regards to expansion funding is uncertain. Until we can be assured that the SUFA is able to effectively limit Aurizon Network's monopoly power in regards to funding expansions, we consider that our proposed amendments provide necessary regulatory oversight to protect access seekers. As such, we consider that this is consistent with section 138(2)(e) of the QCA Act and the object of Part 5 of the QCA Act.

We are not convinced that this regulatory oversight will result in material delay and regulatory risk for expansions. We consider that the only regulatory risk faced by Aurizon Network from our proposed amendments to commercial terms is the potential refusal of terms deemed to be extracting monopoly rents. In this regard, we consider that our proposal balances the legitimate business interests of Aurizon Network with the interests of access seekers. However, if over time it becomes apparent that the SUFA works effectively to limit Aurizon Network's monopoly power in funding expansions, we may no longer consider that such regulatory oversight is necessary.

We acknowledge that other expansion funders are not exposed to the same requirements. However, the SUFA is untested and Aurizon Network is an established expansion funder. Private funders of an expansion will need to compete with Aurizon Network to offer better terms and conditions. While we consider that regulatory oversight is required to limit Aurizon Network's monopoly power in funding expansions, we do not consider that the same regulatory oversight is required for other expansion funders.

These provisions do not prevent Aurizon Network taking advantage of its strengths, but rather are in place to so that Aurizon Network does not abuse its role as the sole operator of the CQCN.

We consider that the conditions of funding for an expansion and the terms of access agreements will influence one another, with these terms and conditions affecting the costs and risks facing the expansion funder. Therefore, we consider that it is appropriate for both sets of circumstances to be addressed by the same mechanism.

It is our view that an assessment of the proposed access conditions provides further transparency for access seekers in a more timely manner. While we acknowledge that access conditions may differ following the negotiation process, assessing these conditions following a lengthy negotiation period has the potential to delay the expansion process (especially if we decide not to approve a negotiated outcome). We consider that the avoidance of unnecessary delays in the assessment process promotes efficient investment in the CQCN, which is consistent with the object of Part 5 of the QCA Act.

We consider that Aurizon Network should be obliged to initially negotiate the terms of an expansion funding within the requirements of the access undertaking. As noted above, we consider that regulatory oversight is appropriate to protect access seekers. Given that the SUFA is untested and that Aurizon Network is not obliged to fund an expansion, we do not consider that allowing Aurizon Network to initially negotiate outside the scope of the access undertaking is in the interest of access seekers. We note that an access seeker may decide to accept commercial terms that are not approved through the regulatory process. However, we consider that it is in the interest of access seekers to initially negotiate the terms of an expansion funding within the requirements of the access undertaking, as the outcome of the regulatory process

may inform the access seekers' decision. As such, we consider that this proposal is consistent with section 138(2)(e) of the QCA Act and the object of Part 5 of the QCA Act.

We consider that our proposed amendments to the commercial terms strengthen the credibility of the pricing obligations in the 2014 DAU, by setting out the boundaries for negotiation of commercial terms, as well as mechanisms to prevent misuse. This is consistent with the object of Part 5 of the QCA Act, and appropriately balances the interest of access seekers, access holders and train operators, with Aurizon Network's legitimate business interests.

Voluntary funding obligation

We acknowledge the access condition provisions do not fully address the concerns with respect to expansion funding, which remains given the lack of a funding obligation in the 2014 DAU. As noted in section 12.5.2, we consider that a funding obligation in the 2014 DAU would be welcomed by stakeholders and would provide a signal of Aurizon Network's commitment to work collaboratively in seeking economic gains for the CQCN coal supply chain.

Under section 119(2)(c), 119(4), 119(4A) and 119(4B) of the QCA Act, Aurizon Network cannot be obliged to fund an expansion, unless all of the following requirements have been satisfied:

- (a) Under section 119(4)(a), the QCA makes an access determination that is consistent with a requirement imposed under an approved access undertaking for the service that was approved by the QCA under section 136(4) or 142(2).
- (b) The extension will be technically and economically feasible and consistent with the safe and reliable operation of the facility.
- (c) The legitimate business interests of the owner of the facility are protected.

In our IDD amended DAU, we included clause 6.13.3(g)(iii) to meet the requirements of section 119(4), 119(4A) and 119(4B) of the QCA Act. However, we consider that the inclusion of this clause is no longer necessary.

Consolidated draft decision 16.14

- (1) After considering Aurizon Network's proposal for the commercial term provisions in the 2014 DAU, our consolidated draft decision is to refuse to approve the proposal.
- (2) The way in which we consider it appropriate for Aurizon Network to amend its 2014 DAU is to reinstate the 2010 AU access condition provisions, with further amendments (as set out in clause 6.13 of our CDD amended DAU), to:
 - (a) simplify the drafting
 - (b) expand its application to all non-standard terms that have cost and risk implications
 - (c) provide that if the QCA refuses to approve some or all access conditions,
 Aurizon Network can enter into negotiations for a separate arrangement with
 access seekers that will be regarded as entirely outside of the scope of the
 access undertaking, and will be subject to Division 5 of Part 5 of the QCA Act.

We consider it appropriate to make this decision having regard to each of the matters set out in section 138(2) of the QCA Act for the reasons set out in our analysis above.

17 REFERENCE TARIFFS

Reference tariffs and related provisions in Schedule F of Aurizon Network's 2014 DAU provide the basis for determining and recovering access charges. These tariffs apply to Aurizon Network, access seekers, access holders, and other stakeholders.

Upon applying the factors in section 138(2) of the QCA Act, we consider the reference tariffs and related provisions in Schedule F of Aurizon Network's 2014 DAU are not appropriate, so our consolidated draft decision is to refuse to approve Aurizon Network's proposed reference tariff arrangements. The way we consider it appropriate for Aurizon Network to amend its 2014 DAU is to make the following amendments to Schedule F and related reference tariff calculations:

- Remove the proposed rebalancing of the tariff structure and modify the adjustments that were made to address the impact of the increase in AT_2 tariffs.
- Modify tariff calculations for specific train services based on the appropriate application of pricing principles.
- Modify selected general reference train service characteristics.
- Modify selected revenue cap adjustments, including the removal of proposed revenue adjustments to the AT₁ tariff that seek to minimise its variability and incorporate this tariff component in the revenue cap.
- Limit review events to events that are not foreseeable and not within the control of Aurizon Network.

Our consolidated draft decision on the pricing arrangements for WIRP train services is presented separately in Chapter 18.

The detailed drafting of Schedule F attached to this consolidated draft decision sets out the way in which we consider it is appropriate to amend the 2014 DAU.

Appendix A summarises our changes to Aurizon Network's proposed modelling assumptions and methodologies.

Appendix B details our reference tariffs (A T_1 –A T_5), and associated revenue caps, for each system.

17.1 Introduction

Aurizon Network's proposed 2014 DAU reference tariffs comprise:

- charges calculated for reference and cross-system train services derived from reference tariff inputs²¹³ which may be subject to system discounts
- take-or-pay charges.

As discussed in Chapter 15, the existing multi-part reference tariff structure largely reflects the tariff structure developed initially for UT1. The tariff structure has seven different reference tariff inputs.²¹⁴

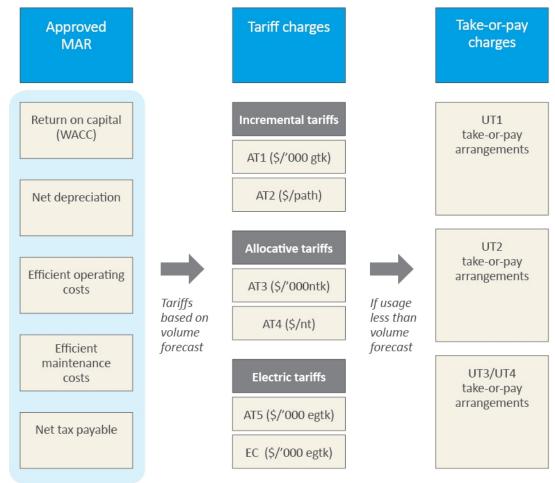
²¹³ Reference tariff inputs are AT₁, AT₂, AT₃, AT₄, AT₅, electric energy charge (EC) and the QCA levy.

²¹⁴ See section 15.2 of our initial draft decision for a more detailed explanation of the existing CQCN tariff structure.

Take-or-pay charges are intended to provide a price signal to customers about contracting for the capacity they will most likely use. The proposed 2014 DAU take-or-pay arrangements are discussed in further detail in Chapter 19.

The figure below outlines the reference tariff and take-or-pay charges for access to the CQCN as proposed by Aurizon Network in the 2014 DAU. The take-or-pay charge for a particular access holder depends on the access undertaking in place when the access agreement was executed.

Figure 8 Reference tariff arrangements in the CQCN



Note: In addition to the tariff components above, a QCA levy recovers costs separate to the approved MAR.

Reference tariff provisions in Aurizon Network's proposed 2014 DAU include:

- provisions about reference train service characteristics which
 - provide certainty to an access holder that it will pay the reference tariff if it meets the reference train service characteristics
 - facilitate the contracting of access rights for an access seeker.
- revenue cap arrangements which provide Aurizon Network with greater certainty that it will
 recover its maximum allowable revenue (MAR) and provide greater certainty and
 transparency to access holders as annual reference tariff variations can be expected to
 reflect revenue cap adjustment outcomes.

17.2 Overview

17.2.1 Aurizon Network's proposal

Reference tariff structure

Aurizon Network did not propose changing the reference tariff structure in Schedule F of the 2014 DAU (cl. 2.2) from the structure in place since UT1, but proposed a major rebalancing of this tariff structure.

Aurizon Network proposed significant increases to the AT_2 reference tariff in various systems; it said the CQCN is capacity constrained and the AT_2 tariff for each system should better reflect the cost of the next expansion on each system. The increase in the AT_2 tariff component resulted in largely offsetting reductions in the allocative tariff components (AT_3 and AT_4).

Consistent with pricing arrangements in UT3, Aurizon Network applied a capacity (diesel) multiplier to adjust the AT₂ charge for the incremental capacity consumption of a diesel train service where applicable.

Aurizon Network proposed that potential adverse implications of the significant increase in the AT₂ tariff be addressed through the following measures:

- changing the calculation of charges for cross-system train services
- changing the calculation of minimum contribution to common costs (CCC)
- setting the AT₄ charge for the Newlands system to zero for all years in the UT4 regulatory period.

Aurizon Network also proposed the use of discounted reference tariffs in place of rebate arrangements for a number of existing spur line users who have signed access facilitation deeds (AFD) with Aurizon Network in previous regulatory periods. The system discount reflects contributed capital on a particular single user spur.

Wiggins Island Rail Project (WIRP) Stage 1

In August 2014, as part of the 2014 DAU process, Aurizon Network provided us with a submission on its proposed revenue and pricing treatment of WIRP Stage 1. This submission contained:

- proposed allocations of capital expenditure, maintenance and operating costs by customer group (including existing customers)
- revenue smoothing applied from 2015–16 when the WIRP infrastructure is included in the capital indicator
- WIRP volumes set at 90 per cent of contracts for pricing purposes.

Aurizon Network proposed that the incremental costs associated with WIRP Stage 1 should be 'socialised' within the Moura and Blackwater systems. By 'socialisation' it was meant that all users of the Moura and Blackwater systems would be required to share the costs and risks of the WIRP infrastructure, rather than only those users who wanted the expansion. Submissions from stakeholders on Aurizon Network's submission provided opposing views on whether the incremental costs of WIRP should be socialised in this manner.

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²¹⁵ Aurizon Network, 2013 DAU, sub. 2: 238.

²¹⁶ Aurizon Network, 2014 DAU, sub. 6.

Subsequently, in December 2014, Aurizon Network provided a WIRP pricing proposal based on the 2010 AU pricing principles. 217

In July 2015, we published a supplementary draft decision that considered Aurizon Network's 2014 DAU submission relating to WIRP pricing arrangements under the 2014 DAU ('WIRP draft decision'). Our consolidated draft decision on WIRP train services is separately presented in Chapter 18.

Goonyella to Abbot Point Expansion (GAPE) project

In September 2013, we approved Aurizon Network's draft amending access undertaking (DAAU) to establish the Goonyella to Abbot Point system (GAP) and applicable reference tariffs. 218

Our approval was based on our acceptance of the:

- establishment of GAP as a new rail system within the CQCN
- setting of new reference tariffs for the GAP system for the remaining years of the 2010 AU regulatory period (2011–12 and 2012–13)
- setting of a transitional reference tariff for the GAP system for 2013–14.

Related pricing arrangements outlined in the 2013 GAPE DAAU were deferred to the 2014 DAU approval process including:

- the proposed allocation of GAPE costs to the Newlands system and resultant pricing arrangements
- recovery of equity raising costs (considered in Chapter 14)
- cost recovery principles for future new customers connecting to the GAPE infrastructure.

Cost recovery principles for new customers connecting to an existing system are discussed further in Chapter 16. The remaining aspects are evaluated further in Section 17.4.

New reference tariffs

Since the beginning of 2013-14, Aurizon Network has sought approval for new 'transitional' reference tariffs for new train services between:

- Middlemount mine and Dalrymple Bay Coal Terminal
- Caval Ridge mine and Hay Point Services Coal Terminal.

In addition, Aurizon Network proposed its electric investments in the Rolleston branch line be recovered from the Blackwater AT₅ tariff because the forecast incremental cost is lower than the Blackwater AT₅ charge. ²¹⁹

Other Schedule F provisions

Schedule F of the 2014 DAU contains provisions about reference train service characteristics similar to those in the 2010 AU, modified to clarify specific characteristics and exclude unnecessary ones.²²⁰

²¹⁷ Aurizon Network 2014(g).

²¹⁸ QCA, 2013(g).

²¹⁹ Aurizon Network, 2013 DAU, sub. 3: 158–159.

²²⁰ Aurizon Network, 2013 DAU, sub. 2: 201.

Schedule F of the 2014 DAU also contains processes for amending access charges similar to those in the 2010 AU, modified to consider factors outside Aurizon Network's direct control (including demand). ²²¹

Aurizon Network proposed revenue adjustments associated with the AT_1 tariff to minimise its variability and incorporate this tariff component in the revenue cap. Aurizon Network advised that the exclusion of AT_1 revenue from the revenue cap exposes it to volume risk because a significant proportion of its maintenance costs are not sensitive to volume changes in the short run.²²²

17.2.2 Outline of the QCA assessment

Our consolidated draft decisions in this chapter have considered the application of section 138(2) of the QCA Act as set out in Section 15.2.

For the reasons given in Chapter 15, we are concerned that many of the proposed changes in Aurizon Network's 2014 DAU will increase the complexity of pricing arrangements that are already complex, resulting in adverse and unclear consequences for some customers.

We consider that the existing pricing structures should be simplified. Aurizon Network should follow a more strategic approach, supported by full customer consultation, to the development of pricing arrangements for UT5. We therefore propose not to approve the more material changes that would result in the rebalancing of the tariff structure.

This is consistent with the application of section 138(2)(h) of the QCA Act, relating to matters affecting access holders and addressing the need for simplicity and clarity. We also consider this approach to be consistent with Aurizon Network's legitimate business interests (section 138(2)(b) of the QCA Act) as it is able to recover its efficient costs. It is also in the interests of access seekers and holders as it should minimise the level of tariff re-balances which may be needed to transition to a longer-term pricing arrangement.

This chapter provides our assessment of Aurizon Network's 2014 DAU on reference tariff calculations, reference train service characteristics, revenue cap adjustments and reference tariff variation events. It also addresses issues on the pricing of new coal carrying train services.

Our detailed consideration of these matters is reflected in the marked-up drafting of Schedule F of the 2014 DAU.

Appendix A summarises our changes to Aurizon Network's proposed modelling assumptions and methodologies.

Appendix B provides updated reference tariffs and allowable revenues based on our changes for this consolidated draft decision.

17.3 Reference tariff structure and derivation

Although Aurizon Network did not propose changing the reference tariff structure in Schedule F of the 2014 DAU (cl. 2.2), it proposed a major rebalancing of its tariff arrangements.

Our initial draft decision was to refuse to approve Aurizon Network's proposed rebalancing of its tariff arrangements. We consider it appropriate to amend Schedule F of the 2014 DAU and

²²² Aurizon Network, 2013 DAU, sub. 2: 246.

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²²¹ Aurizon Network, 2013 DAU, sub. 2: 246.

Aurizon Network's pricing model by reversing the range of changes proposed and generally retaining the existing 2010 AU arrangements.

For the reasons outlined in Chapter 15, we considered that Aurizon Network's proposed changes would result in pricing arrangements that were overly complex. Furthermore, the proposed changes would result in 'winners and losers' that were difficult to identify. It would be preferable to take a more strategic approach for UT5, supported by full customer consultation.

Below, we discuss the following tariff issues:

- incremental maintenance charge (AT₁ tariff)
- incremental capacity charge (AT₂) and associated changes to address the impact of proposed AT₂ increases over UT4
- system discount.

17.3.1 Incremental maintenance charge (AT₁)

Aurizon Network's proposal

Aurizon Network said the AT_1 maintenance component (which is levied on a dollar per thousand gtk basis), should signal the long-run change in maintenance costs that result from an increase in volume, recognising that some of these costs were fixed in the short run.²²³

Aurizon Network's proposed AT₁ tariff component for the UT4 period was:

- based on the AT₁ tariff rate approved as at 1 July 2009 (as part of the 2010 AU)
- escalated yearly by the maintenance cost index (MCI) to the beginning of the UT4 period of 1
 July 2013 (equal to a cumulative rate of 19.5 per cent over the period)
- escalated by forecast CPI (2.5 per cent) each year over the UT4 period.

Aurizon Network also proposed including AT_1 in the revenue cap in order to reduce its volume risk. ²²⁴ This matter is discussed further in Section 17.7.

Summary of the initial draft decision

Our initial draft decision was to refuse to approve the AT_1 reference tariff as proposed by Aurizon Network. While we accepted the base-year AT_1 rate as calculated by Aurizon Network (by escalating the UT3 rate using the MCI), we proposed that the base-year AT_1 be escalated over the UT4 period using the approved forecast MCI from our MAR draft decision.

Specifically, our initial draft decision 17.3 was:

Our Draft Decision is to refuse to approve Aurizon Network's proposed AT_1 calculation approach. We would approve an amendment to the 2014 DAU, to escalate the AT_1 according to the MCI over the 2014 DAU regulatory period.

Our full analysis and reasoning is contained in Section 17.3 of the initial draft decision under the heading 'Incremental maintenance charge (AT_1) '. We adopt that analysis and reasoning for the purposes of this consolidated draft decision, subject to the comments in the remainder of this section.

²²³ Aurizon Network, 2013 DAU, sub. 2: 239.

²²⁴ Aurizon Network, 2013 DAU, sub. 2: 256–258.

Stakeholders' comments on the initial draft decision

Aurizon Network agreed with our initial draft decision to escalate the AT_1 rate according to the forecast MCI over the 2014 DAU regulatory period. Aurizon Network noted that it would be exposed to additional volume risk should the MCI vary from forecast. ²²⁵

QCA analysis and consolidated draft decision

After having regard to the criteria in section 138(2) of the QCA Act and stakeholders' submissions, we refuse to approve Aurizon Network's proposals relating to the AT_1 reference tariff in the 2014 DAU.

Our initial draft decision was that the AT₁ reference tariff should remain unchanged from the approach used in previous access undertakings since UT1.

As Aurizon Network agreed with our initial draft decision and we have not received any new information from other stakeholders, our consolidated draft decision is to maintain our initial draft decision to escalate Aurizon Network's proposed base-year AT_1 rate by the approved MCI over the UT4 regulatory period. We consider our proposed approach provides an appropriate balance among the interests of Aurizon Network and access seekers and access holders under section 138(2) of the QCA Act.

17.3.2 Incremental capacity charge (AT₂)

Aurizon Network's proposal

Aurizon Network's 2014 DAU proposed the following based on its view that the CQCN is capacity constrained:

- For each system, the AT₂ tariff should better reflect the cost of the next expansion in order to provide more effective pricing signals for incremental capacity costs. ²²⁶
- Expansion costs are now considerably higher and the nature of the forward-looking investment path had materially changed since the beginning of UT1. For example, the Blackwater system's investment path had focused on duplication, which would be completed with the WIRP upgrade.²²⁷
- As the AT₂ tariff depended on the scope, scale and timing of the expansions considered, the following common corridor expansions are appropriate for calculating the relevant systemspecific AT₂ charge:
 - Blackwater: Rocklands to Stanwell and Dingo to Bluff duplication projects
 - Goonyella: Goonyella rail expansion project (HPX3) and an additional 30 mtpa to
 Dudgeon Point (excluding any port-specific investment)
 - GAPE and Newlands: a 25 million tonne expansion to Abbot Point (only considering the expansion costs in line sections common to both systems).²²⁸
- For the Moura System, the existing AT_2 tariff should be escalated by CPI. An AT_2 charge based on expanding that system to support WIRP Stage 2 would materially exceed the MAR, resulting in the long-run marginal cost exceeding the historical total actual cost. ²²⁹

²²⁷ Aurizon Network, 2013 DAU, sub. 2: 239–240; sub. 77: 81.

²²⁵ Aurizon Network, 2014 DAU, sub. 82: 248.

²²⁶ Aurizon Network, 2013 DAU, sub. 2: 241.

²²⁸ Aurizon Network, 2013 DAU, sub. 2: 241; sub. 3: 155, 157.

The table below summarises Aurizon Network's proposed AT₂ tariffs for the different coal systems.

Table 67 AT₂ incremental capacity charge (\$ per train path, nominal)

System	2014 DAU proposed (2013–14)	2010 AU (2012–13)	Variation
Blackwater	5,030	1,970	155%
Goonyella	2,488	1,248	99%
Moura	612	590	4%
Newlands	6,976	264	2,544%
GAPE (June 2013 GAPE DAAU)	6,976	12,249	-43%

Source: 2014 DAU; 2010 AU; June 2013 GAPE DAAU.

Consistent with pricing under the 2010 AU, Aurizon Network included a capacity (diesel) multiplier, which estimates the incremental capacity consumption of a diesel train service in each of the Blackwater and Goonyella systems. The proposed increase in the AT₂ tariffs amplifies the signal from this capacity (diesel) multiplier.

Proposed changes to mitigate AT₂ impact

Aurizon Network proposed that the potential adverse implications of the significant increases in AT₂ tariffs should be addressed through such measures as:

- calculating the minimum CCC for existing mines at Minerva, Lake Vermont (to RG Tanna),
 Rolleston and Middlemount using a 5 per cent per annum escalation factor over the 2014
 DAU regulatory period, and calculating the base CCC using 2012–13 reference tariffs
- reducing the AT_4 rate for the Newlands system to zero for all years in the 2014 DAU regulatory period to offset the reduction in the distance taper resulting from the increase in the AT_2 charge (since both AT_2 and AT_4 have a pricing unit which is not distance related)^{230,231}
- changing the 2010 AU treatment of tariff components AT_3 and AT_4 in the calculation of crosssystem train services to ensure that the proposed AT_2 increase to the Blackwater and Goonyella systems does not unreasonably disadvantage cross-system train services. ²³²

Summary of the initial draft decision Incremental capacity charge (AT₂)

Our initial draft decision was to refuse to approve Aurizon Network's proposed changes to the AT₂ reference tariffs and related changes that sought to address the consequential effects.

Specifically, our initial draft decision 17.1 was:

Our Draft Decision is to refuse to approve Aurizon Network's proposed pricing matters relating to the AT_2 tariffs. We would approve amendments to the 2014 DAU, to:

²²⁹ Aurizon Network, 2013 DAU, sub. 2: 241.

²³⁰ This adjustment offsets the increase in costs in the AT_2 rate with a reduction in costs allocated to the AT_4 rate (and an increase in costs allocated to the distance related AT_3 rate).

²³¹ Aurizon Network, 2013 DAU, sub. 2: 241–242; sub. 77: 81.

²³² Aurizon Network, 2013 DAU, sub. 2: 194.

- (a) escalate the 2012–13 AT₂ tariffs from the 2010 AU by CPI over the 2014 DAU regulatory period
- (b) remove the adjustments that were made to address the impact of the increase in AT_2 tariffs as follows:
 - (i) revert the calculation of the charge for cross-system train services to the 2010 AU approved approach for AT_3 and AT_4 tariffs
 - (ii) revert the calculation of minimum contribution to common costs (CCC) to the 2010 AU approved approach
 - (iii) reset the AT_4 tariffs for the Newlands system to the standard calculation approach used in other systems for all years in the 2014 DAU regulatory period.

Our full analysis and reasoning is contained in Section 17.3 of the initial draft decision under the heading 'Incremental capacity charge (AT_2) '. We adopt that analysis and reasoning for the purposes of this consolidated draft decision, subject to the comments in the remainder of this section.

As outlined in Chapter 15 of the initial draft decision, we considered that the current approach to reference tariffs was too complex. Prior to changes that will have diverse effects on users, a more transparent and rigorous review of the future structure of reference tariffs should occur.

Moreover, it was not clear that Aurizon Network's proposed AT₂ tariffs were set at the most efficient level for future expansions. The AT₂ tariffs appeared to be based on large rather than small capacity increments (e.g. Dudgeon Point coal terminal for Goonyella). In addition, a number of port expansion projects identified by Aurizon Network (for example, Dudgeon Point coal terminal ²³³) were no longer being considered for development.

As a result, we were not persuaded that the proposed AT₂ tariff rates were consistent with the requirements of section 168A of the QCA Act.

Capacity (diesel) multiplier

Our initial draft decision also considered the application of the 'diesel' multiplier to the AT_2 charge for diesel trains in the Blackwater and Goonyella systems. This diesel multiplier was intended to provide a price signal about the opportunity cost of operating a train that varies substantially from the standard train and consumes more network capacity than the reference train.

The capacity multiplier was set in UT1, and reflected the relative performance of electric versus diesel trains at that time. However, the train fleet has changed considerably since UT1 and the relative performance of the two forms of locomotive is now similar. As no evidence was provided that operating a diesel train varied substantially from an electric train and consumes more network capacity, we were not persuaded that the proposed multiplier rates were consistent with the requirements of sections 138 and 168A of the QCA Act.

Therefore, we removed the diesel multiplier from our calculation of reference tariffs in our initial draft decision.

Specifically, our initial draft decision 17.2 was:

Our Draft Decision is to refuse to approve Aurizon Network's proposed capacity 'diesel' multiplier. We would approve an amendment to the 2014 DAU to remove the capacity 'diesel' multiplier.

²³³ NQBP media release: http://www.nqbp.com.au/media-statement-cancellation-of-declaration-for-dudgeon-point-coal-terminals-project: Cancellation of Declaration for Dudgeon Point Coal Terminals Project.

We will reconsider this issue if there is evidence to support the continued use of the capacity 'diesel' multiplier.

Our full analysis and reasoning is contained in Section 17.3 of the initial draft decision under the heading 'Capacity diesel multiplier'. We adopt that analysis and reasoning for the purposes of this consolidated draft decision, subject to the comments in the remainder of this section.

Stakeholders' comments on the initial draft decision

The table below summarises stakeholders' comments on our initial draft decision on AT₂ tariffs.

Table 68 Stakeholders' comments on the initial draft decision on AT₂ tariff changes

Issues	Stakeholders' comments	
AT ₂ tariffs	Aurizon Network considered that our AT_2 reference tariffs do not provide an appropriate price signal of the cost of creating network capacity. However, it was prepared to accept our position on the basis that it has the opportunity to reassess AT_2 as part of any future pricing review. In addition, Aurizon Network proposed that the AT_2 tariff be escalated using the mid-point of the RBA's target rate of inflation for the remaining years of UT4.	
	The QRC had some concerns with our initial draft decision to reject the increase of revenue recovery through AT ₂ . However, it generally accepted the initial draft decision pending the completion of a full review of reference tariffs. ²³⁵	
Calculation of charge for cross-system train services	Aurizon Network disagreed with our initial draft decision that the calculation of the charges for cross-system train services should remain unchanged from the 2010 AU approved approach for AT $_3$ and AT $_4$ tariffs. It contends that its 2014 DAU approach for calculating cross-system reference tariffs was developed at the request of QRC to improve consistency between the ways tariffs are derived and revenues allocated. Aurizon Network reiterated its proposal to:	
	• calculate the AT ₃ cross-system reference tariff as the average AT ₃ in each system, weighted in accordance with the distance travelled	
	• set the AT ₄ cross-system reference tariff equal to the applicable reference tariff of the origin system. ²³⁶	
	The QRC maintained its support for Aurizon Network's proposal to amend the AT_3 and AT_4 calculation methodologies for cross-system train services. QRC said that it is not aware of any stakeholders that have an objection to the change, and does not consider that this improvement should be deferred. ²³⁷	
Capacity 'diesel' multiplier	While Aurizon Network agreed with our initial draft decision, it sought to clarify that there is no such thing as a 'diesel multiplier'. It stated that there is only a capacity multiplier, which is applicable to train services independent of traction choice. ²³⁸	
	The QRC stated that it is relying on the QCA to determine the appropriateness and magnitude of the diesel multiplier without further comments. ²³⁹	
	Asciano supported removing the diesel capacity multiplier. 240	

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²³⁴ Aurizon Network, 2014 DAU, sub. 82: 245.

²³⁵ QRC, 2014 DAU, sub. 84: 43–44.

²³⁶ Aurizon Network, 2014 DAU, sub. 82: 246–248.

²³⁷ QRC, 2014 DAU, sub. 84: 41–42.

²³⁸ Aurizon Network, 2014 DAU, sub. 82: 248.

²³⁹ QRC, 2014 DAU, sub. 84: 44.

²⁴⁰ Asciano, 2014 DAU, sub. 76: 23.

QCA analysis and consolidated draft decision

After having regard to the criteria listed in section 138(2) of the QCA Act and stakeholders' submissions, we refuse to approve Aurizon Network's proposals relating to the AT_2 reference tariff in the 2014 DAU.

Incremental capacity charge (AT₂)

Aurizon Network accepted our initial draft decision on the basis that it will have the opportunity to reassess AT_2 as part of any future pricing review. In addition, we have not received any new information from stakeholders.

We therefore maintain our analysis and conclusions from the initial draft decision. Our consolidated draft decision is to refuse to approve Aurizon Network's proposed changes to the AT₂ reference tariffs and related changes that seek to address consequential effects, with the exception of the calculation of charges for cross-system train services.

Calculation of charges for cross-system train services

Our analysis of the 2010 AU approach to calculating AT_3 and AT_4 for cross-system train services (which we also proposed in our IDD amended DAU) shows that:

- AT₃ is set at the maximum of the origin AT₃ or destination AT₃, while the revenues are largely allocated according to the distance travelled
- AT₄ is set at the maximum of the origin AT₄ or destination AT₄ while the revenues are fully allocated to the origin system.

Therefore, cross-system train services that predominantly travel in one system may be exposed to the higher AT_3 and AT_4 of the other system.

Aurizon Network's proposed 2014 DAU approach aligns the derivation of the AT_3 and AT_4 tariffs with how revenues are allocated; it sets the AT_3 based on a weighted average of distance travelled in the origin and destination systems and sets the AT_4 equal to the origin AT_4 tariff.

We consider that Aurizon Network's proposed 2014 DAU approach which aligns the derivation of the AT₃ and AT₄ tariffs with how revenues are allocated is appropriate and does not adversely affect other stakeholders. We consider Aurizon Network's proposal provides an appropriate balance among the interests of Aurizon Network and access seekers and access holders under section 138(2) of the QCA Act.

Capacity (diesel) multiplier

Aurizon Network agreed with our initial draft decision to remove the diesel multiplier. We have also not received any new information from other stakeholders that persuades us to reconsider this position. Therefore, our consolidated draft decision is to refuse to approve Aurizon Network's proposed capacity 'diesel' multiplier.

As our initial draft decision concluded, we are not persuaded that the proposed diesel multiplier rates are consistent with the requirements of sections 138 and 168A of the QCA Act.

17.3.3 System discount

Aurizon Network's proposal

Aurizon Network's 2014 DAU proposed discounted reference tariffs in place of rebate arrangements for a number of existing spur users who have signed access facilitation deeds (AFDs) with Aurizon Network in previous regulatory periods.²⁴¹

An AFD is a financial agreement stating that a spur user pays upfront capital and interest costs for the construction of mine-specific infrastructure (MSI) (in order to connect to a rail mainline for coal export), in which a rebate (with a value equivalent to the return on and return of capital for that MSI) is then returned to that spur user.

Where a single-user spur (or part thereof) subsequently becomes a multi-user spur, Aurizon Network proposed to have the relevant portion of those assets included in the system reference tariff with the discount reduced accordingly. Aurizon Network would then reimburse the original user through a return to the rebate arrangement.

Aurizon Network submitted that its proposal eliminates the need to rebate revenue that should not have been collected and avoids the complexity of calculating individual allowable revenues for each spur line.²⁴²

Summary of our initial draft decision

We concluded that there was not strong justification for moving from rebate arrangements to a system discount applicable to the system reference tariff for mines with contributed capital on a single-user spur. The rebate arrangements provided a transparent approach to refunding the capital charge associated with the contributed assets. We were not convinced that the proposed discount resulted in an equivalent outcome to the existing rebate arrangements. In addition, maintaining rebates allowed a consistent approach for single-user and multi-user spurs.

Specifically, our initial draft decision 17.4 was:

Our Draft Decision is to refuse to approve Aurizon Network's proposed system discounts. We would approve an amendment to the 2014 DAU, to:

(a) remove the system discount and revert to the rebate arrangements in place under the 2010 AU

Our full analysis and reasoning is contained in Section 17.3 of the initial draft decision under the heading 'System discount'. We adopt that analysis and reasoning for the purposes of this consolidated draft decision, subject to the comments in the remainder of this section.

Stakeholders' comments on the initial draft decision

While Aurizon Network was neutral to the QCA's position on this matter, it believed further variations to the reference tariffs would not be unduly onerous or confusing, and the system discount approach promoted effective competition in upstream and downstream markets.²⁴³

²⁴² Aurizon Network, 2013 DAU, sub. 2: 238.

²⁴¹ Aurizon Network, 2013 DAU, sub. 2: 238.

²⁴³ Aurizon Network, 2014 DAU, sub. 82: 249.

QCA analysis and consolidated draft decision

After having regard to the criteria listed in section 138(2) of the QCA Act and stakeholders' submissions, we do not consider it appropriate to approve Aurizon Network's proposed system discounts.

Aurizon Network is neutral to our initial draft decision, which removed the proposed system discount and maintained the existing rebate arrangements. We have also not received any new information from other stakeholders that persuades us to reconsider our initial draft decision.

We remain unconvinced that the proposed discount leads to an equivalent outcome to the existing rebate arrangements. Rebates provide transparency for refunding the capital charge associated with contributed assets, and consistency for single and multi-user spurs.

A transparent approach to refunding the capital charge is in the interests of access seekers and holders (s. 138(2)(e) and (h) of the QCA Act), and also recognises Aurizon Network's legitimate business interests as it does not adversely affect Aurizon Network's ability to earn revenue that reflects its efficient costs or reasonable rate of return (s. 138(2)(b) and (g) of the QCA Act).

For these reasons, our consolidated draft decision is to maintain the existing rebate arrangements.

17.3.4 Conclusion

Our proposed amendments are in the interests of access seekers and holders (s. 138(2)(e) and (h) of the QCA Act) because they result in a relatively stable profile of access charges, which reduces uncertainty. Our proposed amendments also recognise Aurizon Network's legitimate business interests because they do not adversely affect Aurizon Network's ability to earn revenue that reflects its efficient costs and appropriate rate of return (s. 138(2)(b) and (g) of the QCA Act). Therefore, our proposed changes provide an appropriate balance among the interests of Aurizon Network and access seekers and access holders under section 138(2) of the QCA Act.

Consolidated draft decision 17.1

- (1) After considering Aurizon Network's proposed changes to its tariff arrangements, our consolidated draft decision is to refuse to approve Aurizon Network's original proposal.
- (2) The way in which we consider it is appropriate that Aurizon Network amend its draft access undertaking is to:
 - (a) escalate the 2012–13 AT₂ tariffs from the 2010 AU by CPI over the 2014 DAU regulatory period
 - (b) remove the adjustments that were made to address the impact of the increase in AT₂ tariffs as follows:
 - (i) revert the calculation of minimum contribution to common costs to the 2010 AU approved approach
 - (ii) reset the AT₄ tariffs for the Newlands system to the standard calculation approach used in other systems for all years in the 2014 DAU regulatory period.
 - (c) remove the proposed capacity 'diesel' multiplier from reference tariff calculations.
 - (d) escalate the AT₁ according to the MCI over the 2014 DAU regulatory period.
 - (e) remove the system discount and revert to the rebate arrangements in place under the 2010 DAU.

We consider it appropriate to make these decisions having regard to each of the matters set out in section 138(2) of the QCA Act for the reasons set out in our analysis above.

17.4 Impact of the GAPE project on pricing arrangements

17.4.1 Aurizon Network's proposal

Aurizon Network's 2014 DAU proposed pricing arrangements for the GAPE project are largely consistent with its 2013 GAPE DAAU proposal. These proposed pricing arrangements affect the reference tariffs and allowable revenues for the Newlands system (cl. 9) and GAP system (cl. 10) in Schedule F of Aurizon Network's 2014 DAU.

Key aspects of the pricing arrangements for the GAPE project proposed in Aurizon Network's 2014 DAU price modelling are the:

- inclusion of the GAP system which comprises the rail infrastructure connecting the Goonyella and Newlands systems²⁴⁴ and infrastructure enhancements required in the Goonyella and Newland systems
- allocation of GAPE capital costs by customer type to ensure that customers who benefit from capital works pay for them, in particular:

²⁴⁴ Defined as the Goonyella Newlands Connection in Part 12 Definitions of the 2014 DAU. This is also referred to as the Northern Missing Link.

- application of a GAP system reference tariff to customers who utilise the Goonyella Newlands Connection (GAPE Deed customers) to reflect all project costs associated with the Goonyella Newlands Connection, Goonyella system enhancements and a proportion²⁴⁵ of new investment for Newlands enhancements
- application of a Newlands reference tariff to all existing Newlands customers and new Newlands to Abbot Point Expansion (NAPE) Deed customers that includes the following GAPE project costs:
 - the difference between the approved UT3 (actual) capital expenditure for the Newlands system and the approved UT3 (forecast) capital indicator for the Newlands system²⁴⁶
 - o a proportion²⁴⁷ of GAPE project costs for Newlands enhancements
- application of the existing Goonyella system reference tariff to customers located in the Goonyella system that do not use the Goonyella Newlands Connection.
- recovery of equity raising costs (considered in Chapter 14 on Schedule E Regulatory Asset
- introduction of cost recovery principles for new customers connecting to the GAPE infrastructure.

Aurizon Network justified the socialisation of NAPE costs within the Newlands system on the basis that part of this expenditure would have been required in the Newlands system in the absence of the GAPE project. Aurizon Network also argued that existing Newlands users derive a benefit from the GAPE project, including the ability to operate longer and heavier trains. 248

QRC made the following submissions as part of the GAPE 2013 DAAU process (these issues were deferred for consideration as part of the 2014 DAU approval process):

- Some of the costs allocated to Newlands may have been incurred in the absence of the GAPE project. In particular, the capital expenditure incurred in 2011–12 and included in the UT3 capital indicator for the Newlands system should be assessed further.²⁴⁹
- Costs incurred for NAPE customers should only be allocated to the Newlands system if this results in a decrease in tariffs for Newlands customers. If the result is higher tariffs, then there may be a case for a system premium to be applied to new expanding customers. ²⁵⁰

²⁴⁵ Based on GAPE Deed contract tonnages as a proportion of total GAPE and NAPE Deed contract tonnages

⁽Aurizon Network, 2013(a): 21). ²⁴⁶ Aurizon Network said this amount (\$30.3 million in its 2014 DAU modelling) was a proxy estimate for track renewal works that would have been required in the Newlands system in the absence of the GAPE project. Aurizon Network said these works were subsequently completed as part of the GAPE scope of works (Aurizon Network, 2013(a): 21).

²⁴⁷ Based on NAPE Deed contract tonnages as a proportion of total GAPE and NAPE Deed contract tonnages (Aurizon Network, 2013(a): 21). ²⁴⁸ Aurizon Network, 2013(a): 21.

²⁴⁹ QRC 2013(a): 4–6.

²⁵⁰ QRC 2013(a): 5.

17.4.2 Summary of our initial draft decision

Our initial draft decision refused to approve Aurizon Network's proposals for the pricing arrangements for the GAPE project. We considered it appropriate that Aurizon Network amend the 2014 DAU as outlined below.

Specifically, our initial draft decision 17.5 was:

Our Draft Decision is to refuse to approve Aurizon Network's proposed pricing matters outlined in this section. We would approve amendments to the 2014 DAU, to:

- (a) remove NAPE costs from the Newlands system
- (b) create an independent NAP system with a separate reference tariff and the required access undertaking amendments to recover the tariff revenue
- (c) revise the GAP system tariff so that the AT_3 and AT_4 tariff components are calculated in a manner consistent with other CQCN reference tariffs in order to recoup the remainder of costs not recovered via the AT_1 and AT_2 tariffs.

Our full analysis and reasoning is contained in Section 17.4 of the initial draft decision. We adopt that analysis and reasoning for the purposes of this consolidated draft decision, subject to the comments in the remainder of this section.

GAP system tariff

Cost allocation and common cost contribution

Our initial draft decision considered that Aurizon Network's 2014 DAU proposed approach to allocating capital costs to the GAP system was consistent with the requirements of Part 5 of the QCA Act. The proposed approach allocated capital costs to the GAP system based on the proportion of total contracted volumes attributable to GAPE customers, including:

- 100 per cent of the costs of the Goonyella Newlands Connection, as only GAPE customers use this infrastructure
- 100 per cent of the costs of the Goonyella system enhancements, as these enhancements are only required due to the construction of the Goonyella Newlands Connection
- 81 per cent of the costs of the Newlands system enhancements, reflecting the proportion of contract tonnes relating to GAPE, rather than NAPE, customers.^{251,252}

Consistent with its GAPE 2013 DAAU proposal, Aurizon Network did not propose an allocation to the GAP system of common costs from the Goonyella and Newlands systems. Given that expanding users would already be paying access charges that are higher than the access charges faced by existing users, we considered it reasonable that expanding users not make a contribution towards common costs. A requirement to pay common costs would impose an additional burden that could dissuade investment. In addition, a zero contribution to common costs from expanding users would not make existing users worse off. This was consistent with Aurizon Network's proposed expansion pricing principles in the 2014 DAU that we accepted in section 16.5.3 of the initial draft decision.

We considered a zero contribution to common costs from expanding users to be consistent with the object of Part 5 of the QCA Act, as it was consistent with the objective of promoting efficient

²⁵¹ This proportion is consistent with the GAPE customer share of contract tonnages as a proportion of total GAPE and NAPE Deed contract tonnages (Aurizon Network, 2013(a): 21).

²⁵² The remaining 19 per cent of costs relating to NAPE customers were allocated by Aurizon Network to the Newlands system. The allocation of NAPE costs to the Newlands system is discussed further below.

investment in the CQCN, and appropriately balanced the interests of access seekers and access holders (s. 138(2)(e) and (h) of the QCA Act). It also recognised Aurizon Network's legitimate business interests as it did not adversely affect Aurizon Network's ability to earn revenue that reflected its efficient costs including an appropriate rate of return (s. 138(2)(b) and (g) of the QCA Act).

Recovery of Goonyella system enhancements

Our initial draft decision noted that Aurizon Network calculated the AT₃ and AT₄ tariff components for GAP system train services in a manner that differed from other CQCN reference tariffs. Specifically, Aurizon Network set the GAP system AT₃ tariff to recover only Goonyella system enhancements (including electric costs associated with additional passing loops). The AT₄ tariff recovered the remainder of the GAP costs not recovered from the AT₁, AT₂ and AT₃ tariff components.

We understood that this alternative tariff calculation was meant to provide different pricing arrangements for customers that do not use the Goonyella system enhancements. In particular, customers that connected directly to the Goonyella Newlands Connection would not pay the AT₃ tariff.

We did not consider that Aurizon Network had provided sufficient justification for this modified approach. We considered that a transparent and consistent approach to calculating reference tariffs in the CQCN was in the interests of access seekers and holders (s. 138(2)(e) and (h) of the QCA Act). This approach also recognised Aurizon Network's legitimate business interests as it did not adversely affect Aurizon Network's ability to earn revenue that reflected its efficient costs and appropriate rate of return (s. 138(2)(b) and (g) of the QCA Act).

Therefore, our reference tariffs calculated the AT_3 and AT_4 tariffs for the GAP system on a basis consistent with other system reference tariffs in the CQCN.

Tariff for NAPE users

Cost allocation and common cost contribution

Our initial draft decision refused to approve Aurizon Network's proposed allocation of GAPE project costs to the Newlands system.

We considered that:

- the inclusion of NAPE costs, and associated new volumes, would materially increase the Newlands system reference tariff
- Aurizon Network had not provided evidence to justify its claims that:
 - existing Newlands users would benefit from the infrastructure enhancements
 - part of the renewal works would have been required in the Newlands system in the event that the GAPE project did not proceed
- NAPE users should be charged at least the incremental cost of their access
- as expanding NAPE users faced an incremental cost that was higher than the access charges
 faced by existing Newlands system users, it was reasonable that expanding NAPE users not
 make a contribution towards common costs.

We considered that our approach appropriately balanced the interests of expanding and existing users (s. 138(2)(e) and (h) of the QCA Act), and was consistent with the object of Part 5 of the QCA Act.

Independent Newlands to Abbot Point (NAP) system for pricing purposes

Our initial draft decision concluded that the application of a system premium (in addition to the Newlands system reference tariff) could result in existing users potentially bearing a substantial part of the costs of an expansion. In particular, under-railings by expanding users would result in higher take-or-pay liabilities or greater revenue shortfalls to be recovered from all users through the revenue cap adjustment process.

We considered that it is more appropriate for a separate reference tariff²⁵³ to cover the potential costs and risks of expansion for existing users.

Our pricing arrangements appropriately balanced the interests of expanding and existing users (s. 138(2)(e) and (h) of the QCA Act), and were consistent with the object of Part 5 of the QCA Act. They also recognised Aurizon Network's legitimate business interests as they did not adversely affect Aurizon Network's ability to earn revenue that reflects its efficient costs and appropriate rate of return (s. 138(2)(b) and (g) of the QCA Act).

17.4.3 Aurizon Network's comments on the initial draft decision

Aurizon Network's comments on our initial draft decision are summarised in the table below.

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²⁵³ This separate reference tariff was proposed to be implemented by creating an independent NAP system for pricing purposes, consistent with the pricing approach for the GAP system.

Table 69 Aurizon Network comments on the initial draft decision on GAPE pricing

Issues	Aurizon Network comments	
Cost allocation to existing Newlands customers	Aurizon Network disagreed with our initial draft decision to remove the \$30.3 million ²⁵⁴ it proposed to allocate to the Newlands system and allocate this to NAPE customers. Aurizon Network said we approved their 2013 GAPE DAAU and their 2011–12 RAB roll-forward which included this amount in the Newlands system. ²⁵⁵	
	Aurizon Network reiterated that these are not NAPE costs, and are for track renewal works that would have been required in the Newlands system even if the GAPE project did not proceed. Aurizon Network noted that these works were subsequently completed as part of the GAPE scope of works.	
Independent NAP system for pricing purposes	Aurizon Network proposed that the allowable revenues and volumes associated with the NAPE share of capital expenditure be removed from its 2014 DAU submission, until such time as there is more certainty regarding the commencement of NAPE Train Services. 257	
	Aurizon Network disagreed with our initial draft decision 17.5(b) to create an independent NAP system.	
	It said that when the commencement date becomes clear, they will submit a DAAU to address the pricing treatment of NAPE Train Services. ²⁵⁸	
AT ₃ and AT ₄ tariff components of the GAP system	Aurizon Network disagreed with our initial draft decision 17.5(c) to revise the GAP system tariffs, citing our approval of its GAP reference tariff structure as a reason not to change their pricing structure.	
	Aurizon Network said the GAP reference tariff structure was established to provide additional transparency of the access charges associated with the Goonyella system enhancements costs. The allocation of Goonyella system enhancement costs to the AT ₃ tariff (applied on a nt basis) results in the only difference in charge between train services being due to relative net tonnes. ²⁶⁰	
	It suggested we leave the GAP reference tariff structure in its current form as we have not provided any reasons for the revision, and we have not identified any stakeholder concerns or objections. ²⁶¹	

17.4.4 Other stakeholders' comments on the initial draft decision

Other stakeholders' comments are summarised in the table below.

The GAPE Reference Tariff structure was established to provide additional transparency to GAPE Train Services paying the GAPE Reference Tariffs. Through this structure, GAPE Access Seekers and Access Holders will be able to independently verify the Access Charges associated with the Goonyella System Enhancements.

The pricing structure is also consistent with the operational characteristics of the haul from the North Goonyella Junction (starting point of the NML). That is, all customers travel the same distance, so the only differences between train services are due to Net Tonnes. Aurizon

²⁵⁴ This amount relates to the difference between the approved UT3 (actual) capital expenditure for the Newlands system and the approved UT3 (forecast) capital indicator for the Newlands system.

²⁵⁵ Aurizon Network, 2014 DAU, sub. 82: 251.

²⁵⁶ Aurizon Network, 2014 DAU, sub. 82: 251.

²⁵⁷ Aurizon Network, 2014 DAU, sub. 82: 252.

²⁵⁸ Aurizon Network, 2014 DAU, sub. 82: 252.

²⁵⁹ Aurizon Network, 2014 DAU, sub. 82: 252–253.

²⁶⁰ Aurizon Network, 2014 DAU, sub. 82: 253.

²⁶¹ Aurizon Network, 2014 DAU, sub. 82: 252–253.

Network considers that the increased transparency provided via the GAPE Reference Tariff structure is in the interest of GAPE Access Seekers and Access Holders.

Table 70 Stakeholders' comments on the initial draft decision on GAPE pricing

Issues	Stakeholders' comments	
Cost allocation to existing Newlands customers	BMA agreed with our assessment that Aurizon Network's justification for allocating \$30.3 million to the Newlands asset base was not robust. 262	
	QCoal questioned whether the QCA's allocation of the \$30.3 million to NAPE Deed customers is consistent with the allocation approach set out in the original GAPE pricing decision. ²⁶³	
	QCoal argued that this amount should not be apportioned entirely to NAPE customers, but included in the total project capital cost and then allocated across all GAPE project customers. ²⁶⁴	
Other cost allocation issues	QCoal said that Aurizon Network's allocation of common or indirect costs of the GAPE actual project costs between the various systems is not transparent and appears to be inconsistent with direct expenditure allocations. QCoal suggested that an independent assessment of the apportionment of project costs should be undertaken prior to the finalisation of reference tariffs.	
Sustaining capital expenditure to upgrade the Newlands system	QCoal contended that it is logical that any sustaining capital expenditure that upgrades the Newlands system be allocated between all systems—Newlands, GAPE and NAPE—utilising the infrastructure on a proportional basis. QCoal questioned how sustaining capital, operating and maintenance expenditure are to be allocated in the future, as the concept of Newlands system tariff is now blurred. ^{266,267}	
Independent NAP system for pricing purposes	QCoal disagreed with our initial draft decision 17.5(b) to create an independent NAP system. They submitted that the NAPE Deed was signed on the basis of a socialised Newlands tariff. 268	

17.4.5 QCA analysis and consolidated draft decision

Having regard to the section 138(2) factors and stakeholders' submissions, we refuse to approve Aurizon Network's proposed GAPE pricing arrangements in the 2014 DAU.

We have concluded that, for some of the issues raised, we have not received any new information or arguments that compel us to change our initial draft decision. For these issues, our consolidated draft decision is to confirm the amendments to Aurizon Network's 2014 DAU and associated pricing model set out in the initial draft decision.

Where new information or arguments have resulted in changes to our initial draft decision, our consolidated draft decision is to incorporate the amendments set out below.

Cost allocation to existing Newlands customers

Although we accepted Aurizon Network's Newlands capital indicator in the UT3 undertaking period, the amount to be included in the roll-forward is subject to an ex post prudency and efficiency review. Based on this review, we approved a total capital expenditure of \$11.9 million

²⁶² BMA, 2014 DAU, sub. 78: 10.

²⁶³ QCoal, 2014 DAU, sub. 80: 5.

²⁶⁴ QCoal, 2014 DAU, sub. 81: 2–5.

²⁶⁵ QCoal, 2014 DAU, sub. 80: 6.

²⁶⁶ QCoal, 2014 DAU, sub. 80: 5.

²⁶⁷ QCoal, 2014 DAU, sub. 81: 2, 5–6.

²⁶⁸ QCoal, 2014 DAU, sub. 81: 2, 7–10.

for Newlands in 2011–12. Aurizon Network reallocated the difference (\$30.3 million) between its approved (forecast) Newlands capital indicator (\$42.2 million) and its approved (actual) Newlands capital expenditure (\$11.9 million) from GAPE project costs to Newlands.

We stated in our decisions for the 2013 GAPE DAAU²⁶⁹ and the 2011–12 RAB roll-forward²⁷⁰ that the appropriate allocation of GAPE assets included in the Newlands system RAB for reporting purposes would be considered as part of the UT4 approval process.

We consider that while the UT3 capital indicator may have included an amount for Newlands for the purpose of assessing reference tariffs, this does not imply acceptance of this amount of capital expenditure in the Newlands RAB. The 2010 AU (Schedule A, cl. 2.3) clearly states that the inclusion of expenditure in the capital indicator does not imply the acceptance of this level of capital expenditure in the RAB.

As Aurizon Network did not provide evidence to justify its claim that this difference between forecast and actual would have been required in the Newlands system if the GAPE project did not proceed²⁷¹, we maintain our initial draft decision that this difference (\$30.3 million) should not be directly attributable to the Newlands system.

Cost allocation to NAPE Deed customers

We previously approved Aurizon Network's 2013 GAPE DAAU, where it proposed that 19 per cent of the Newlands enhancements sub-project be allocated to NAPE Deed and Newlands (existing) customers. The figure below summarises Aurizon Network's 2013 GAPE DAAU.

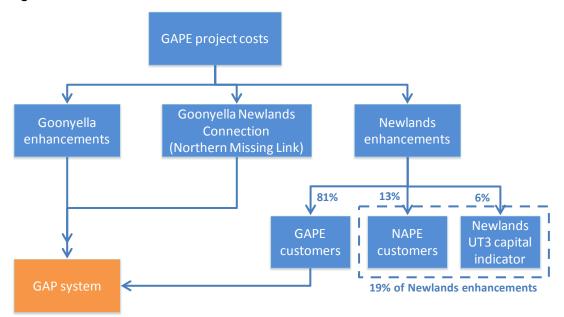


Figure 9 Aurizon Network 2013 GAPE DAAU

However, in the pricing model underlying its 2014 DAU, Aurizon Network allocated 19 per cent of Newlands enhancement costs solely to NAPE Deed customers. Aurizon Network also proposed that an additional \$30.3 million²⁷² be allocated to Newlands as discussed above.

²⁶⁹ QCA, 2013(f): 13.

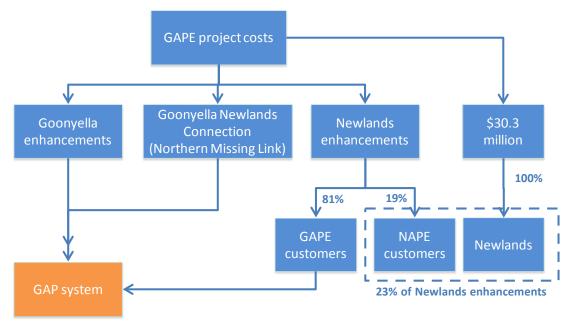
²⁷⁰ QCA, 2013(h): 2.

²⁷¹ This means that the infrastructure is required by existing Newlands customers.

²⁷² Reflecting the difference between the approved (forecast) Newlands capital indicator (\$42.2 million) and the approved (actual) Newlands capital expenditure (\$11.9 million).

Given its 2014 DAU proposal to socialise NAPE costs within the Newlands system, this results in a total Newland enhancement costs allocated to the Newlands system of approximately 23 per cent (19 per cent plus the \$30.3 million discussed above). The figure below summarises Aurizon Network's 2014 DAU modelling approach.

Figure 10 Aurizon Network 2014 DAU Price Model



QCoal proposed that, should the QCA reject Aurizon Network's proposal to allocate the \$30.3 million to Newland's system customers, this cost should be included in the top level GAPE project cost and allocated across all GAPE project customers, as the assets represented by this cost are not required only by NAPE customers.²⁷³

Our initial draft decision reallocated all costs allocated to the Newlands system in Aurizon Network's 2014 DAU (including the \$30.3 million) to NAPE Deed customers. However, further evidence suggests that this cost is not directly attributable to any particular customer group.

For our consolidated draft decision, we consider that this amount should therefore be allocated to both GAPE and NAPE customers that use the Newlands enhancements.

Our consolidated draft decision is to allocate the costs to GAPE and NAPE Deed customers as shown in the figure below.

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²⁷³ QCoal, 2014 DAU, sub. 81: 2–5.

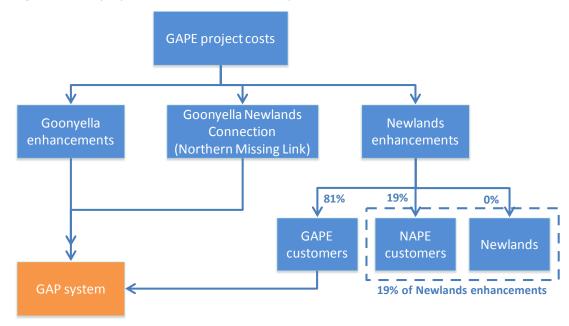


Figure 11 QCA proposed allocation of GAPE Project Costs

Allocation of common or indirect GAPE project costs

We have also considered QCoal's proposal that GAPE project costs should be allocated between the Goonyella Newlands connection and Newlands enhancements sub-projects based on final project costs. QCoal also proposed that common or indirect GAPE project costs should be allocated between these two sub-projects based on contracted train paths.

To allocate common or indirect GAPE project costs, we requested further information on the actual costs spent on these two sub-projects of the GAPE project from Aurizon Network. In response to our information request, Aurizon Network said its 2014 DAU proposed capital allocations are consistent with those approved as part of our final decision on the 2013 GAPE DAAU. Aurizon Network said it does not intend to revise the calculations because of the consequences of re-opening past decisions. ²⁷⁴

We note that what we approved as part of the 2013 GAPE DAAU was the basis of allocation to GAPE and NAPE Deed customers. Under the approved approach:

- Goonyella enhancement costs were fully allocated to GAPE Deed customers
- Goonyella Newlands Connection costs were fully allocated to GAPE Deed customers
- Newlands enhancement costs were allocated between GAPE and NAPE Deed customers based on respective contract tonnages.

We did not, however, approve the respective costs of the three sub-projects of the GAPE project. Although we approved the GAPE tariffs proposed by Aurizon Network for the remainder of UT3, these were based on forecast costs that were incorporated in an updated UT3 capital indicator. We noted that any variance between the capital indicator and the

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²⁷⁴ Aurizon Network, response to the QCA in a Request for Information (15 September 2015).

approved capital expenditure amounts²⁷⁵ would be reflected in the UT3 capital carryover account balance and, as a result, in future tariffs approved as part of the UT4 process. 276

In the absence of further information from Aurizon Network, we reviewed the detailed capital expenditure underlying the report prepared by our consultant.²⁷⁷

Our analysis of the detailed project cost breakdown underlying the SKM report²⁷⁸ shows that around 52 per cent of the total GAPE project cost for 2011–12 of \$960.3 million (excluding IDC) was directly attributable to the Newlands enhancement sub-project²⁷⁹, 37 per cent to the NML sub-project, 1 per cent to Goonyella enhancements, and 10 per cent are common and indirect costs.

This compares with Aurizon Network's 2014 DAU proposal—based on its 2013 DAAU proposal to allocate 56.5 per cent of the total GAPE project cost for 2011-12 to the Newlands enhancement sub-project and the remaining 43.5 per cent to the NML sub-project.

We do not consider that the apportionment of common and indirect costs between the two sub-projects would lead to an overall capital split that is materially different to the split that has been used in Aurizon Network's 2014 DAU proposal. As a consequence, we have retained our initial draft decision allocation of total GAPE project costs between the Newlands enhancement and the NML sub-projects.

Sustaining capital expenditure related to the Newlands system

We have considered QCoal's argument that any sustaining capital expenditure in the Newlands system should be allocated between GAPE, NAPE and Newlands systems. We note that the Newlands capital indicator over UT4 is comprised largely of state-wide capital expenditure that has been allocated over Blackwater, Goonyella, Newlands and Moura based on the respective forecast gtk of each system. Given that the Newlands capital indicator has been calculated based on Newlands gtk only, we do not consider that a portion of this amount should be allocated to the GAP system.

Aurizon Network has since clarified that state-wide capital expenditure is not allocated to the GAP system, consistent with our 2013 DAAU GAPE decision that the GAP system tariff only recovers incremental system costs and does not make a contribution towards common costs. 280 Given that GAP system access charges remain significantly higher than existing Goonyella and Newlands access charges, we consider it reasonable that GAPE customers continue to only pay their incremental system costs over UT4.

We will reassess this issue in the context of WIRP and GAP pricing in the next undertaking approval process.

We consider a zero contribution to common costs from GAP system users to be consistent with the object of Part 5 of the QCA Act, as it is consistent with the objective of promoting efficient investment in the CQCN, and appropriately balances the interests of access seekers and access holders (s. 138(2)(e) and (h) of the QCA Act). It also recognises Aurizon Network's legitimate

²⁷⁵ We refer here to the approved capital expenditure amounts from the 2011–12 and 2012–13 ex-post capital reviews.

²⁷⁶ QCA, 2013(f): 13.

²⁷⁷ SKM, 2013.

²⁷⁸ SKM, 2013: 186–208.

²⁷⁹ Consistent with our 2013 GAPE DAAU final decision, this sub-project was comprised of Abbot Point to Bogie River and Bogie River to Newlands.

²⁸⁰ Aurizon Network, response to the QCA in a Request for Information (30 October 2015).

business interests since it does not adversely affect Aurizon Network's ability to earn revenue that reflects its efficient costs or reasonable rate of return (s. 138(2)(b) and (g) of the QCA Act).

For future expansion projects, this allocation would be set out as part of the Pricing Proposal that is required to be submitted to the QCA, as required in clause 6.4.3 of our CDD amended DAU (see Section 16.5).

Independent NAP system for pricing purposes

We accept stakeholders' submissions that the recovery of allowable revenue associated with NAPE train services be deferred until railing commences. This leaves open the question whether or not independent NAP reference tariffs will apply in the future.

We will assess a NAPE reference tariff proposal if the NAPE train services commence in the UT4 period. We consider that any proposal that seeks to socialise NAPE within the Newlands system will need to go through stakeholder consultation, including with existing Newlands customers.

GAP system tariff

Our analysis has confirmed that the Aurizon Network's 2014 DAU calculation methodology for GAPE AT_3 and AT_4 reference tariffs is consistent with its initial 2013 GAPE DAAU approach. In addition, our analysis shows that Aurizon Network's alternative calculation approach for GAPE reference tariffs does not result in a materially different access charge across all GAPE customers as compared with the standard CQCN approach.

Based on the additional information provided by Aurizon Network in its response to our initial draft decision, we consider that the GAP reference tariff structure provides increased transparency of the costs attributable to different GAP train services.

Our consolidated draft decision is therefore to accept Aurizon Network's proposed alternative pricing approach for GAP system reference tariffs.

We accept that in the interests of certainty and predictability (s. 138(2)(h) of the QCA Act) and the interests of access seekers (s. 138(2)(e) of the QCA Act), the 2013 GAPE pricing approach should apply. This signifies a change from our initial draft decision.

Consolidated draft decision 17.2

- After considering Aurizon Network's proposed pricing arrangements for the GAPE project, our consolidated draft decision is to refuse to approve Aurizon Network's original proposal.
- (2) The way in which we consider it is appropriate that Aurizon Network amend its draft access undertaking is to:
 - adjust the allocation of costs so that the difference between the Newlands (a) capital indicator and approved capital expenditure for 2011-12 is allocated to all GAPE and NAPE Deed customers.

We consider it appropriate to make these decisions having regard to each of the matters set out in section 138(2) of the QCA Act for the reasons set out in our analysis above.

New reference tariffs 17.5

17.5.1 Aurizon Network's proposal

Aurizon Network did not propose discounted reference tariffs for Middlemount and Caval Ridge loading points in either its 2013 DAU or 2014 DAU submissions. Clause 7.2(b) of Schedule F in Aurizon Network's 2014 DAU presented the loading points in the Goonyella system for which discounted reference tariffs were proposed.

However, since its initial 2013 DAU submission, Aurizon Network has sought approval, under the 2010 AU process, for transitional reference tariffs for new train services between:

- the Middlemount mine and the Dalrymple Bay Coal Terminal (DBCT)²⁸¹
- the Caval Ridge mine and the Hay Point Services Coal Terminal (HPSCT).

For the Middlemount mine to DBCT train service, we approved Aurizon Network's proposals to establish new reference tariffs for 2011-12 and 2012-13, and transitional tariffs for 2013-14 and 2014-15. These tariffs were based on the 2010 AU pricing principles in place at the time of our decision, with discounts provided to the Goonyella system reference tariffs to reflect Middlemount's investment in its own private rail infrastructure. 283

For the Caval Ridge to HPSCT train service, we approved Aurizon Network's proposal to establish a new transitional reference tariff for 2014–15. 284 This transitional reference tariff was also consistent with 2010 AU pricing principles in place at the time of our decision, with discounts provided to the Goonyella system reference tariffs to reflect the investment in private rail infrastructure by BHP Billiton Mitsubishi Alliance (BMA).

In addition, Aurizon Network proposed a single AT₅ electric access charge for all users of electric train services in the Blackwater system which included costs associated with new investment for electrification of the Rolleston branch line.

²⁸¹ Aurizon Network, April 2014.

²⁸² Aurizon Network, August 2014.

²⁸³ QCA, 2014(e).

²⁸⁴ QCA, October 2014.

Aurizon Network submitted that there were incremental benefits in the Rolleston electrification investment, with electric train services from the Rolleston branch line expected to make a positive contribution to common system costs.²⁸⁵ In conducting this incremental cost test, Aurizon Network assumed long-run system railings of 85 per cent of contracted volumes.

17.5.2 Summary of our initial draft decision

Our initial draft decision was to refuse to approve Aurizon Network's approach to new reference tariffs. Rather, we considered it appropriate that a reference tariff would be calculated for each new train service based on the pricing principles in force at the commencement of operations of each train service.

Specifically, our initial draft decision 17.6 was:

Our Draft Decision is to refuse to approve Aurizon Network's proposed new reference tariff arrangements. We would approve amendments to the 2014 DAU, to:

- (a) derive an alternative reference tariff for the Middlemount to DBCT train service based on the 2010 AU pricing principles
- derive the reference tariff for the Caval Ridge to HPSCT train service based on 2014 DAU pricing principles
- apply an incremental cost test to Rolleston electric assets using forecast volumes rather (c) than with reference to 85 per cent of contract volumes.

Our full analysis and reasoning is contained in Section 17.5 of the initial draft decision. We adopt that analysis and reasoning for the purposes of this consolidated draft decision, subject to the comments in the remainder of this section.

Reference tariffs for new train services

Middlemount to DBCT

The Middlemount to DBCT train service commenced operations in November 2011 prior to the start of the UT4 regulatory period. We therefore considered that the reference tariffs for this train service should be based on 2010 AU pricing principles.

Our June 2014 final decision on new reference tariffs for the Middlemount to DBCT train service stated that:

We agree with BMA's view that it is appropriate to apply the UT3 pricing principles to the proposal, which the owners of the Middlemount mine would have relied on in costing rail access requirements, given that changes to the pricing principles proposed in UT4 have not as yet been approved. However, future proposals will need to be considered in the context of the timing and nature of the particular application, and how that might relate to the pricing principles in an approved undertaking in force at the time. 286

For the prudency assessment of private incremental costs, we noted that:

Given the non-material impact of the proposal on other Goonyella system users, we do not consider a full prudency assessment is warranted, and are prepared to accept the costs reported by Middlemount as being prudent. 287

However, any future application for additional train services from Middlemount to DBCT should be based on 2014 DAU pricing principles.

²⁸⁵ Aurizon Network, 2013 DAU, sub. 3: 158–159.

²⁸⁶ QCA, 2014(e): 5.

²⁸⁷ QCA, 2014(e): 5.

We considered that a transparent and consistent approach to calculating reference tariffs in the CQCN was in the interests of access seekers and holders (s. 138(2)(e) and (h) of the QCA Act), and recognised Aurizon Network's legitimate business interests as it did not adversely affect Aurizon Network's ability to earn revenue that reflected its efficient costs and appropriate rate of return (s. 138(2)(b) and (g) of the QCA Act).

Caval Ridge to HPSCT

The Caval Ridge to HPSCT train service qualified as a new loading point under clause 6.3.1 IDD amended DAU because it commenced operations in the 2014 DAU regulatory period. Under our IDD amended DAU clause 6.3.1, the applicable access charge was the higher of the relevant existing reference tariff and the minimum revenue contribution derived as the incremental costs of providing access (excluding mine-specific spur line costs).

Under this test, the applicable access charge for the Caval Ridge to HPSCT train service was the Goonyella system reference tariff over the 2014 DAU regulatory period. We note that the same pricing outcome would eventuate under Aurizon Network's 2014 DAU.

We considered the 2014 DAU pricing principles explicitly dealt with issues relating to the interpretation, and prudency and efficiency assessment, of private incremental costs. We also considered our approach was simple and transparent, and facilitates efficient pricing outcomes.

Rolleston electric assets

Our MAR draft decision included the Rolleston electric investment in our 2014 DAU capital indicator.

Consistent with the approach followed for Rolleston non-electric assets, we considered that the AT₅ electric tariff for the Rolleston loading point needed to cover incremental costs. However, rather than using Aurizon Network's assumption of 85 per cent of contracted volumes for electric train services on the Rolleston branch line, we considered it more appropriate to use forecast volumes consistent with our MAR draft decision.

Users of Rolleston electric investment would pay a system premium when the incremental cost of the new investment results in a higher tariff than the Blackwater AT_5 tariff. When users' incremental cost does not result in a higher Blackwater AT_5 tariff, they would pay a socialised Blackwater AT_5 electric tariff in 2015–16 and 2016–17.

We considered that a transparent and consistent approach to calculating reference tariffs in the CQCN was in the interests of access seekers and holders (s. 138(2)(e) and (h) of the QCA Act). This also recognised Aurizon Network's legitimate business interests as it did not adversely affect Aurizon Network's ability to earn revenue that reflected its efficient costs and appropriate rate of return (s. 138(2)(b) and (g) of the QCA Act).

17.5.3 Aurizon Network's comments on the initial draft decision

Aurizon Network's comments on our initial draft decision are summarised in the table below.

²⁸⁸ This train service also qualified as a new loading point under clause 6.2.5 of Aurizon Network's 2014 DAU.

Table 71 Aurizon Network comments on the initial draft decision on new reference tariffs

Issues	Aurizon Network comments
Using 2014 DAU pricing principles to calculate reference tariff for Caval Ridge to HPSCT train services	Aurizon Network said that the reference tariff for this train service should be based on the pricing principles known to the relevant parties when the decision to invest was made. Aurizon Network questioned why the 2014 DAU pricing principles, which were neither approved nor in effect when these train services commenced operation, should be backdated. Aurizon Network maintained that our initial draft decision was inconsistent with Part 5 of the QCA Act. 289
Pricing for Rolleston electric assets	Aurizon Network disagreed with our initial draft decision to apply an incremental cost test to Rolleston electric assets using forecast volumes. Aurizon Network said that the pricing principles applied to Rolleston electric assets should reflect the principles in place at the time the investment decision was made. 290
	Aurizon Network sought to correct our assertion that pricing for Rolleston assets was based on volumes set at 85 per cent of contract ²⁹¹ , and submitted the volumes it had adopted for pricing purposes. Expressed as a percentage of contracted gtk, Aurizon Network said these were 39 per cent, 75 per cent and 82 per cent of contract gtk for 2014–15, 2015–16 and 2016–17, respectively. ²⁹²
Revenue smoothing for Rolleston electric assets	Aurizon Network said that our initial draft decision allowed for a full year return for Rolleston electric assets in 2014–15, even though electric railings did not commence until December 2014. To address this, Aurizon Network proposed that the MAR associated with Rolleston electric assets be smoothed consistent with the ramp-up profile of Rolleston electric train services. Aurizon Network maintained that this approach was consistent with the objective of Part 5 of the QCA Act. ²⁹³

17.5.4 Other stakeholders' comments on the initial draft decision

Other stakeholders' comments are summarised in the table below.

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Aurizon Network, 2014 DAU, sub. 82: 254.
 Aurizon Network, 2014 DAU, sub. 82: 255.
 Aurizon Network, 2014 DAU, sub. 82: 255.

²⁹² Aurizon Network, 2014 DAU, sub. 82: 256.

²⁹³ Aurizon Network, 2014 DAU, sub. 82: 256.

Table 72 Stakeholders' comments on the initial draft decision on new reference tariffs

Issues	Stakeholders' comments
Using 2014 DAU pricing principles to calculate reference tariff for Caval Ridge to HPSCT train services	The QRC encouraged further consultation on the pricing proposals for Middlemount and Caval Ridge. The QRC did not comment on the reasonableness or advantages and disadvantages of the pricing proposals. ²⁹⁴
	BMA disagreed with our approach to base the calculation of reference tariff for Caval Ridge on the 2014 DAU pricing principles. BMA said that its investment in Caval Ridge and the negotiation of its access occurred during UT3, under the terms of the UT3 and based on prices estimated using the UT3 pricing principles. BMA maintained that our approach was inconsistent with the QCA Act.
	BMA said that it cooperated closely with Aurizon Network when asked to provide information on the capital cost of spurs.
	BMA also said that the principles designed to protect existing users from the effects of a major expansion are not necessarily applicable to the pricing of mines where the costs of the spur is explicitly excluded from the RAB.
	BMA proposed the following for pricing of new spurs under the 2014 DAU:
	• include a component of CCC, as agreed in UT3, if spur costs are to be excluded from the RAB.
	 reduce the discount to AT₃ and AT₄ over time (perhaps 10 years) to appropriately balance the interests of access seekers and access holders in the longer term.
Revenue smoothing for Rolleston electric assets	Aurizon Operations said the final decision should include the electric costs and volumes associated with WIRP, including those originating on the Rolleston branch line. ²⁹⁶
	Aurizon Operations also said there was a misalignment between a full year return for Rolleston electric assets in 2014–15, even though electric railings did not commenced until the second half of 2014–15. Aurizon Operations said the additional revenue can be smoothed within the tariff profile for the entire regulatory period. ²⁹⁷

17.5.5 QCA analysis and consolidated draft decision

After having regard to the criteria listed in section 138(2) of the QCA Act and stakeholders' submissions, we refuse to approve Aurizon Network's proposals relating to the pricing of new train services in the 2014 DAU.

We consider that:

- the Middlemount train service should have reference tariffs derived based on 2010 AU pricing principles consistent with our June 2014 decision on Middlemount transitional tariffs
- the Caval Ridge train service should have UT4 reference tariffs based on 2010 AU pricing principles consistent with our October 2014 decision on Caval Ridge transitional tariffs
- the requirement for a system premium for Rolleston should be reassessed based on updated allowable revenues and volumes, with revenue smoothing applied over the last three years of UT4 to deal with the mid-year commissioning of this infrastructure in 2014–15.

Our consolidated draft decision is therefore to require Aurizon Network to amend its 2014 DAU to explicitly present alternative reference tariffs for these train services.

²⁹⁶ Aurizon Operations, 2014 DAU, sub. 93: 11–12.

²⁹⁴ QRC, 2014 DAU, sub. 84: 44–45.

²⁹⁵ BMA, 2014 DAU, sub. 78: 1–5.

²⁹⁷ Aurizon Operations, 2014 DAU, sub. 93: 12.

Middlemount to DBCT

Having regard to the section 138(2) factors and stakeholders' submissions by Aurizon Network, we have concluded that there is no new information or arguments that warrant us changing our initial draft decision. Therefore, our consolidated draft decision confirms our initial draft decision.

Caval Ridge to HPSCT

We note that at the time of investment, the 2010 AU pricing principles were relevant to inform the decision to invest, and were appropriate for the nature of the investment. We also note that our pricing principles in this consolidated draft decision have retained the pricing methodology within 2010 AU pricing principles for new mine-specific spur lines which do not require an expansion. As a result, we consider that the pricing methodology within the 2010 AU pricing principles should apply for this train service.

The key difference between 2010 AU and our proposed 2014 DAU pricing principles with respect to a new mine-specific spur line is the additional 2014 DAU requirement for an independent prudency assessment of private incremental costs. Given the non-material impact on other Goonyella system users of applying a discount for the Caval Ridge tariff, we are prepared to accept the private incremental costs reported as being prudent.

We consider this pricing treatment to be in the interests of certainty and predictability (s. 138(2)(h) of the QCA Act) and the interests of access seekers (s. 138(2)(e) of the QCA Act).

While we have approved the application of subclause 4.1.2 from the 2010 AU in the case of the Caval Ridge train service, we have considered section 138(2) factors and stakeholders' submissions in our decision on appropriate pricing arrangements for WIRP train services. As outlined in Chapter 18, in our view the 2010 AU pricing principles are not able to be applied to an expansion of the nature of WIRP.

Rolleston electric assets

Our initial draft decision did not assert that Aurizon Network used 85 per cent of contracted volumes to calculate Rolleston AT_5 . Rather, we noted that Aurizon Network adopted 85 per cent of contracted volumes for its incremental cost test, as set out in its 2013 DAU. ²⁹⁸

We consider that the proposed tariff mechanism should be based on volumes that will not introduce a material bias for either under- or over-recovery of allowed revenues. For this reason, we have used forecast volumes—updated by Energy Economics—for the incremental cost test and setting the Rolleston AT_5 tariff.

To address the mid-year commissioning of the Rolleston electric assets in 2014–15, we have smoothed the Rolleston electric revenues over 2014–15 to 2016–17 based on ramp-up volumes. This is consistent with our smoothing of WIRP revenues over the ramp-up period.

We have reassessed whether a system premium is required for the AT_5 for Rolleston train services (see Section 18.6.2). This analysis incorporates the electric costs and volumes associated with WIRP, and shows that a system premium should apply to the AT_5 electric tariff for Rolleston over the UT4 regulatory period.

We consider that a transparent and consistent approach to calculating reference tariffs in the CQCN was in the interests of access seekers and holders (s. 138(2)(e) and (h) of the QCA Act). This also recognised Aurizon Network's legitimate business interests as it did not adversely

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²⁹⁸ Aurizon Network, 2013 DAU, sub. 3: 158–159.

affect Aurizon Network's ability to earn revenue that reflected its efficient costs and appropriate rate of return (s. 138(2)(b) and (g) of the QCA Act).

Consolidated draft decision 17.3

- (1) After considering Aurizon Network's proposed new reference tariff arrangements, our consolidated draft decision is to refuse to approve Aurizon Network's original proposal.
- (2) The way in which we consider it is appropriate that Aurizon Network amend its draft access undertaking is to:
 - (a) derive an alternative reference tariff for the Middlemount to DBCT train service based on the 2010 AU pricing principles
 - (b) derive the reference tariff for the Caval Ridge to HPSCT train service based on 2010 DAU pricing principles
 - (c) apply revenue smoothing to the Rolleston electric train services over 2014–15 to 2016–17
 - (d) apply an incremental cost test to Rolleston electric assets using forecast volumes rather than with reference to 85 per cent of contract volumes.

We consider it appropriate to make these decisions having regard to each of the matters set out in section 138(2) of the QCA Act for the reasons set out in our analysis above.

17.6 Reference train service characteristics

17.6.1 Aurizon Network proposal

General train service characteristics

Aurizon Network's 2014 DAU proposed general train service characteristics that are broadly similar to the 2010 AU. However, some additions and amendments to the criteria for a reference train service have been proposed as outlined in the table below.

Table 73 Aurizon Network's proposed general train service characteristics

Issue	Aurizon Network's proposal
Direct operating route (cl. 1.3(b)(vii))	Aurizon Network proposed a new provision in its 2014 DAU requiring a reference train service to operate from its origin directly to its destination using the most direct route.
Capital costs (cl. 1.3(b)(viii))	Initially added in Aurizon Network's proposed 2013 DAU with amendments in its 2014 DAU, this operational characteristic requires that the capital costs incurred in relation to providing access rights for the train service be included in the calculation of reference tariffs, other than:
	capital costs that the QCA refused to accept
	capital costs for which the QCA's acceptance will not be sought
	capital costs that the QCA has accepted but has not allocated in relation to the provision of access rights for the relevant train service.
Coal loss management standard (cl. 1.3(b)(x))	Modified requirement for reference train service to comply with Aurizon Network's coal loss management standard (as published by Aurizon Network from time to time) in using measures to minimise coal spillage and leakage and coal dust emissions en route.
Commercial terms of access (cl. 1.3(d))	Proposed requirement for reference train service to operate in accordance with an access agreement on the same terms as a standard access agreement applicable to coal carrying train services.
Train service entitlement (cl. 1.3(e))	Proposed requirement for reference train service to have a train service entitlement (TSE):
	based on trains being available for operation 24 hours per day and 360 days per year
	specified in terms of cyclic traffic which will:
	 operate in accordance with the distribution set out in the master train plan
	 have regard to planned possessions and any other matters agreed between Aurizon Network and other service providers in the coal supply chain
	 comply with the applicable scheduling procedures as set out in the NMP.

System-specific train service characteristics

System-specific train service characteristics are similar to those in the 2010 AU and include criteria such as maximum train length, maximum axle load, traction type, separation time and below-rail transit time.

17.6.2 Summary of our initial draft decision

Our initial draft decision approved Aurizon Network's proposed system-specific train service characteristics but refused to approve its proposed general reference train service characteristics.

The reference train is the benchmark for estimating access charges and establishing the circumstances for allowing price differentiation in the 2014 DAU. For this reason, we considered that variations to the reference train service were appropriate only when they reflected clear differences in service and cost.

Specifically, our initial draft decision 17.7 was:

Our Draft Decision is to refuse to approve Aurizon Network's proposed reference train service characteristics in Schedule F of the 2014 DAU. We would approve amendments to the 2014 DAU, to:

- (a) remove the requirement for a reference train service to operate using the most direct route or provide justification for retaining this requirement
- (b) remove the requirement relating to capital costs or provide justification for retaining this requirement
- (c) amend the requirement relating to conditions of access as set out in the marked changes to Schedule F attached to this Draft Decision.

Our full analysis and reasoning is contained in Section 17.6 of the initial draft decision. We adopt that analysis and reasoning for the purposes of this consolidated draft decision, subject to the comments in the remainder of this section.

General reference train service characteristics

We considered that most of the characteristics proposed were appropriate. However, we had concerns with those characteristics that either lacked clarity or were not relevant for defining a reference train service.

Direct operating route

Our initial draft decision agreed with the QRC that Aurizon Network's proposal that a reference train service should use the most direct route was unclear. Also, Aurizon Network did not provide an explanation for its proposal. We considered that a clear and transparent approach to the specification of reference train services was necessary to appropriately balance Aurizon Network's and users' rights and interests (s. 138(2)(b), (e) and (h) of the QCA Act).

Capital costs

In the absence of an explanation by Aurizon Network, we did not accept this proposal as we were not convinced that this provision was an operational characteristic for a reference train. We considered that a clear and transparent approach to specifying reference train services was necessary to appropriately balance Aurizon Network's and users' rights and interests (s. 138(2)(b), (e) and (h) of the QCA Act).

Coal loss management standard

We considered that this proposal should be amended to align with the coal loss mitigation provisions (CLMPs) because compliance with the coal loss management standard was interlinked with Aurizon Network's proposed CLMPs, and we made an interim decision to include the CLMPs in the access undertaking rather than in the standard rail connection agreement.

Commercial terms of access

We considered that this provision was appropriate because it encouraged alignment between access agreements and standard access agreements.

Access charges that deviate from a particular reference tariff would be considered appropriate only when the differences between an access agreement and the standard access agreement have a material impact on cost or risk.

The use of the wording 'commercial terms' without capitalisation as a defined term may create confusion in the application of commercial terms as defined in Aurizon Network's 2014 DAU. We reverted to the 2010 AU terminology 'conditions of access' to remove any potential misunderstanding.

These changes appropriately balanced Aurizon Network's and users' rights and interests (s. 138(2)(b), (e) and (h) of the QCA Act).

Train service entitlement (TSE)

We considered that this provision was appropriate because a reference train service should have its TSEs clearly specified.

We noted that other stakeholders raised issues with the determination of TSEs under this provision which were covered in Aurizon Network's proposed NMP in Schedule G of the 2014 DAU.

System-specific reference train service characteristics

We considered that these characteristics were appropriate because they concerned rail operation within the rail systems and were similar to the characteristics in the 2010 AU. Clearly defined requirements for a train service that pays a reference tariff can reduce the transaction costs associated with negotiating an access price, and help address the information asymmetry between an access seeker or holder and Aurizon Network. Therefore, we considered these changes appropriately balanced the legitimate business interests of Aurizon Network with the interests of access seekers and access holders (s. 138(2)(b), (e) and (h) of the QCA Act).

We approved Newlands' below-rail transit time in our final decision on Aurizon Network's GAPE DAAU application in September 2013.

17.6.3 Aurizon Network's comments on the initial draft decision

Table 74 Aurizon Network comments on the initial draft decision on reference train service characteristics

Tariff issues	Aurizon Network's comments
Direct operating route	Aurizon Network maintained its position that a reference train service should operate using the most direct route between an origin and destination. Aurizon Network said that a train service which travels to multiple 'origins' on the way to its destination may consume additional network capacity and/or create additional interface risks relative to a train service which operates using a direct route. 299
Capital cost	As Aurizon Network anticipated no material consequences, it agreed with our initial draft decision. 300
Conditions of access	As Aurizon Network anticipated no material consequences, it agreed with our initial draft decision. 301

²⁹⁹ Aurizon Network, 2014 DAU, sub. 82: 256.

³⁰⁰ Aurizon Network, 2014 DAU, sub. 82: 256.

³⁰¹ Aurizon Network, 2014 DAU, sub. 82: 256.

17.6.4 Other stakeholders' comments on the initial draft decision

Table 75 Stakeholders' comments on the initial draft decision on reference train service characteristics

Tariff issues	Stakeholders' comments
Direct operating route	The QRC agreed with our initial draft decision. 302
Capital cost	In a system with more than one reference tariff, the QRC understood that the intent of clause 1.3(viii) was to determine which reference tariffs would apply to particular access rights. In these circumstances, the applicable reference tariff would be the reference tariff which reflected the capital costs associated with providing the particular access rights. The QRC suggested that if this clause is deleted, it should be dealt with somewhere else. 303
Coal loss management standard	The QRC agreed with our initial draft decision. 304

17.6.5 QCA analysis and consolidated draft decision

After having regard to the criteria listed in section 138(2) of the QCA Act and stakeholders' submissions, we:

- refuse to approve Aurizon Network's general train service characteristics in the 2014 DAU
- approve Aurizon Network's specific train service characteristics in the 2014 DAU.

General reference train service characteristics

Direct operating route

Our initial draft decision removed the requirement for a reference train service to operate using the most direct route. Although Aurizon Network disagreed with our initial draft decision, it did not provide evidence to substantiate its claim that a train that travels to multiple 'origins' consumes additional network capacity and/or creates additional interface risks. Therefore, we do not consider it appropriate to accept this proposal because it remains unclear why this provision is required.

A clear and transparent approach to the specification of reference train services is necessary to appropriately balance Aurizon Network's and users' rights and interests (s. 138(2)(b), (e) and (h) of the QCA Act).

Capital costs

Our initial draft decision removed the requirement relating to capital costs. Aurizon Network agreed with our initial draft decision. However, the QRC understood that in a system with more than one reference tariff, this clause would be used to determine which of the reference tariffs would apply to particular access rights. The QRC also suggested that if this clause is deleted, then this matter should be addressed elsewhere. However, the QRC understood that in a system with more than one reference tariffs would apply to particular access rights.

Concerning the QRC's comments, we note that clauses 7 to 11 of Schedule F of our CDD amended DAU clearly outline which reference tariff would apply to each particular access right.

³⁰² QRC, 2014 DAU, sub. 84: 41.

³⁰³ QRC, 2014 DAU, sub. 84: 41.

³⁰⁴ QRC, 2014 DAU, sub. 84: 41.

³⁰⁵ Aurizon Network, 2014 DAU, sub. 82: 256.

³⁰⁶ Aurizon Network, 2014 DAU, sub. 82: 256.

³⁰⁷ QRC, 2014 DAU, sub. 84: 41.

In the case of a new train service, Aurizon Network is required to submit a proposed new reference tariff to us under clause 6.5 of our CDD amended DAU.

As Aurizon Network agreed with us, and we have not received any new and compelling information from other stakeholders to the contrary, we remain unconvinced that this provision is an operational characteristic for a reference train.

A clear and transparent approach to the specification of reference train services is necessary to appropriately balance Aurizon Network's and users' rights and interests (s. 138(2)(b), (e) and (h) of the QCA Act).

Coal loss management standard

Our initial draft decision considered that a reference train service should comply with Aurizon Network's CLMPs, instead of the coal loss management standard proposed by Aurizon Network.

As we have not received any new information from Aurizon Network or other stakeholders to the contrary, our consolidated draft decision confirms our initial draft decision.

Commercial terms of access

Our initial draft decision amended the requirements for conditions of access and Aurizon Network agreed with that decision.³⁰⁸ As we have not received any new information from other stakeholders to the contrary, our consolidated draft decision confirms our initial draft decision.

These changes will appropriately balance Aurizon Network's and users' rights and interests (s. 138(2)(b), (e) and (h) of the QCA Act).

Train service entitlement

As we have not received any new information on this provision, our consolidated draft decision confirms our initial draft decision acceptance of Aurizon Network's proposal.

System-specific reference train service characteristics

The system-specific reference train characteristics are important to access seekers and access holders because they define the parameters of a train service that pays a reference tariff. We would expect that other stakeholders would have made adverse submissions to our initial draft decision to accept Aurizon Network's proposal had they considered that the parameters proposed by Aurizon Network were unreasonable or inaccurate. As we have not received any submissions on this matter, we have inferred that the parameters proposed by Aurizon Network are reasonable and acceptable to other stakeholders.

These provisions will appropriately balance the legitimate business interests of Aurizon Network with the interests of access seekers and access holders (s. 138(2)(b), (e) and (h) of the QCA Act).

Conclusion

Having regard to the section 138(2) factors and stakeholders' submissions by Aurizon Network, we have concluded that there is no new information or arguments that warrant us changing our initial draft decision. Therefore, our consolidated draft decision confirms our initial draft decision to:

approve Aurizon Network's proposed system-specific train service characteristics

³⁰⁸ Aurizon Network, 2014 DAU, sub. 82: 256.

 refuse to approve Aurizon Network's proposed general reference train service characteristics.

With respect to the general reference train characteristics, we note that an unduly narrow definition of the reference train gives Aurizon Network scope to deviate from the reference tariff by application of clause 6.2.2(b)(i) in Schedule F of Aurizon Network's 2014 DAU. Aurizon Network could discriminate against access seekers by defining the reference train in a manner that more precisely reflects Aurizon Network's own above-rail services, hence resulting in charges higher than the reference tariff being applied to access seekers that do not precisely match the same train characteristics as Aurizon Network. As a result, and against the background of our consolidated draft decision on price discrimination (Chapter 16), we consider it inappropriate to accept the general reference train characteristics discussed above.

We consider this is consistent with the object of Part 5 of the QCA Act, and appropriately balances the legitimate business interests of Aurizon Network with the interests of access seekers, access holders, and train operators.

Consolidated draft decision 17.4

- (1) After considering Aurizon Network's proposed changes to its reference train service characteristics, our consolidated draft decision is to refuse to approve Aurizon Network's original proposal.
- (2) The way in which we consider it is appropriate that Aurizon Network amend its draft access undertaking is to:
 - (a) remove the requirement for a reference train service to operate using the most direct route
 - (b) remove the requirement relating to capital costs
 - (c) align a reference train to comply with Aurizon Network's coal loss mitigation provisions
 - (d) amend the requirement relating to conditions of access.

We consider it appropriate to make these decisions having regard to each of the matters set out in section 138(2) of the QCA Act for the reasons set out in our analysis above.

17.7 Revenue cap adjustments

17.7.1 Aurizon Network proposal

Schedule F of Aurizon Network's 2014 DAU contains provisions for the calculation of Aurizon Network's adjusted allowable revenues and total actual revenues as part of the annual revenue cap adjustment process. Any over- or under-recovery of Aurizon Network's adjusted allowable revenues leads to tariff adjustments as part of a separate process (i.e. the annual review of reference tariffs).

Aurizon Network proposed the following revenue adjustments associated with the AT₁ tariff that seek to minimise its variability and incorporate this tariff component in the revenue cap:

 as part of the annual review of reference tariffs, an adjustment to allowable revenue at the beginning of each year to account for any changes in short-run variable maintenance costs based on the difference between approved volume forecast and revised volume forecast as part of the revenue cap adjustment process, an adjustment to allowable revenue to account for the difference between approved AT₁ revenue and actual AT₁ revenue received.³⁰⁹

Other provisions relating to the calculation of adjusted allowable revenue are similar to the 2010 AU other than the inclusion of additional adjustments to account for the difference between:

forecast and actual audit costs

Queensland Competition Authority

forecast and actual rebates paid by Aurizon Network.

Aurizon Network proposed that the adjustment for its over- or under-payment of rebates to AFD holders be moved from the calculation of total actual revenue (2010 AU, Schedule F, cl. 3.2.3(c)) to the calculation of adjusted allowable revenue (2014 DAU, Schedule F, cl. 3.3(b)(v)). Aurizon Network submitted that this change results in the recovery of its under- or over-payment of rebates via the revenue cap adjustment process, rather than through take-orpay charges which were limited to UT3 access holders as this adjustment was introduced in the 2010 AU. Aurizon Network also stated that this change aims to shift the volume risk associated with the payment of rebates from UT3 access holders to all users of the particular system.

Other provisions relating to the calculation of total actual revenue are similar to the 2010 AU, with the intent and purpose seemingly unchanged.

Aurizon Network also proposed an additional circumstance in which it can earn an increment, as compared to the 2010 AU terms, to align with an additional element of its proposed incentive mechanism that was submitted to us in April 2012 (2014 DAU, Schedule F, cl. 3.4(a)(i)).

Summary of our initial draft decision

Our initial draft decision included overload charges and ancillary revenues as part of total actual revenue. We refused to approve the proposed adjustments for short-run variable maintenance costs, AT₁ revenue, audit costs, and rebates, as well as the proposed approach to calculating and applying performance increments.

Specifically, our initial draft decision 17.8 was:

Our Draft Decision is to refuse to approve Aurizon Network's proposed revenue cap adjustments in Schedule F of the 2014 DAU. We would approve amendments to the 2014 DAU to:

- (a) remove proposed revenue adjustments in relation to:
 - (i) short-run variable maintenance costs
 - (ii) AT₁ revenue
- (b) reflect in the calculation of adjusted allowable revenue the cost of audits required under this undertaking by the QCA, but only to the extent that the QCA has approved these costs as being efficient incurred and these costs are not recoverable elsewhere in this undertakina.
- (c) remove rebate adjustments from the calculation of adjusted allowable revenue

³⁰⁹ Aurizon Network, 2013 DAU, sub. 2: 246.

³¹⁰ Aurizon Network, 2013 DAU, sub. 2: 239.

³¹¹ Aurizon Network, 2013 DAU, sub. 2: 239.

³¹² Aurizon Network, 2013 DAU, sub. 2: 239.

- (d) include overload charges and ancillary revenues in the calculation of total actual revenue
- (e) remove the increment calculation and application.

Our full analysis and reasoning is contained in Section 17.7 of the initial draft decision. We adopt that analysis and reasoning for the purposes of this consolidated draft decision, subject to the comments in the remainder of this section.

Short-run variable maintenance cost and AT₁ revenue cap adjustments

We were not convinced by Aurizon Network's analysis of its proportion of fixed versus variable maintenance costs. Consequently, we were not confident that these adjustment provisions would serve their intended purpose.

Should the fixed and variable maintenance cost proportions turn out to be significantly inaccurate, the arbitrary creation of 'winners and losers' would result under a revenue cap arrangement. For this reason, we required a more detailed build-up (bottom-up approach) of the short-run variable costs before these adjustment provisions could be considered for inclusion.

While Aurizon Network was exposed to volume risk under existing arrangements with the AT_1 tariff excluded from the revenue cap, we considered such risk to be minimal. It was difficult to see how this risk would be significant for Aurizon Network unless there was a considerable shock to Aurizon Network's rail system (which had a low probability). In this regard, we noted Aurizon Network's view that the probability of actual volumes falling 8 per cent or more below forecast volumes was negligible without a material exogenous shock. 313

Our initial draft decision removed revenue adjustments associated with short-run variable maintenance costs and the AT_1 tariff. We considered that this change appropriately balanced Aurizon Network's and users' rights and interests (s. 138(2)(b), (e) and (h) of the QCA Act).

Audit costs

We noted Aurizon Network's concerns about unplanned audits in our MAR draft decision. ³¹⁴ We accepted that any unplanned audit costs that Aurizon Network incurred could be treated as a cost pass-through and reflected in adjustments to allowable revenue, with reviews on a case-by-case basis to ensure that such costs had been efficiently incurred.

We accepted Aurizon Network's proposal on the basis that it will appropriately balance Aurizon Network's and users' rights and interests (s. 138(2)(b), (e) and (h) of the QCA Act).

Treatment of rebate adjustments

We were not convinced that all users should be subject to volume risk with respect to possible under- or over-payment of rebates resulting from an AFD arrangement between Aurizon Network and a particular AFD holder.

An AFD is an agreement between Aurizon Network and a particular customer, and the volume risk for associated payments should be limited to these two parties.

Our initial draft decision excluded this adjustment from the calculation of both adjusted allowable revenue and total actual revenue. We considered this change appropriately balanced Aurizon Network's and users' rights and interests (s. 138(2)(b), (e) and (h) of the QCA Act).

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³¹³ Aurizon Network, 2013 DAU, sub. 2: 267.

³¹⁴ QCA, 2014(h): 86.

Overload charges and ancillary revenues

We could not establish whether the costs associated with Aurizon Network's overload charges and ancillary revenues were included in the cost forecasts because sufficient information to assess this was not provided by Aurizon Network. Potentially, this could result in the double-counting of these costs—that is, recovered once through reference tariffs and again via mechanisms outside of reference tariffs.

Therefore, we considered it appropriate to include overload charges and ancillary revenues in the total actual revenue, whether material or not, given that it was not clear whether associated costs are excluded from cost forecasts used to calculate MAR and reference tariffs.

Waiver of relinquishment fees

Under Aurizon Operations' proposed provision, the waiving of relinquishment fees by Aurizon Network for an access holder in a particular system would transfer costs to other access holders in that system. We considered such a provision was inconsistent with the interests of access holders as they should not be penalised for reasons unrelated to them (including a waiver of relinquishment fees).

We considered Aurizon Operations' proposed provision in section 11.6.3 of our initial draft decision. As outlined in that section, we did not consider that a cost shift from a rail operator to the remainder of the network would necessarily promote the efficient use of and investment in significant infrastructure.

Performance incentives

Our initial draft decision removed the increment calculation and application, and noted that an incentive arrangement should be considered as part of the development of a more comprehensive incentive mechanism as outlined in section 3.8 of the initial draft decision.

17.7.2 Aurizon Network's comments on the initial draft decision

Table 76 Aurizon Network comments on allowable revenues and total actual revenues

Issues	Aurizon Network's comments
Short-run variable maintenance cost (SRVC) and AT ₁ revenue cap adjustments	Aurizon Network disagreed with our initial draft decision to remove its SRVC adjustment to allowable revenues as part of the annual reference tariff variation as it believed it was inconsistent with other adjustments associated with changes in volume forecasts. However it acknowledged that the SRVC rate could be better aligned to volumes and further analysis was required. Aurizon Network said that if we were willing to work with it to confirm these amounts, then this clause should be reinstated and amended to reflect the revised SRVC rate. The SRVC would only be applied to the 2016–17 reference tariff variation. 315
	Aurizon Network also disagreed with our initial draft decision to exclude AT_1 from the revenue cap adjustment process, but accepted our initial draft decision subject to a review of reference tariffs prior to the commencement of UT5. 316
Audit costs	Aurizon Network accepted our initial draft decision to require that such costs should be efficiently incurred and not recovered elsewhere in the undertaking. 317
Treatment of rebate adjustments	Aurizon Network said that we misinterpreted the purpose of their proposal which excluded from allowable revenues both forecast revenues attributable to rebateable assets and actual rebates paid. Aurizon Network said that if we want to reflect our intent to isolate volume risk to the Access Facilitation Deed (AFD) holder, then we should allow rebate adjustments to be retained, as the sole purpose of the rebate adjustment is to ensure that volume risk is isolated to the AFD holder. 318
	Aurizon Network also said that it was difficult for them to renegotiate the terms of each AFD so rebate over- or under-recoveries could be settled between the two parties subject to the AFD. 319
Overload charges and ancillary revenues	Aurizon Network accepted our proposed inclusion of ancillary revenues in the total actual revenues to the extent that the ancillary services are related to provision of access for coal-carrying train services.
	Aurizon Network said it could agree with our definition of ancillary revenues in the calculation of total actual revenue subject to the following amendments:
	the removal of the word 'storage' from the definition of ancillary services, since storage is not part of the declared service and is not included in their MAR
	 the removal of the words 'relating to maintaining connections to private infrastructure', since these words are unnecessary as these connections are covered by the Standard Rail Connection Agreement which states that costs associated with maintenance of those connections will be included in the MAR.
	Aurizon Network accepted our proposed inclusion of overload charges on the basis that ballast cutting costs associated with overloaded wagons on trains are allowed by the QCA as part of the UT4 maintenance allowance. 321
Waiving of relinquishment fees	Aurizon Network disagreed with our initial draft decision and said it was its view that a change is required to the current relinquishment fee provisions to help facilitate operator efficiency improvements. 322
Performance incentives	Aurizon Network agreed with our initial draft decision. 323

³¹⁵ Aurizon Network, 2014 DAU, sub. 82: 257–258. ³¹⁶ Aurizon Network, 2014 DAU, sub. 82: 257–258.

³¹⁷ Aurizon Network, 2014 DAU, sub. 82: 258.

³¹⁸ Aurizon Network, 2014 DAU, sub. 82: 258–259.

³¹⁹ Aurizon Network, 2014 DAU, sub. 82: 258–259.

Aurizon Network, 2014 DAU, sub. 82: 259–261.

³²¹ Aurizon Network, 2014 DAU, sub. 82: 260–261.

³²² Aurizon Network, 2014 DAU, sub. 82: 142.

17.7.3 Other stakeholders' comments on the initial draft decision

Table 77 Stakeholders' comments on allowable revenues and total actual revenues

Issues	Stakeholders' comments
Short-run variable maintenance cost (SRVC) and AT ₁ revenue cap adjustments	The QRC supported our initial draft decision and considered that an approach involving extensive consultation and assessment of the needs of the system should be developed, rather than be a formula-based adjustment. The QRC also supported our position to exclude AT_1 from the revenue cap adjustment process to reflect differences between actual and forecast AT_1 revenues.
Audit costs	The QRC supported our initial draft decision. 326
Treatment of rebate adjustments	The QRC supported our initial draft decision. 327
Overload charges and ancillary revenues	The QRC supported our initial draft decision and said that the calculation of 'Total Actual Revenue' requires the inclusion of ancillary revenue. 328
Waiving of	Aurizon Operations said that:
relinquishment fees	it maintained its position that there should be a mechanism whereby a component of a relinquishment fee attributable to the ntk and the nt can be waived where it is associated with above-rail productivity improvements and the total contracted ntk and nt are unchanged
	 there should be a mechanism whereby the rail operator can seek a rebate on the AT₂ component of a relinquishment fee which is commensurate with any benefits arising from an above rail productivity improvement and the total ntk and nt are unchanged
	the pricing principles in section 168A of the QCA Act require that prices for access to the service should provide incentives to reduce costs or otherwise improve productivity. 329
	BMA disagreed with our initial draft decision and noted that supply chain participants are working together to improve the efficiency of the network by introducing new operating practices. BMA considered our initial draft decision was likely to significantly reduce investment in this research.
Performance incentives	The QRC supported our initial draft decision requiring the removal of increment, and reasoned that Aurizon Network should not be in a position to claim performance bonuses until a symmetrical suite of performance incentives is introduced. 331

17.7.4 QCA analysis and consolidated draft decision

After having regard to the criteria listed in section 138(2) of the QCA Act and stakeholders' submissions, we refuse to approve Aurizon Network's proposals relating to revenue cap adjustments in the 2014 DAU.

After considering the submissions of Aurizon Network and other stakeholders we have concluded that, in the main, we have received no new information or arguments that compel us

³²³ Aurizon Network, 2014 DAU, sub. 82: 244.

³²⁴ QRC, 2014 DAU, sub. 84: 42.

³²⁵ QRC, 2014 DAU, sub. 84: 43.

³²⁶ QRC, 2014 DAU, sub. 84: 42.

³²⁷ QRC, 2014 DAU, sub. 84: 42.

³²⁸ QRC, 2014 DAU, sub. 84: 43.

Aurizon Operations, 2014 DAU, sub. 93: 20–22.

³³⁰ BMA, 2014 DAU, sub. 78: 6.

³³¹ QRC, 2014 DAU, sub. 84: 43.

to change our initial draft decision. Therefore, most of the reasons contained in our initial draft decision remain relevant.

Short-run variable maintenance cost and AT₁ revenue cap adjustments

Our initial draft decision removed revenue adjustments associated with the short-run variable maintenance costs, for the reasons contained in Section 17.7 of the initial draft decision.

Although Aurizon Network disagreed with our initial draft decision, it recognised that the short-run variable maintenance cost rate could be better aligned to volumes. Aurizon Network said that if we were willing to work with it to confirm these amounts, then this provision should be reinstated.³³²

In our initial draft decision, we said we would require a more detailed build-up of the short-run variable costs before these adjustment provisions would be considered for inclusion. As we have not received this information from Aurizon Network, we maintain our position that the revenue adjustments associated with the short-run variable maintenance costs should be removed.

Our initial draft decision also refused to approve Aurizon Network's proposal to include the AT_1 revenue in the revenue cap adjustment process. While disagreeing with this decision, Aurizon Network accepted it subject to a review of reference tariff arrangements prior to the commencement of UT5. Additionally, we have not received any new information or arguments from other stakeholders to the contrary; therefore, our consolidated draft decision is to maintain our position to exclude the AT_1 revenue from the revenue cap adjustment process.

This change will appropriately balance Aurizon Network's and users' rights and interests (s. 138(2)(b), (e) and (h) of the QCA Act).

Audit costs

Our initial draft decision accepted Aurizon Network's proposal that the cost of unplanned audits should be included in adjustments to allowable revenue, subject to our reviews on a case-by-case basis that such costs have been efficiently incurred. As Aurizon Network agreed with our initial draft decision, and as we have not received any new information from other stakeholders to the contrary, our consolidated draft decision is to confirm our initial draft decision for the reasons contained in Section 17.7 of the initial draft decision.

We accept Aurizon Network's proposal on the basis that it will appropriately balance Aurizon Network's and users' rights and interests (s. 138(2)(b), (e) and (h) of the QCA Act).

Treatment of rebate adjustments

Our initial draft decision excluded the under- and over-recovery of rebates from the calculation of both adjusted allowable revenue and total actual revenue.

In its submission to our initial draft decision, Aurizon Network said that we misinterpreted its proposal. Aurizon Network said that if our intention is to isolate volume risk to the AFD holder, then we should allow the retention of rebate adjustments, as the sole purpose of the rebate adjustment is to ensure that volume risks is isolated to the AFD holder. 334

³³³ Aurizon Network, 2014 DAU, sub. 82: 257–258.

³³² Aurizon Network, 2014 DAU, sub. 82: 257–258.

³³⁴ Aurizon Network, 2014 DAU, sub. 82: 258–259.

We have sought further clarification from Aurizon Network and consider that we have not misinterpreted their proposal. Our approach will remove variations between forecast and actual rebates from the take-or-pay and revenue cap adjustment processes, limiting the volume risk to the parties involved in the AFD agreement. Therefore, our consolidated draft decision is to confirm our initial draft decision for the reasons contained in Section 17.7 of the initial draft decision.

This change will appropriately balance Aurizon Network's and users' rights and interests (s. 138(2)(b), (e) and (h) of the QCA Act).

Overload charges and ancillary revenues

In our initial draft decision, we considered it appropriate to include overload charges and ancillary revenues in the calculation of total actual revenue.

In its submission to our initial draft decision, Aurizon Network said it could agree with our initial draft decision subject to removal of the word 'storage' from the definition of ancillary revenues, and removal of the words 'relating to maintaining connections to private infrastructure' from the definition of total actual revenue.³³⁵

Storage

We understand that storage does not form part of access and is excluded from access agreements. However, we undertook further analysis to ensure that the costs associated with Aurizon Network's storage services were not double-counted—that is, are incorporated in the MAR and recovered through reference tariffs and again through a storage fee that is charged to customers.

In response to Aurizon Network's submission 336, we sought from Aurizon Network further information on the storage services it provides. Aurizon Network said that these services include long-term storage of locomotives or empty wagons in locations where tracks are not in use (i.e. using existing infrastructure). 337

Aurizon Network also provided the following additional information regarding these services:

- Storage locations are optimised to minimise disruption to the network.
- The provision of storage means trains operators avoid these costs.
- The storage fee is a nominal charge rolled forward by CPI from prior to 2010.
- The same methodology is applied to all customers to ensure consistency and fairness.
- Storage charges are based on nominal rates, revenues earned are immaterial, and the incremental costs incurred are negligible.

Based on the new information we have received, we understand that Aurizon Network has not built new infrastructure solely to accommodate the storage of locomotives. While particular CQCN assets may be used as part of providing the storage service, the use of these assets for storage activities does not have a material impact on CQCN train services.

From our analysis, it does not appear that costs incorporated in the MAR include the incremental costs incurred by Aurizon Network for the provision of storage services.

³³⁶ Aurizon Network, 2014 DAU, sub. 82: 259–260.

³³⁵ Aurizon Network, 2014 DAU, sub. 82: 259–261.

³³⁷ Aurizon Network, response to the QCA in a Request for Information (4 September 2015).

Therefore we accept Aurizon Network's comment that 'storage' should be removed from the definition of ancillary revenues.

Connections to private infrastructure

Aurizon Network has provided detailed information on connections to private infrastructure including: 338

- connections which are required to facilitate the movement of coal-carrying train services, including to and from private infrastructure, are covered by the SRCA. This means the costs associated with maintenance of these connections are to be included in Aurizon Network's maintenance cost allowance. Aurizon Network has confirmed that the maintenance allowance submitted for UT4 includes these costs.
- the costs associated with maintaining connections which are required to facilitate the movement of non-coal train services have been excluded from the UT4 maintenance cost allowance.

Aurizon Network has confirmed the maintenance allowance it submitted for UT4 includes the costs associated with maintaining connections to private infrastructure for coal-carrying train services. Therefore, the same cost should be included in the calculation of total actual revenue to avoid double counting.

As the costs of maintaining connections to private infrastructure for non-coal train services have been excluded from the UT4 maintenance cost allowance, we agree that the same costs should be excluded from the calculation of total actual revenue.

Overload charges

The ballast cutting costs contained in Chapter 24 do not distinguish between regular-loaded wagons and overloaded wagons. Therefore, the ballast cutting allowance we propose includes the costs associated with overloaded wagons. However, this does not imply that we have made an in-principle decision to include it in future maintenance allowances.

Waiving relinquishment fees

Our initial draft decision did not allow Aurizon Network to waive relinquishment fees for an access holder.

The benefits associated with improving efficiency should be assessed against the associated cost which should reflect the payment of relinquishment fees. Other users unrelated to this decision should not be adversely affected by the waiving of this relinquishment fee.

The reasons we provided in our initial draft decision remain relevant, and are consistent with our consolidated draft decision contained in Chapter 11.

Performance incentives

Our initial draft decision removed the increment calculation and application. As Aurizon Network agreed with our initial draft decision, and we have not received any new information or arguments to the contrary, our consolidated draft decision is to confirm our initial draft decision for the reasons provided in Section 17.7 of the initial draft decision.

³³⁸ Aurizon Network, 2014 DAU, sub. 82: 260–261.

Consolidated draft decision 17.5

- (1) After considering Aurizon Network's proposal for revenue cap adjustments in Schedule F of the 2014 DAU, our consolidated draft decision is to refuse to approve Aurizon Network's original proposal.
- (2) The way in which we consider it is appropriate that Aurizon Network amend its draft access undertaking is to:
 - (a) remove proposed revenue adjustments in relation to
 - (i) short-run variable maintenance costs
 - (ii) AT₁ revenue
 - (b) include in the calculation of adjusted allowable revenue the cost of audits required under this undertaking by the QCA, but only to the extent that the QCA has approved that these costs have been efficiently incurred and these costs are not recoverable elsewhere in this undertaking
 - (c) remove rebate adjustments from the calculation of adjusted allowable revenue
 - (d) include overload charges and ancillary revenues in the calculation of total actual revenue
 - (e) remove the increment calculation and application.

We consider it appropriate to make these decisions having regard to each of the matters set out in section 138(2) of the QCA Act for the reasons set out in our analysis above.

17.8 Reference tariff variation events

17.8.1 Aurizon Network's proposal

Schedule F of Aurizon Network's 2014 DAU contains provisions that require Aurizon Network to submit a reference tariff variation application within 60 days after it becomes aware of an endorsed variation event or a review event. In the event that Aurizon Network fails to do so, we may require Aurizon Network to submit a reference tariff variation application. The reference tariff variation events are discussed below.

Endorsed variation events

Endorsed variation events are similar to those in the 2010 AU except for the removal of the variation in the electric energy charge (defined in the 2014 DAU as 'EC') as a result of a change in pricing by an electricity retailer. Aurizon Network's 2014 DAU proposed instead that our approval be sought for updates to the EC by the end of the May preceding the particular financial year (cl. 2.2(a)).

Review events

Aurizon Network's proposed review events are different to those in the 2010 AU and include, among other things:

• maintenance costs that have been prudently and efficiently incurred, but are greater than the maintenance cost allowance, including maintenance costs that relate to:

- a change in maintenance practices as reasonably requested by an access holder or customer subsequent to the commencing date
- a competitive process, engaging or otherwise appointing a third party, or an Aurizon party (on arms-length terms), to perform any maintenance activities
- force majeure that has a similar definition to that contained in the 2010 AU and further includes storm surge, cyclone, tornado, severe weather conditions and natural calamity.

17.8.2 Summary of our initial draft decision

Our initial draft decision was to refuse to approve Aurizon Network's proposed reference tariff variation events.

We adopted the principle that reference tariff variation events should be limited to events that are not foreseeable and not within the control of Aurizon Network. This principle was consistent with our approach to distribute financial risks between parties that can effectively mitigate them, and appropriately balanced the interests of Aurizon Network and access holders (s. 138(2)(b) and (h) of the QCA Act).

We considered that, in applying this principle, Aurizon Network's 2014 DAU should include reference tariff variation events that comprise:

- a change in law or relevant taxes with a 2.5 per cent materiality threshold
- a change in the pricing related to distribution and/or transmission entities with a 2.5 per cent materiality threshold
- a review of the QCA levy
- force majeure.

17.8.3 Stakeholders' comments on the initial draft decision

Aurizon Network agreed with our initial draft decision to retain its proposed list of endorsed variation events. 339

However, Aurizon Network disagreed with our initial draft decision to limit review events to events that are not foreseeable and not within the control of Aurizon Network. In its submission, Aurizon Network said that our initial draft decision is inconsistent with the pricing principles outlined in section 168A of the QCA Act. It also stated that its proposal helps customers by providing additional flexibility when dealing with changes in circumstances and considers that the following review events should be reinstated: 340

- Aurizon Network's ability to recover maintenance costs that have been prudently and
 efficiently incurred, but are greater than the maintenance cost allowance (subject to a 2.5
 per cent materiality threshold)
- provisions relating to the expansion pricing framework (clause 4.3 (e) of the 2014 DAU)
- provisions relating to a material change in volumes or other circumstances where there are reasonable grounds to amend a Reference Tariff (clause 4.3 (f) and (g) of the 2014 DAU).

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³³⁹ Aurizon Network, 2014 DAU, sub. 82: 261.

³⁴⁰ Aurizon Network, 2014 DAU, sub. 82: 261.

The QRC supported our initial draft decision which limits review events to force majeure events only. 341

While Anglo American does not disagree with the theoretical concept behind the review event process, it disagrees with the way the concept is being used. Anglo American said that review events represent an insurance mechanism to pass through claims at a regulated rate of return rather than the simple escalation of costs of what are now relatively frequent flooding events. 342

Anglo American expressed the following concerns:

- the practical implications of having the review event process at all
- flooding is now relatively common and industry, Aurizon and the QCA have to accept that there will be more flooding in the future
- Aurizon Network should not be able to immediately recover the value of repair in one lump sum from users
- the costs of the repair and construction works should be attributed as replacement capital expenditure (or the renewals program) and these costs should be optimised into the RAB.

17.8.4 QCA analysis and consolidated draft decision

After having regard to the criteria listed in section 138(2) of the QCA Act and stakeholders' submissions, we refuse to approve Aurizon Network's proposals relating to reference tariff variation events in the 2014 DAU.

We have considered the submissions of Aurizon Network and other stakeholders and have concluded that we have not received new and compelling information or arguments that would change our initial draft decision.

We maintain the principle that reference tariff variation events should be limited to events that are not foreseeable and not within the control of Aurizon Network. This principle was consistent with our approach to distribute financial risks between parties that can effectively mitigate them, and appropriately balanced the interests of Aurizon Network and access holders (s. 138(2)(b) and (h) of the QCA Act).

We note that our initial draft decision left out the endorsed variation event related to a change in the pricing related to distribution and/or transmission entities, while it was included in our marked changes to Schedule F of the initial draft decision. We have rectified this internal inconsistency by updating our consolidated draft decision contained below.

Based on the reasons above, our consolidated draft decision is to confirm our initial draft decision.

Our changes appropriately balance the interests of Aurizon Network and access holders (s. 138(2)(b) and (h) of the QCA Act.

³⁴¹ QRC, 2014 DAU, sub. 84: 43.

³⁴² Anglo American, 2014 DAU, sub. 95: 42–43.

³⁴³ Anglo American, 2014 DAU, sub. 95: 42–43.

Consolidated draft decision 17.6

- (1) After considering Aurizon Network's proposed suite of reference tariff variation events in Schedule F of the 2014 DAU, our consolidated draft decision is to refuse to approve Aurizon Network's original proposal.
- (2) The way in which we consider it is appropriate that Aurizon Network amend its draft access undertaking is to limit reference tariff variation events to:
 - (a) a change in law or relevant taxes with a 2.5 per cent materiality threshold
 - (b) a change in the pricing related to distribution and/or transmission entities with a 2.5 per cent materiality threshold
 - (c) a review of the QCA levy
 - (d) force majeure.

We consider it appropriate to make these decisions having regard to each of the matters set out in section 138(2) of the QCA Act for the reasons set out in our analysis above.

18 REFERENCE TARIFFS FOR WIRP TRAIN SERVICES

The proposed 2014 DAU pricing arrangements for WIRP train services were outlined in Aurizon Network's August 2014 guidance note. In December 2014, Aurizon Network submitted an updated pricing proposal (under the 2010 AU process) which set out pricing arrangements for WIRP train services that differed from those in its 2014 DAU proposal.

This chapter discusses our assessment of the appropriateness of Aurizon Network's proposed pricing arrangements for WIRP train services under the 2014 DAU, having regard to the factors set out in section 138(2) of the QCA Act.

Our consolidated draft decision is to refuse to approve Aurizon Network's proposed WIRP reference tariff arrangements. The way in which we consider it appropriate to amend Schedule F to reflect our proposed WIRP pricing arrangements is to:

- modify the allocation of WIRP capital expenditure to existing customers to only include those costs that have clear benefits attributable to existing users
- modify the operating and maintenance costs for WIRP train services to equal those proposed by Aurizon Network in December 2014
- adopt the forecast volumes for WIRP and non-WIRP train services consistent with Energy Economics' forecasts with an adjustment to cap WIRP volumes to contracted volumes
- address the impact of WIRP users that are not expected to rail during the UT4 period, by application of our proposed revenue deferral mechanisms
- apply a system premium for WIRP train services, if applicable, in addition to the relevant Blackwater or Moura system reference tariffs.

Appendix A provides a summary of our proposed changes to Aurizon Network's proposed modelling assumptions, including those related to WIRP pricing arrangements. Appendix B details our reference tariffs (AT1–AT5) for the whole CQCN including WIRP train services.

18.1 Introduction

The Wiggins Island Coal Export Terminal (WICET) is an industry-funded terminal integrated within the existing infrastructure at the Port of Gladstone. Being built in stages, WICET aimed to deliver 27 million tonnes per year of export capacity to a consortium of eight coal exporters with the completion of its first stage. 344

Significant rail infrastructure is required in conjunction with WICET in the Moura and Blackwater coal systems. Wiggins Island Rail Project (WIRP)³⁴⁵ refers to a series of individual geographically distinct rail infrastructure projects in the southern Bowen Basin. These projects are collectively known as the WIRP Stage 1 expansion and consist of six project segments, including a new balloon loop, track duplications and upgrades.

New and existing users of the CQCN have contracted below-rail capacity for access to WICET. These parties, referred to as WIRP users, consist of:

³⁴⁴ The eight users involved in WICET Stage 1 are Aquila Resources, Bandanna Energy, Caledon Resources, Cockatoo Coal, Glencore Xstrata, Northern Energy Corporation, Wesfarmers Curragh and Yancoal.

³⁴⁵ References to 'WIRP' throughout this chapter refer collectively to all WIRP Stage 1 expansion projects.

- WIRP Blackwater—customers who have contracted train services under WIRP arrangements and are geographically located in the Blackwater system
- WIRP Moura—a customer who has contracted train services under WIRP arrangements and is geographically located in the Moura system
- WIRP NCL—a customer who has contracted train services originating from the Colton mine to WICET (referred to as the North Coast Line (NCL) train service) under WIRP arrangements.

Train services to WICET, referred to as WIRP train services, commenced in March 2015.

Further detail on WIRP is set out in our draft decision titled 'Aurizon Network 2014 DAU: Reference Tariffs for Wiggins Island Rail Project Train Services', dated 31 July 2015 ('WIRP draft decision'). We have adopted that material for the purposes of this consolidated draft decision.

18.2 Overview

18.2.1 Aurizon Network's proposal

2014 DAU submission

In its 2014 DAU submission, Aurizon Network proposed pricing arrangements for WIRP train services. As part of its 2014 DAU submission in August 2014, Aurizon Network provided a separate guidance note which outlined the revenue and pricing treatment of WIRP train services under its proposed 2014 DAU. This proposal was similar to the treatment set out under Aurizon Network's withdrawn 2013 DAU. Aurizon Network said that its proposed pricing approach was guided by pricing principles in the 2014 DAU and the legislative requirements of the QCA under section 138 of the QCA Act. 346

Aurizon Network proposed the incremental costs associated with WIRP be socialised across all users within the Moura and Blackwater systems. This would result in all users (WIRP or non-WIRP) of the Moura and Blackwater systems sharing the costs and risks of the WIRP infrastructure. Subsequent stakeholder submissions reflected strongly opposing views as to whether the incremental costs of WIRP should be shared across all system users or borne only by WIRP users.

On 26 November 2014, in response to stakeholder submissions, we asked Aurizon Network for a more comprehensive tariff proposal for WIRP that could be used for further stakeholder consultation in the context of our consideration of the 2014 DAU.

December 2014 pricing proposal

On 18 December 2014, Aurizon Network submitted a pricing proposal for WIRP train services pursuant to clause 6.4.2 of the 2010 AU, rather than as a submission on the 2014 DAU. The proposal comprised 'transitional' reference tariffs under the 2010 AU for 2014–15 through to 2016-17. 348

³⁴⁶ Aurizon Network, 2014 DAU, sub. 6: 2–3.

³⁴⁷ Aurizon Network also proposed an alternative reference tariff for the NCL train service, based on the Colton to Barney Point Alternative Access Charge proposal that we approved in March 2012 (Aurizon Network December 2013 Financial Model; QCA, 2012(e)).

At the time, proposing tariffs for 2015–16 and 2016–17 was beyond the term of the 2010 AU (the 2010 AU has since been extended via a separate proposal and will expire 29 February 2016).

On 20 February 2015, we sought further advice from Aurizon Network on the legal basis for this proposal, given that it was unclear how reference tariffs for periods beyond the term of the 2010 AU could be consistent with the 2010 AU as required by clause 6.4.2(g)(i) of the 2010 AU.

On 6 March 2015, Aurizon Network acknowledged we do not have the power to approve reference tariffs beyond the 2010 AU period under clause 6.4.2 of the 2010 AU. Aurizon Network clarified that the purpose of the pricing proposal was to seek our approval of:

- Aurizon Network's proposed methodology to be applied to calculate WIRP tariffs, as well as our confirmation that WIRP tariffs in the 2014 DAU would be determined on the basis of the methodology outlined in the pricing proposal
- 'transitional' WIRP tariffs for the rest of the 2010 AU period.

Under this pricing proposal, for 2014–15 the existing transitional reference tariff for the Blackwater and Moura systems would be applied to WIRP train services originating from the respective systems. Any access revenues received from these train services in 2014–15 would be credited against WIRP allowable revenues for the succeeding year.

For 2015–16 and 2016–17, Aurizon Network proposed:

- a socialised Blackwater system reference tariff for both WIRP and non-WIRP train services in the Blackwater system
- a system premium on top of the Moura system reference tariff for WIRP train services in the Moura system
- an alternative reference tariff for the NCL train service based on the pricing approach that we approved in March 2012 for the Colton to Barney Point train service.

On 22 April 2015, we approved Aurizon Network's proposed WIRP transitional reference tariff for 2014–15 under the 2010 AU. At the time, the 2010 AU had not been extended beyond the 30 June 2015, so we could not approve tariffs beyond this.

On 5 June 2015, we approved Aurizon Network's proposal to extend the 2010 AU until 29 February 2016. We also approved transitional reference tariffs for coal-carrying train services, including WIRP for 2015–16.

18.2.2 Scope of the QCA assessment

This chapter provides our assessment of Aurizon Network's 2014 DAU in terms of WIRP pricing arrangements. Our consolidated draft decisions in this chapter have considered the application of section 138(2) of the QCA Act as set out in Section 15.2.

We have provided an overview of the legislative framework and its application in a pricing context in Chapter 2 (Legislative framework) and in Chapter 15 (Pricing arrangement for rail access), as well as Chapters 16 and 17. We have adopted that analysis for the purposes of our analysis of the WIRP pricing arrangements.

For the purposes of section 138(2)(h) of the QCA Act, we consider the following additional issues to be relevant to the proposed WIRP pricing arrangements beyond the matters already identified in the previous Chapters:

- the interests of access holders
- the historic level and extent of customer engagement by Aurizon Network, including representations made

- historic expectations regarding the appropriate regulatory framework, including the extent to which the pricing principles approved in the 2010 AU should be used as a benchmark for the WIRP infrastructure
- appropriate allocation of risk between different stakeholders (where not already addressed by section 138(2))
- the possibility of shifting existing volumes to WIRP infrastructure
- the need for transparency and certainty—the WIRP pricing approach should be as transparent as practicable and minimise complexity, to ensure all stakeholders have certainty as to how costs are allocated and how access charges are derived
- market conditions—as the CQCN continues to face globally competitive conditions, a
 balance has to be struck between preserving individual stakeholders' business interests and
 promoting the public interest (i.e. ensuring the CQCN's medium- to long-term competitive
 position in the global coal markets).

18.3 Historical context and implications

In forming our view on WIRP pricing arrangements, we reviewed and considered:

- the relevance of the 2008 Coal Rail Infrastructure Master Plan (CRIMP)
- the relevance of WIRP access conditions
- any regulatory pricing principles contained in the access undertaking that applied at the relevant time.

18.3.1 CRIMP in the context of WIRP

Aurizon Network's proposal

Total WIRP forecast capital costs include \$424.8 million relating to duplications to the Blackwater system. 349

Aurizon Network said the Blackwater duplications were deemed to be prudent and accepted by incumbent Blackwater system customers as part of the 2008 CRIMP and, as a result, received scope pre-approval from the QCA. Aurizon Network noted both these approvals were granted in the absence of the additional capacity created by WICET. 350

Aurizon Network also claimed the request from the Gladstone Coal Exporters Executive (GCEE) in December 2010 to recommence the Blackwater duplication project reinforced the view the duplications remained prudent in the absence of WIRP train services.³⁵¹

Accordingly, Aurizon Network said that the customer endorsement of the 2008 CRIMP justified an allocation of the Blackwater duplication costs to the existing Blackwater users.³⁵²

Summary of the WIRP draft decision

Based on the available information, we did not consider existing users' endorsement of the Blackwater duplications as part of the 2008 CRIMP to be a determinative factor in forming our view on the appropriate allocation of WIRP costs to existing Blackwater users.

³⁵⁰ Aurizon Network, 2014(g): 8.

³⁵¹ Aurizon Network, 2014(g): 9.

³⁴⁹ Aurizon Network, 2014(g): 7.

³⁵² Aurizon Network, 2014(g): 18; Aurizon Network, 2014 DAU, sub. 6: 3.

We recognised existing users of the Blackwater system endorsed the scope of seven mainline duplications as part of the 2008 CRIMP process. Nevertheless, in the two-year period following the 2008 CRIMP, circumstances and assumptions on which the 2008 CRIMP had been developed significantly changed. For example, Aurizon Network amended the timing and number of Blackwater duplications required on numerous occasions and within various forums, based on the results of updated analysis and capacity modelling it had undertaken.

We understood that existing Blackwater customers were not availed the opportunity to vote again to endorse the various changes in scope and the assumptions on which these changes were based. We considered that this was contrary to the interests of all or some of the relevant access holders and access seekers (ss. 138(2)(e) and (h) of the QCA Act) who would have been entitled, through the voting process, to express their view on Aurizon Network's revised proposals.

We considered the fact that Aurizon Network did not conduct subsequent voting processes—based on information that has improved since the 2008 and subsequent CRIMPs—is counter to the requirement to ensure efficient investment in the CQCN and therefore does not align with the object of the access regime and the public interest (ss. 69(e) and 138(a) and (d) of the QCA Act).

Accordingly, we considered that customer endorsement of the 2008 CRIMP is negated and is no longer determinative as the basis for forming our view on allocating WIRP costs. We considered that this position does not conflict with Aurizon Network's legitimate business interests as it can still recover the efficient costs of providing the infrastructure, including a regulated return on the investment commensurate with the regulatory and commercial risks involved, over the estimated economic life of the asset.

Stakeholders' comments on the WIRP draft decision

Aurizon Network

Aurizon Network said the QCA should not seek to negate the effect or relevance of the vote given the following:³⁵³

- Our WIRP draft decision effectively ignored the past customer group vote under the 2010 AU that endorsed the Blackwater duplications.
- Our WIRP draft decision would set a precedent that would diminish regulatory certainty for existing and future investors in the CQCN.
- There were no changes in the scope of the relevant capital projects that are sufficiently material to warrant negating the vote.

Further, Aurizon Network said its correspondence with the GCEE in the lead-up to WIRP supported the view that existing customers recognised the benefits from the Blackwater duplications and were willing to consider contributing to the associated costs. 354

Other stakeholders

WIRP users did not comment specifically on the relevance of the 2008 CRIMP customer endorsement.

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³⁵³ Aurizon Network, 2014 DAU, sub. 109: 6.

³⁵⁴ Aurizon Network, 2014 DAU, sub. 109: 31–32.

Asciano and Idemitsu agreed that the 2008 CRIMP customer endorsement does not mean that the WIRP cost should be allocated to existing Blackwater users. Additionally, not all impacted stakeholders were consulted in the 2008 CRIMP process.

QCA analysis and consolidated draft decision

After having regard to the section 138(2) factors and stakeholder submissions, we do not consider it appropriate to treat the 2008 CRIMP customer endorsement as a determinative factor when forming our view on the appropriate allocation of WIRP costs to existing Blackwater users.

Upon gaining customer endorsement, Aurizon Network significantly amended the scope and circumstances on which the 2008 CRIMP had been developed. As outlined in our WIRP draft decision, Aurizon Network indicated on numerous occasions the assumptions underlying the 2008 CRIMP were no longer relevant and updated modelling showed a materially reduced requirement for below rail infrastructure for existing Blackwater train services. 356

This reduced requirement for WIRP infrastructure for existing Blackwater train services is apparent in the correspondence between the GCEE and Aurizon Network in the lead-up to WIRP. Aurizon Network said that this correspondence reinforced their view that the Blackwater duplications provided benefits to existing Blackwater customers and these benefits were valued by existing Blackwater users.

However, we consider the context of the correspondence was unclear, as also noted by various stakeholders. ³⁵⁷ We note the following:

- On 14 December 2010, the GCEE sought clarification from Aurizon Network with respect to the scope and timing of the Blackwater duplication programme, after being informed in November 2010³⁵⁸ that all seven duplications included in the 2008 CRIMP would no longer be required for existing train services.
- On 20 December 2010, Aurizon Network confirmed to the GCEE that the seven duplications included in the 2008 CRIMP were not required for current Blackwater capacity and instead were required for capacity expansion associated with WICET. Specifically, only three Blackwater duplications, or potentially four, would be required for WICET Stage 1, and the remaining duplications would be developed as demanded (such as WICET Stage 2 or Stage 3).
- On 24 December 2010, the GCEE expressed its concern regarding the timing of the
 duplications and said 'a critical window of opportunity will be missed'. It urged Aurizon
 Network to 'complete these duplications during a period when system throughput is
 expected to be relatively low and before a forecast surge in railing requirements' to
 minimise disruptions due to construction. It said that the GCEE members would be 'willing to

³⁵⁵ Idemitsu, 2014 DAU, sub. 113: 1; Asciano, 2014 DAU, sub. 112: 5.

³⁵⁶ Letter from the Queensland Treasurer to GCEE, November 2010; letter from Aurizon Network to GCEE, May 2010.

³⁵⁷ Idemitsu, 2014 DAU, sub. 71: 2; Anglo American, sub. 72: 4.

³⁵⁸ Letter from Queensland Treasurer to GCEE, November 2010; Letter from Aurizon Network to GCEE, May 2010.

³⁵⁹ GCEE, letter to QR National, 14 December 2010.

³⁶⁰ QR National, letter to GCEE, 20 December 2010.

consider the inclusion of costs of the duplications in the RAB, despite the fact they may be constructed earlier than would otherwise have been the case'. 361

We consider that the letter dated 24 December 2014 is not clear in terms of whether it was referring to the timing of the three to four Blackwater duplications required for WICET Stage 1 (also referred to as WIRP Stage 1), or the remaining duplications that Aurizon Network did not plan to construct as part of WIRP Stage 1 at that time.

In addition, it is not clear whether any 'benefit' referred to by the GCEE was only a reference to the 'critical window of opportunity' if Aurizon Network built the Blackwater duplications during a period of low system throughput.

Unclear references aside, we also consider the GCEE letter is non-definitive in terms of the GCEE members' willingness to contribute to the duplication costs. The GCEE stated only that the members 'are willing to consider' rather than commit to contributing to the duplication costs. Further, based on available information we understand that Aurizon Network did not formally respond to that GCEE letter.

Aurizon Network did not seek to gain further approval from existing users after the 2008 CRIMP. In fact, Aurizon Network had previously cited the lack of regulatory pre-approval of WIRP as one of the justifications for its proposed WIRP access conditions. At that time, Aurizon Network said that it would be willing to apply for regulatory pre-approval of the WIRP scope at the request of WIRP users, but this process might delay the agreement of WIRP commercial terms and the commencement of WIRP.

Accordingly, while all seven Blackwater duplications ultimately formed part of the WIRP scope, we consider there is a lack of evidence that existing users were consulted in a meaningful manner regarding such inclusion following the 2008 CRIMP process. Particularly, existing users were not consulted on how the associated costs would be allocated, even though Aurizon Network indicated during the development of the WIRP access conditions that some (if not all) of the duplications would only be required for WIRP train services.

On this basis, we consider Aurizon Network's proposal (i.e. to use 2008 CRIMP customer endorsement to justify an allocation of the Blackwater duplication costs to existing Blackwater users) is unlikely to be consistent with the interests of existing users (who represent a subset of the access seekers and access holders). We note that it may be in the interest of WIRP users (who also represent a subset of the access seekers and access holders), given that it might result in lower tariffs for these customers.

We also consider that our consolidated draft decision does not conflict with Aurizon Network's legitimate business interests, or the pricing principles in section 168A of the QCA Act. Aurizon Network can still recover the efficient costs of providing the infrastructure, including a regulated return on the investment commensurate with the regulatory and commercial risks involved, over the estimated economic life of the asset.

We do not consider that our consolidated draft decision with respect to the 2008 CRIMP undermines regulatory certainty and investment confidence. In our view, there is some evidence that the 2008 CRIMP process was already undermined due to the lack of consultation with existing users leading up to WIRP. In light of the discussion above, to use the 2008 CRIMP

³⁶¹ GCEE, letter to QR Network, 24 December 2010.

³⁶² Aurizon Network, 2011: 14.

³⁶³ Aurizon Network, 2011: 14.

customer endorsement to justify allocating some WIRP costs to existing users could result in a loss of faith in the legitimacy of the customer endorsement process, and potentially promote incentives to inappropriately use the mechanism for other expansion projects. We consider such outcomes are unlikely to be consistent with the object of Part 5 of the QCA Act—particularly with respect to promoting efficient investment—as well as public interest.

Consolidated draft decision 18.1

(1) Our consolidated draft decision is that we do not consider it appropriate to treat the customer endorsement of the 2008 CRIMP as a determinative factor in forming our view on the appropriate allocation of WIRP costs to existing Blackwater users.

We consider it appropriate to make this decision having regard to each of the matters set out in section 138(2) of the QCA Act for the reasons set out in our analysis above.

18.3.2 WIRP access conditions Aurizon Network's proposal

In September 2011, Aurizon Network and WIRP access seekers agreed upon a set of access conditions required by Aurizon Network for it to expand its rail network to provide sufficient capacity to support WICET Stage 1. The detailed terms of the agreed access conditions were contained in individual deeds (WIRP deeds) between Aurizon Network and each of the WIRP access seekers.

The WIRP deeds included a fee (the WIRP fee) applied to each WIRP access seeker's share of the total cost of the WIRP project. The WIRP fee was based on a set proportion of the cost of the Blackwater duplications, and allocated to access seekers accordingly. 364

Aurizon Network did not consider the access conditions to be relevant to WIRP pricing arrangements. Aurizon Network said this is because the access conditions are designed to mitigate its exposure to risks it has taken in addition to those outlined in the standard terms and conditions of the access agreement and, in the case of WIRP:

- the access condition is in the form of an incentive based fee (WIRP fee) linked to the timing, cost and delivery of the installed capacity³⁶⁵
- the WIRP fee is paid by WIRP users only, and the arrangements do not allow Aurizon Network to pass the WIRP fee through to other access holders.

In addition, Aurizon Network said the existence of access conditions does not preclude CQCN infrastructure costs being shared:

The risk of sharing CQCN infrastructure costs between users is an accepted part of the standard regulatory framework. In the context of WIRP, this risk must be kept separate and distinct from any discussion around access conditions. ³⁶⁷

³⁶⁴ Aurizon Network, 2014(g): 15, 19.

³⁶⁵ Aurizon Network, 2014(g): 14–15.

³⁶⁶ Aurizon Network, 2014(g): 15.

³⁶⁷ Aurizon Network, 2014(g): 15.

Summary of the WIRP draft decision

In principle, we agreed with Aurizon Network's position that the existence of access conditions does not necessarily preclude the cost of assets from being socialised. Pricing principles can still be applied to determine how WIRP capital costs should be recovered from new and existing users. In addition, there are no arrangements in the 2010 AU preventing the socialisation of assets where access conditions apply.

In this instance, however, Aurizon Network and WIRP users agreed that additional risks were involved in developing the WIRP project and that Aurizon Network should be compensated for this via access conditions (a WIRP fee). We considered this factor relevant in forming our view on which WIRP costs should be allocated to WIRP users.

In coming to this view we noted both Aurizon Network and WIRP users had decided that it was in their individual interests to agree to the WIRP fee. By contrast, we considered it was not immediately clear what is in the interests of non-WIRP users given the presence of the WIRP fee and the complexities in developing WIRP pricing.

As such, we considered that when developing our initial draft decision on WIRP pricing and balancing the interests of all relevant access seekers, access holders and the public interest (ss. 138(2)(d), (e) and (h) of the QCA Act), it would not be appropriate to exclude an assessment of the WIRP access conditions when forming our decision. Further, we saw no reason why this would conflict with Aurizon Network's legitimate business interests (s. 138(2)(b) of the QCA Act).

Stakeholders' comments on the WIRP draft decision

Aurizon Network

Aurizon Network agreed that we are entitled to consider the WIRP access conditions. However, it considered the access conditions to be of little relevance to the WIRP pricing proposal and made the following comments:

- The access conditions are an incentive-based payment related to Aurizon Network's delivery
 of the relevant capacity with respect to time and cost because these matters were of
 considerable importance to the relevant WIRP users.
- The access conditions do not relate to the entire scope of the WIRP programme.
- The QCA approved the access conditions and should not act in a way that unwinds them or places additional risks on Aurizon Network.
- Only existing WIRP users are subject to the access conditions, and Aurizon Network has not proposed to seek compensation from non-WIRP users.³⁶⁸

Other stakeholders

Asciano and Anglo American agreed with our WIRP draft decision. 369

WIRP users said the scope in the WIRP deed was used to determine the WIRP fee to be paid by the WIRP users and it does not reflect the WIRP users' view on cost allocation between WIRP and non-WIRP users.³⁷⁰

³⁶⁸ Aurizon Network, 2014 DAU, sub. 109: 33.

³⁶⁹ Asciano, 2014 DAU, sub. 112: 5; Anglo American, 2014 DAU, sub. 111: 3.

³⁷⁰ WIRP Users, 2014 DAU, sub. 107: 7.

QCA analysis and consolidated draft decision

After having regard to the section 138(2) factors and stakeholder submissions, we do not consider it appropriate to exclude the consideration of the terms of the WIRP access conditions when forming our view on which WIRP costs should be allocated to WIRP users.

Under the WIRP access conditions, Aurizon Network and WIRP users agreed to an incentive-based payment scheme linked to the delivery of WIRP programme. We acknowledge the WIRP fee does not cover the entire scope of the WIRP programme, nevertheless, it is unclear to us how that would deem the access conditions irrelevant to our assessment. Instead, we consider that the extent to which WIRP scope is covered under the access conditions is itself a relevant factor in forming our view on which WIRP costs should be allocated to WIRP users. The 2010 AU does not preclude the terms of an approved access condition from being considered as part of regulatory pricing assessment.

We also do not consider our consolidated draft decision unwinds the WIRP access conditions. Aurizon Network is still entitled to the WIRP fee agreed under the WIRP access conditions.

On this basis, we are of the view that our consolidated draft decision balances Aurizon Network's legitimate business interests and the interests of all relevant access seekers and access holders (ss. 138(2)(b), (d) and (e) of the QCA Act).

We consider that our consolidated draft decision is unlikely to conflict with the object of Part 5 of the QCA Act—particularly with respect to promoting efficient investment—as well as public interest, given that our consolidated draft decision is not inconsistent with the 2010 AU and does not unwind the WIRP access conditions.

Consolidated draft decision 18.2

(1) Our consolidated draft decision is that it would not be appropriate to exclude consideration of the WIRP access conditions when forming our consolidated draft decision.

We consider it appropriate to make this decision having regard to each of the matters set out in section 138(2) of the QCA Act for the reasons set out in our analysis above.

18.3.3 Applicable access undertaking for regulatory pricing principles Aurizon Network's proposal

Aurizon Network provided us with two separate documents outlining their proposed pricing and revenue treatments for WIRP train services:

- a submission that outlines its revenue and pricing treatment of WIRP in its 2014 DAU submission (August 2014)
- a proposal for 'transitional' tariffs for WIRP train services pursuant to clause 6.4.2 of the 2010 AU (December 2014).

Under these proposals, Aurizon Network applied different assumptions (e.g. cost allocations, volumes, etc.) and methodologies when assessing prices for WIRP train services. Aurizon Network's proposed methodologies for each of its two separate pricing proposals are described at a high level below.

August 2014 submission

Aurizon Network said that its proposed pricing treatment for WIRP under its 2014 DAU was guided by the 'pricing limit' principle proposed under the same draft access undertaking. Aurizon Network's 2014 DAU required the access charges to be set (2014 DAU, cl. 6.3.2(a)):

- (i) no less than the level that will recover the expected Incremental Costs of providing Access ...; and
- (ii) no more than the level that will recover the expected Stand Alone Cost of providing Access ...

Aurizon Network said that these bounds allowed for a number of pricing outcomes and it had sought a reasonable outcome that it considered balanced the interests of different stakeholders.

Aurizon Network applied the 'socialisation' test as proposed in its 2014 DAU to determine whether WIRP expansion costs should be socialised with existing system tariffs for the Blackwater and Moura systems. Clause 6.2.4(i) of Aurizon Network's proposed 2014 DAU required the comparison, on a \$/nt basis, between the existing system reference tariff (without the expansion) and the same tariff once incremental costs and volumes arising from the expansion are socialised within the system.³⁷¹

Aurizon Network said the outcome of this socialisation test was that the 'socialised' tariffs for both the Blackwater and Moura systems would be lower (on a \$/nt basis) than the respective existing system reference tariffs. Aurizon Network said this analysis indicated that WIRP should be socialised within the Blackwater and Moura systems. As a result, Aurizon Network's 2014 DAU submission proposed 'socialised' tariffs for both the Blackwater and Moura systems. ³⁷²

December 2014 pricing proposal

In its December 2014 pricing proposal, Aurizon Network applied the 2010 AU provisions for pricing WIRP train services, rather than the provisions in Aurizon Network's 2014 DAU. Aurizon Network said that WIRP users supported the application of the 2010 AU provisions for setting reference tariffs for WIRP train services.

With respect to the application of the 2010 AU provisions under its December 2014 proposal, Aurizon Network said:

- the investment decisions in relation to WIRP and WICET had relied on the 2010 AU
 provisions, hence it would not be appropriate to retrospectively apply Aurizon Network's
 proposed 2014 DAU provisions to pricing WIRP train services
- applying the 2010 AU provisions to WIRP pricing is consistent with the existing approach to
 assessing the prudency of capital expenditure, where the assessment is based on
 information available to the parties at the time of making the decision
- the final form of the 2014 DAU provisions is not known, and the 2010 AU provisions will still be in effect when WIRP train services commence in 2014–15.

Aurizon Network applied a specific provision of the 2010 AU, which required that the applicable reference tariff for a new coal-carrying train service would be expressed on an \$/ntk basis, as stated in 2010 AU (Schedule F, Part B, cl. 4.1.2):

³⁷¹ Clause 6.2.4(i) has references to the 'Highest Reference Tariff'. In cases where no existing expansion tariff is associated with the system, the system reference tariff is the highest reference tariff.

³⁷² Aurizon Network, 2014 DAU, sub. 6: 6.

In order to reflect the requirements of Subclause 4.1.1, the Reference Tariff applicable for a new coal carrying Train Service will be the higher of (on a \$/ntk basis):

- (a) the Reference Tariff for the relevant Individual Coal System Infrastructure; or
- (b) the sum of the new coal carrying Train Service's Private Incremental Costs (if any), the Incremental Costs of using any Rail Infrastructure specifically related to the new coal carrying Train Service and the required minimum Common Cost contribution ...

provided that the Access Charge payable to QR (now Aurizon) Network for the operation of that new coal carrying Train Service is calculated as the applicable Reference Tariff less the Private Incremental Costs (if any).

This provision (subclause 4.1.2) was applied to WIRP train services in the Blackwater and Moura systems, but not to the NCL train service, which originates from the Queensland Rail network (Aurizon Network proposed an alternative reference tariff for this train service).

Aurizon Network said that, consistent with the requirements of subclause 4.1.2, a socialised system reference tariff should be applied to WIRP train services in the Blackwater system, and an incremental reference tariff (i.e. a system premium on top of the Moura system reference tariff) should apply in the Moura system.

Summary of the WIRP draft decision

We emphasised in our WIRP draft decision that our analysis is occurring under the 2014 DAU process. Therefore, we considered whether the reference tariffs for WIRP identified by Aurizon Network in its 2014 DAU results in a draft access undertaking that we consider to be appropriate having regard to the matters under section 138(2) of the QCA Act.

In doing so, we considered submissions from some stakeholders that the pricing principles set out in the 2010 AU should apply rather than those set out in the 2014 DAU. We also considered arguments based on historic expectations.

Ultimately, while we recognised the relevance of the 2010 AU provisions to WIRP pricing, we did not consider these provisions to be determinative in this context. We did not consider that the pricing principles set out in the 2010 AU should apply rather than those set out in the 2014 DAU.

The factors that informed our view were:

- the applicability of subclause 4.1.2, Schedule F, Part B of the 2010 AU ('subclause 4.1.2') to WIRP train services
- the general intent of the 2010 AU and 2014 DAU pricing principles.

Applicability of subclause 4.1.2

We did not consider the new WIRP train services should be priced in accordance with subclause 4.1.2. We considered that subclause 4.1.2 should not be applied in the WIRP context as it was not designed for such a purpose.

Broad applicability

Subclause 4.1.2 was approved by us in the context of a new train service (an origin–destination pair) with individual coal system infrastructure specifically related to the new train service.³⁷³ It was not envisaged that this test would be applied for major step changes in capacity such as the integrated duplications associated with WIRP.

³⁷³ QCA, 2009: 162–63

Cost and risk could potentially differ significantly between providing access for a single train service by way of a mine-specific spur, and providing access for a combination of new train services arising from a major expansion of the network. In the latter case, if a train service subsequently under-railed, there may be a significant adverse impact on other users. Given this, we considered that the strict application of subclause 4.1.2 to establish prices for WIRP train services without the consideration of other relevant factors disregards the magnitude of costs and risks associated with the project.

In particular, we considered it unreasonable for the economic viability of a mine that is already operating to be adversely impacted by a material increase in access charges resulting from an expansion triggered by other users. Existing users should, to the extent practicable, be confident of a relatively stable risk and access charge profile over time.

Therefore, we did not consider the application of subclause 4.1.2 to a major expansion such as WIRP would be appropriate when having regard to the statutory criteria under section 138(2) the QCA Act.

Specific issues in interpretation

WIRP users suggested there would be a lack of clarity if subclause 4.1.2 were to apply to the interpretation of the term 'specifically related to' with respect to the concept of incremental costs. WIRP users questioned whether incremental mainline costs are relevant for the purposes of the test outlined in subclause 4.1.2.

In its 2013 DAU submission, Aurizon Network also suggested that there was uncertainty among stakeholders with respect to the meaning of incremental costs in the context of applying subclause 4.1.2 to WIRP.³⁷⁴ In particular, Aurizon Network said there was confusion over whether 'specifically related to' referred to only those expansion costs for infrastructure unique to the new train service, or whether it also includes an allocation of expansion costs for common-use infrastructure attributable to the new train service.³⁷⁵

We considered that the difficulty Aurizon Network and WIRP users were experiencing in interpreting 'specifically related to' in the context of applying subclause 4.1.2 to WIRP is because this clause was not designed or intended to be applied in the context of a major expansion. Our reasoning is outlined below.

In its 2013 DAU submission, Aurizon Network explained the application of the words 'specifically related to' as:

This requirement is based on an expectation that AT_2 is representative of the mainline expansion costs and therefore not within the construct of incremental costs (as it is a cost that is common across multiple users). ³⁷⁶

This was broadly consistent with our interpretation of the application of subclause 4.1.2 in our approval of this test in our draft decision on the 2009 DAU:

... the incremental cost used in the system test calculations is based on the asset value and operating cost of the spur, rail loop and other infrastructure which is specifically dedicated to a particular mine. It does not encompass any amount for the train paths on the shared or mainline part of the network, which are required to transport the mine's coal to its destination. Therefore, if train services only paid their incremental cost, they would 'free ride' on the cost of the shared network.

³⁷⁵ Aurizon Network, 2013 DAU, sub. 2: 197.

³⁷⁴ Aurizon Network, 2013 DAU, sub. 2: 197.

³⁷⁶ Aurizon Network, 2013 DAU, sub. 2: 197.

... QR Network's proposed [Common Cost Contribution (CCC)] threshold in the 2009 DAU provides for a mine to pay at least a minimum portion of the shared infrastructure cost, which is difficult or impossible to differentiate between individual users. This means that, in effect, the minimum CCC is a way of estimating those incremental costs that relate to a train service's use of the mainline segments of a coal system. 377

In this respect, we were concerned that the minimum contribution to common costs (CCC) as calculated in accordance with subclause 4.1.2 would reflect the incremental costs associated with WIRP if these costs were not included as part of incremental costs 'specifically related to the new coal carrying Train Service'. We considered this issue highlights the fact that subclause 4.1.2 was not designed or intended to be applied in the context of a major expansion, and therefore is not an appropriate alternative to the pricing proposal for the 2014 DAU.

Intent of the 2010 AU and 2014 DAU provisions

We considered there are alternative approaches to subclause 4.1.2 that address issues associated with WIRP pricing arrangements and are consistent with the 2010 AU pricing principles and the QCA Act.

A key pricing principle common to both the 2010 AU and 2014 DAU (as well as under our proposed amendments to the 2014 DAU) is the pricing limit principle, which states that the relevant access charge for a train service will at least cover the expected incremental costs of providing access for that train service. Both the 2010 AU and proposed 2014 DAU define incremental costs as:

... those costs of providing Access, including capital (renewal and expansion) costs, that would not be incurred (including the cost of bringing expenditure forward in time) if the particular Train Service or combination of Train Services (as appropriate) did not operate, where those costs are assessed as the Efficient Costs and based on the assets reasonably required for the provision of Access.

This definition applies the concept of avoidable costs to address how a floor price can be established for new train services that require an expansion.

This treatment of incremental costs for a major expansion was reflected in Aurizon Network's 2013 DAAU pricing proposal for Goonyella to Abbot Point Expansion (GAPE) train services, where it was proposed that the incremental costs associated with GAPE infrastructure be allocated to expanding customers. This approach is also consistent with the principles proposed by Aurizon Network for the expansion pricing framework in the 2014 DAU.

This provides a precedent regarding the treatment of incremental costs for a major expansion under the 2010 AU that does not relate to existing arrangements in the 2010 AU (i.e. clause 4.1 relating to pricing for new train services including cross-system traffics).

Aurizon Network said that this precedent does not apply to WIRP as there were different considerations for GAPE pricing including:

- As part of GAPE negotiations, it was agreed that separate revenue and take-or-pay caps would apply to GAPE train services.
- Pricing principles were consistent between UT2 (when the GAPE project was endorsed) and UT3 (when the GAPE Draft Amending Access Undertaking (DAAU) was approved).

³⁷⁷ QCA, 2009: 163.

³⁷⁸ Aurizon Network, 2014(g): 11.

However, we did not consider Aurizon Network's suggestion that these factors differentiate GAPE from WIRP to be compelling. With regard to the first factor, the outcome of negotiations between Aurizon Network and expanding GAPE customers was not a key consideration in accepting the development of a separate GAPE system and tariff. We considered this was a reasonable and appropriate approach in our approval of the GAPE DAAU because the proposed tariff was largely based on the incremental costs of the GAPE infrastructure, and avoided sharing the cost of GAPE with other users that did not benefit from the GAPE infrastructure. With regard to the second factor, we did not consider that the pricing principles under the 2010 AU (when WIRP was endorsed) and 2014 DAU are inconsistent with each other in the manner suggested by Aurizon Network.

It was our view that the approved GAPE pricing arrangements provide a precedent that could appropriately be applied to the proposed WIRP pricing arrangements, as the GAPE expansion has several similar characteristics, including that it involves a substantial increase in capacity with a ramp-up period.

We also considered some of the issues in Aurizon Network's 2014 DAU (as well as our proposed amendments) are highly relevant to WIRP pricing arrangements and may lead to a better pricing outcome for all parties. These issues included:

- assessing the impact on existing users (in terms of expected access charge) of an expansion triggered by other users
- the take-or-pay risk for existing users if forecast expansion volumes fail to materialise
- determining whether a CCC should apply for expanding users.

In summary, we were of the view that we are under no obligation to apply subclause 4.1.2 when considering our WIRP draft decision for WIRP pricing. We noted the GAPE expansion pricing process under the 2010 AU did not adopt such an approach. Overall, we did not consider that injudicious adherence to a single clause in the 2010 AU would be appropriate given the range of factors we are required to have regard to under section 138(2) of the QCA Act.

Stakeholders' comments on the WIRP draft decision

Aurizon Network

Aurizon Network disagreed with our WIRP draft decision and said: 380

- the 2010 AU was the only regulatory regime that parties could base their investment decisions on
- it would be inappropriate for the QCA to assess its WIRP pricing proposal under 2014 DAU because it was not drafted at the time the WIRP arrangements were agreed
- the concept of an expansion tariff under the 2014 DAU was not contemplated by any parties at the time the investment decisions were made, and if it were, some projects may not have proceeded
- the WIRP train services commenced in the last quarter of 2014–15 when the 2010 AU was in effect.

³⁷⁹ QCA, 2013(f): 20.

³⁸⁰ Aurizon Network, 2014 DAU, sub. 109: 33–34.

Further, Aurizon Network said that there is nothing in subclause 4.1.2 that excludes its operation where access for the new train service involves a major expansion, and hence it considered that the QCA must apply subclause 4.1.2 to WIRP train services.³⁸¹

We also note that Aurizon Network maintained that the 'WIRP Pricing Proposal' should be considered by QCA under the 2010 AU and that 'it would be inappropriate for the QCA to assess the WIRP Pricing Proposal in the context of the 2014 DAU'. ³⁸² Aurizon Network submitted that following application of the 2010 AU 'the resulting Reference Tariffs, will need to be updated to reflect the financial metrics and inputs confirmed as part of the QCA's final decision on the 2014 DAU'. Aurizon Network considered that 'this is an appropriate and reasonable way of incorporating the WIRP pricing arrangements as part of the finalisation of the 2014 DAU'. ³⁸³

Other stakeholders

WIRP users disagreed with our WIRP draft decision and said it would seriously threaten future investments in the CQCN. They said the expansion principles did not exist in the 2010 AU and 'could not be reasonably anticipated when WIRP was conceptualised or even when WIRP was agreed to by the WIRP users themselves'. They believed our WIRP draft decision is a contravention of the object of Part 5 of the QCA Act. 384

Asciano agreed that subclause 4.1.2 is not an appropriate test to apply to WIRP train services. 385

Anglo American agreed that the pricing principles in the 2014 DAU are most relevant for the following reasons³⁸⁶:

- The provisions in the 2014 DAU are the first to substantively consider the pricing of expansions with the experience gained with the GAPE and WIRP projects.
- The 2014 DAU balances the interests of all the parties by taking into account the experience gained with the GAPE and WIRP projects.
- It is well known that a review of all relevant provisions, including pricing provisions, occurs at each regulatory reset.
- The issue of whether socialisation should continue was brought up by Anglo American in their submission to the draft UT3, and said that socialisation should be considered on a caseby-case basis.

Idemitsu said while the 2010 AU pricing principles should be applied to WIRP, they also accepted our WIRP draft decision that subclause 4.1.2 should not be applied to major expansions such as WIRP. It considered that the 2010 AU (cl. 6.2.2) should result in a pricing decision in which the WIRP users pay for the full incremental cost, including mainline cost, such that existing users are not adversely impacted.³⁸⁷

QCA analysis and consolidated draft decision

After having regard to the section 138(2) factors and stakeholder submissions, our consolidated draft decision is that the 2010 AU provisions—while highly relevant—do not waive the

³⁸¹ Aurizon Network, 2014 DAU, sub. 109: 52–53.

³⁸² Aurizon Network, 2014 DAU, sub. 109: 33–34.

³⁸³ Aurizon Network, 2014 DAU, sub. 109: 34.

³⁸⁴ WIRP Users, 2014 DAU, sub. 107: 48–49.

³⁸⁵ Asciano, 2014 DAU, sub. 112: 6.

³⁸⁶ Anglo American, 2014 DAU, sub. 111: 3–4.

³⁸⁷ Idemitsu, sub. 113: 2.

regulatory requirement that we must have regard to the factors under section 138(2) of the QCA Act when assessing WIRP pricing arrangements. We set out our analysis of the application of the section 138(2) factors in detail in our WIRP draft decision and we adopt that analysis for the purposes of this decision.

Moreover, as noted in our WIRP draft decision, we are required by the QCA Act to consider the appropriateness of the 2014 DAU as actually proposed by Aurizon Network and we must approve or refuse to approve the 2014 DAU as submitted. The December 2014 pricing proposal was submitted after the date that the 2014 DAU was submitted. The December 2014 pricing proposal was also submitted under the 2010 AU processes in that undertaking, not the 2014 DAU process in the QCA Act. The QCA Act only allows the QCA to approve the undertaking given to it (see section 136(4)) and, as the December 2014 pricing proposal is not part of the 2014 DAU as submitted, we cannot approve the proposal in the manner Aurizon Network suggests.

However, as noted in our WIRP draft decision, if we were to refuse to approve the application of the 2014 DAU to WIRP, we are required under section 136(5)(b) of the QCA Act to state the way in which we consider it appropriate to amend the 2014 DAU. We consider that the 2010 AU provisions and the December 2014 pricing proposal submitted by Aurizon Network are both highly relevant to our consideration of the way in which it is appropriate to amend the 2014 DAU. We summarise some of our analysis below.

We acknowledge that the 2010 AU provisions were heavily relied upon by Aurizon Network and WIRP users in the lead-up to WIRP. Accordingly, we accept that the pricing principles approved in the 2010 AU are influential when assessing the WIRP pricing arrangements presented by Aurizon Network in the context of the 2014 DAU. However, this does not necessarily imply that subclause 4.1.2 should be applied mechanistically to WIRP train services, particularly given our comments above that it is the 2014 DAU as proposed by Aurizon Network that we are considering, not the 2010 AU.

Moreover, even if we were considering the application of the 2010 AU, then, as explained in our WIRP draft decision, we did not consider the application of subclause 4.1.2 to a major expansion such as WIRP would necessarily be appropriate. Subclause 4.1.2 was approved by us in the context of a new train service with mine-specific spur line. We consider that the provision was not envisaged to be applied for major step changes in capacity such as the integrated duplications associated with WIRP, where the magnitude of associated costs and risks is likely to be more significant relative to the case of mine-specific spur lines. Our WIRP draft decision, for example, noted that Aurizon Network and WIRP users experienced difficulty in interpreting the terms in subclause 4.1.2 in the context of WIRP train services.

We also consider that strict application of subclause 4.1.2 to WIRP train services, without consideration of other relevant factors, could lead to the economic viability of existing mines being adversely impacted by major below-rail infrastructure upgrades triggered by WIRP users. When considered in the context of section 138(2) of the QCA Act, we consider that the strict application of subclause 4.1.2 is unlikely to promote the object of Part 5 of the QCA Act under section 138(2)(a) or the public interest under section 138(2)(d). We also consider that this subclause 4.1.2 would not appropriately balance the interests of access seekers and access holders under sections 138(2)(e) and (h).

Notwithstanding subclause 4.1.2, in our WIRP draft decision we also noted that the 2010 AU pricing limit principle specified that the relevant access charge for a train service should at least cover the expected incremental costs of providing access for that train service. This treatment of incremental costs for a major expansion was previously reflected in Aurizon Network's 2013

DAAU pricing proposal for GAPE train services, which did not adopt the existing arrangements in the 2010 AU (i.e. subclause 4.1.2 or the equivalent provision for cross-system train services).

Aurizon Network said the QCA must apply subclause 4.1.2 to WIRP train services as nothing in subclause 4.1.2 excludes its operation where a major expansion is involved. Putting aside the fact that we are required by the QCA Act to consider the 2014 DAU and not the 2010 AU, we consider this assertion is inconsistent with Aurizon Network's own previously proposed arrangements for GAPE train services. At that time, Aurizon Network said:

As Aurizon Network is submitting the GAPE Reference Tariff as a DAAU and not in accordance with the requirements of Clause 6.4.2 it is not an explicit requirement that proposed reference tariff must conform to the relevant provisions of the Aurizon Network Undertaking. The tariff has been developed to reflect the commercial and economic matters relevant to users of the service in a manner consistent with the intention of those provisions. 388

We consider our approved GAPE pricing arrangements provide a relevant precedent that subclause 4.1.2 is not determinative in circumstances where a major expansion is involved. In this manner, Aurizon Network has itself recognised that it is not the case that existing arrangements in the 2010 AU (such as subclause 4.1.2) should always be applied to major expansions.

We do not accept that our consolidated draft decision undermines regulatory certainty and investment confidence:

- First, Aurizon Network and other stakeholders were aware at all times of the terms and conditions of the 2010 AU and its finite duration. Aurizon Network has discretion under the QCA Act to submit voluntary access undertakings with longer duration if it requires greater investment certainty.
- Second, Aurizon Network has had a variety of steps open to it under the various access
 undertakings in place to obtain sufficient certainty that it would recover its costs. As
 identified above, Aurizon Network did not make appropriate use of the CRIMP processes so
 did not avail itself appropriately of some of these steps.
- Third, the QCA Act itself requires, as a pricing principle in section 168A, that the price of
 access to the declared service should generate expected revenue for the service that is at
 least enough to meet the efficient costs of providing access to the service and include a
 return on investment commensurate with the regulatory and commercial risks involved.
 Aurizon Network is not in a negative NPV scenario, so can invest with confidence that it is
 recovering at its WACC.
- Finally, notwithstanding our comments above, as outlined in more detail in later sections, our recommended amendments to the 2014 DAU would in fact deliver an outcome that is consistent with the pricing principles in the 2010 AU. As identified below, we consider that this is appropriate after having regard to the factors under section 138(2) of the QCA Act.

We note that our WIRP draft decision proposed to adopt the expansion pricing principles previously established in our IDD amended DAU. We were of this view after having regard to the factors under section 138(2) of the QCA Act. We have clarified in later sections that these principles are also consistent with the 2010 AU provisions.

³⁸⁸ Aurizon Network, 2013(a): 11.

Consolidated draft decision 18.3

(1) Our consolidated draft decision is that while the 2010 AU provisions relating to WIRP pricing are relevant to our consideration of the reference tariffs for WIRP under the 2014 DAU, we do not consider these provisions are determinative.

We consider it appropriate to make this decision having regard to each of the matters set out in section 138(2) of the QCA Act for the reasons set out in our analysis above.

18.4 WIRP costs and volumes

18.4.1 Capital indicator

Aurizon Network's proposal

Aurizon Network's December 2014 WIRP pricing proposal provided an updated capital indicator for WIRP capital costs of \$945.3 million, inclusive of interest during construction (IDC). This is \$4.4 million lower than Aurizon Network's December 2013 estimate of \$949.7 million, which we included in the capital indicator for the purpose of developing our MAR draft decision. ³⁸⁹ Aurizon Network said the amounts presented in its updated capital indicator for WIRP adopt the post-tax nominal vanilla WACC when calculating IDC, consistent with our MAR draft decision. ³⁹⁰

Summary of the WIRP draft decision

We did not seek to assess the prudency and efficiency of WIRP project costs. The prudency and efficiency of WIRP capital expenditure will be considered on an *ex post* basis via another process following the commissioning of the WIRP infrastructure.

In terms of using forecast capital expenditure to determine a tariff, Aurizon Network's approach was consistent with approaches applied to other reference tariff approval processes in the past (e.g. the GAPE system reference tariff). Once capital expenditure is approved, Aurizon Network can apply to have future tariffs (and revenues), adjusted for any over- or underspending relative to forecast. Accordingly, we accepted that it is appropriate to use an estimated capital expenditure amount for WIRP when calculating the reference tariff.

In a letter to Aurizon Network in November 2014, we requested updated capital expenditure estimates for WIRP as part of a comprehensive tariff proposal for WIRP train services.

For the purposes of the WIRP draft decision, we:

- accepted Aurizon Network's updated capital expenditure forecasts for WIRP related projects
- retained the 2014 DAU capital indicator estimates for non-WIRP infrastructure that we used in the calculation of reference tariffs in our January 2015 initial draft decision.

Stakeholders' comments on the WIRP draft decision

Aurizon Network agreed with our WIRP draft decision.³⁹¹ Other stakeholders did not provide comments.

³⁸⁹ QCA, 2014(h): 166; Aurizon Network also included revised capital indicator estimates for non-WIRP infrastructure in the financial model that it provided us as part of its December 2014 WIRP pricing proposal.

³⁹⁰ Aurizon Network, 2014(g): 17.

³⁹¹ Aurizon Network, 2014 DAU, sub. 109: 37–38.

QCA analysis and consolidated draft decision

Given that Aurizon Network has accepted our WIRP draft decision, and no other stakeholders have provided any new information or arguments, our consolidated draft decision remains to refuse to approve Aurizon Network's proposed capital indicator for WIRP in the 2014 DAU.

Consistent with Chapter 26, we consider it appropriate that Aurizon Network amend its capital indicator to calculate the IDC using the post-tax nominal vanilla WACC, consistent with the updated capital indicator for WIRP capital costs of \$945.3 million. ³⁹²

Consolidated draft decision 18.4

- (1) After considering Aurizon Network's proposed capital indicator for WIRP in the 2014 DAU, our consolidated draft decision is to refuse to approve Aurizon Network's original proposal.
- (2) The way in which we consider it is appropriate that Aurizon Network amend its draft access undertaking is to:
 - (a) adjust the capital indicator for WIRP to use the post-tax nominal vanilla WACC for calculating interest during construction.

We consider it appropriate to make this decision having regard to each of the matters set out in section 138(2) of the QCA Act for the reasons set out in our analysis above.

18.4.2 Allocation of capital expenditure between WIRP users Aurizon Network's proposal

In both of its WIRP pricing proposals, Aurizon Network said it allocated capital expenditure for shared WIRP project segments across the users of the segment based on their share of contracted gross tonne kilometre (gtk) attributable to the particular project segment.

The key difference between Aurizon Network's 2014 DAU and December 2014 proposals relates to the allocation of NCL project costs. In its 2014 DAU proposal, Aurizon Network allocated this expenditure only to WIRP users located in the Blackwater system. However, in its December 2014 proposal it allocated this expenditure to all WIRP users.

Summary of the WIRP draft decision

We accepted the 2014 DAU approach to allocate NCL upgrade capital expenditure as this is consistent with the commercial arrangements between Aurizon Network and WIRP users. We considered these arrangements to reflect the agreement between Aurizon Network and each WIRP customer on the incremental capital cost attributable to the particular customer.

Stakeholders' comments on WIRP draft decision

Aurizon Network said it agreed with our WIRP draft decision subject to their proposed amendment of allocating shared capital expenditure between WIRP users using updated information on gtk at full contract utilisation. 393

Other stakeholders did not provide comments.

³⁹² This amount for WIRP capital costs is consistent with the updated capital indicator provided by Aurizon Network to the QCA in September 2015.

³⁹³ Aurizon Network, 2014 DAU, sub. 109: 38.

QCA analysis and consolidated draft decision

After having regard to the criteria listed in section 138(2) of the QCA Act and stakeholders' submissions, we have retained our WIRP draft decision to approve Aurizon Network's proposed capital cost allocation approach for WIRP users as set out in the 2014 DAU.

We have updated our cost allocation between WIRP users based on updated information provided by Aurizon Network on gtk at full contract utilisation. We note that this does not have material impact on the cost allocated between WIRP customers.

Consolidated draft decision 18.5

(1) After considering Aurizon Network's proposed capital cost allocation approach for WIRP users, our consolidated draft decision is to approve Aurizon Network's original proposal.

We consider it appropriate to make this decision having regard to each of the matters set out in section 138(2) of the QCA Act for the reasons set out in our analysis above.

18.4.3 Allocation of capital expenditure to non-WIRP users Aurizon Network's proposal

Aurizon Network said, with the exception of the Wiggins Island balloon loop and the Moura West upgrades, capital expenditure for WIRP relates to mainline upgrades that will be utilised by both new and existing customers. 394

Aurizon Network said all customers (both WIRP and non-WIRP) will receive operational benefits from WIRP, including:

- additional train paths, leading to greater planning flexibility, fewer contested paths and greater ability to recover from day of operation losses and maintenance activities
- added optionality and reduced system closures, as maintenance will be able to occur while still allowing trains to be scheduled on the duplicate section
- reduced speed restrictions and track failures as a result of rail replacement, renewals and strengthening.³⁹⁵

As a result, Aurizon Network said the full capital cost of the Blackwater duplications should not be treated as costs that are incremental to WIRP train services. 396

In its 2014 DAU proposal, Aurizon Network allocated one-seventh of the total capital cost of Blackwater duplications to existing customers for the purposes of assessing the impact of socialisation. ³⁹⁷ By contrast, in its December 2014 WIRP pricing proposal under the 2010 AU, Aurizon Network proposed to allocate 50 per cent of the total capital cost of Blackwater duplications to existing Blackwater system customers.

Aurizon Network said the 50 per cent allocation was appropriate for the following reasons:

The Blackwater duplications provide operational benefits to both WIRP and non-WIRP users.

³⁹⁴ Aurizon Network, 2014(g): 8.

³⁹⁵ Aurizon Network, 2014(g): 10.

³⁹⁶ Aurizon Network, 2014(g): 8.

³⁹⁷ Aurizon Network, 2014 DAU, sub. 6: 3.

- The WIRP volumes at full utilisation would only comprise one-third of the total tonnes that use the Blackwater duplications.
- The Blackwater duplications were previously endorsed by non-WIRP users as part of the 2008 CRIMP process in the absence of committed WIRP capacity.

Aurizon Network said the existence of WIRP access conditions does not limit the sharing of infrastructure costs between WIRP and non-WIRP users. 399

Aurizon Network has not proposed to allocate any costs associated with WIRP Moura to non-WIRP users in the Moura system.

Summary of the WIRP draft decision

For capital expenditure associated with WIRP infrastructure, we considered that an allocation of expansion costs to existing (non-WIRP) users may be appropriate if:

- there are clear benefits to existing users based on the evidence provided
- existing users have stated they want the benefits and are willing to pay for it.

This is consistent with the notion that users pay a price reflective of the service they receive. We considered this promotes efficient infrastructure investment (ss. 69E and 138(2)(a) of the QCA Act) and appropriately takes into account the interests of existing and expanding users (ss. 138(2)(e) and (h) of the QCA Act).

Blackwater

It was evident that there was no clear consensus, among stakeholders, as to whether the WIRP infrastructure provides a benefit to non-WIRP users.

We considered three options for allocating a share of the Blackwater duplication cost to non-WIRP users as shown in the table below.

³⁹⁸ Aurizon Network, 2014(g): 20.

³⁹⁹ Aurizon Network, 2014(g): 15.

Table 78 Possible allocations of Blackwater duplication costs to existing users

Share of Blackwater duplication costs	Basis	QCA analysis
0 % to non-WIRP	The default option, in the case where no evidence has been provided that existing users will enjoy clear benefits; existing users wanted the benefits; and existing users are willing to pay a share of the cost to attain them.	This option was consistent with our conclusion that neither Aurizon Network nor WIRP users provided sufficient evidence that existing customers wanted the relevant benefits or agreed to meet a share of the cost.
One-seventh share to non-WIRP	Proposed by Aurizon Network in its August 2014 guidance note on 2014 DAU treatment of WIRP.	No evidence was provided by Aurizon Network or WIRP users to quantify this level of benefits to existing users. There was insufficient evidence that existing
		customers agreed to meet a one-seventh share of the cost.
50 % to non-WIRP	Proposed by Aurizon Network in its December 2014 submission.	No evidence was provided by Aurizon Network or WIRP users to quantify this level of benefits to existing users.
		There was insufficient evidence that existing customers agreed to meet a 50 % share of the cost.

Evidence

We noted in our initial draft decision that neither Aurizon Network nor WIRP users attempted to estimate the monetary value of the operational benefits to non-WIRP users (e.g. increased reliability or savings from maintenance over time). Further, Aurizon Network did not provide any transparency on its capacity modelling and assessments to verify and assist stakeholders in understanding capacity requirements pre- and post-WIRP.

Additionally, we did not consider the customer endorsement of Blackwater duplications as part of the 2008 CRIMP to provide guidance on the appropriate allocation of WIRP capital costs, given changes in the scope and circumstances that followed the initial customer endorsement.

Capacity modelling

We were of the understanding that Aurizon Network's capacity modelling, completed prior to the time of the investment decision, showed that the Blackwater duplications were only required in the presence of WIRP train services. In late 2010, Aurizon Network indicated to the GCEE that, as a result of updated capacity modelling, none of the Blackwater duplications would be required for existing Blackwater system capacity. 400

Overall assessment

On the basis of information available, we considered that all WIRP Blackwater capital costs should be allocated to WIRP train services.

However we considered that a portion of the Wiggins Island balloon loop costs should be allocated to existing Blackwater train services, reflecting the expected use of this infrastructure by existing Blackwater train services as reflected in WIRP commercial arrangements.

⁴⁰⁰ Letter from Queensland Treasurer to GCEE, November 2010; letter from Aurizon Network to GCEE, May 2010.

Moura

We were not presented with any proposal to allocate a portion of WIRP costs to existing Moura users. As a result, we accepted Aurizon Network's proposal that no WIRP capital costs should be allocated to existing Moura customers.

Stakeholders' comments on the WIRP draft decision

Aurizon Network

Aurizon Network said that one of the factors that we used to determine cost allocation to non-WIRP users in our WIRP draft decision—i.e. that existing users have stated they want the benefit and are willing to pay for it—creates a free-riding problem. Expanding users could effectively be forced to subsidise improvements to existing services if they wish to proceed with an expansion and existing users refuse to state they want the benefit and are willing to pay for it.

Aurizon Network agreed with our WIRP draft decision to allocate a portion of the cost of the Wiggins Island balloon loop costs to an existing (non-WIRP) train service to reflect that existing train paths are expected to use this segment.⁴⁰²

In contrast, Aurizon Network disagreed with our WIRP draft decision that the Blackwater duplication costs should only be borne by WIRP users. It considered that our decision with respect to the Wiggins Island balloon loop cost allocation was inconsistent with our approach to cost allocation of other WIRP project segments. ⁴⁰³ Aurizon Network said:

- the cost of all the project segments should be borne by all Blackwater or Moura customers who may use the infrastructure, and that the appropriate cost allocation must have regard to section 69E, Part 5 of the QCA Act
- a key question for the QCA to consider is whether it is economically efficient for incumbent users to contribute to the costs of infrastructure that will deliver significant operational efficiencies to the supply chain
- the duplications were endorsed by the incumbent users, which Aurizon Network and the WIRP users relied upon when making their respective investment decisions
- the WIRP infrastructure will be extensively used by non-WIRP users and they will benefit from the WIRP programme.

In addition, Aurizon Network provided details of the supply chain benefits of the WIRP programme to existing users, as outlined in the table below. 405

⁴⁰³ Aurizon Network, 2014 DAU, sub. 109: 39.

⁴⁰¹ Aurizon Network, 2014 DAU, sub. 109: 41–42.

 $^{^{\}rm 402}$ Aurizon Network, 2014 DAU, sub. 109: 39.

⁴⁰⁴ Aurizon Network, 2014 DAU, sub. 109: 39–42.

⁴⁰⁵ Aurizon Network, 2014 DAU, sub. 109: 18–27.

Table 79 Aurizon Network's description of supply chain benefits of WIRP to existing users

Category	Aurizon Network's description of benefits		
Operational efficiencies			
General benefits of the WIRP programme to the network	 It will increase the available daily train paths on the mainline from 48 to 72 in the Blackwater system, and 48 to 96 paths on the NCL, resulting in greater planning flexibility, fewer contested paths, and a greater ability to recover from day of operations losses and maintenance activities. The WIRP Moura East project scope included rail replacement, renewals and strengthening of the existing Moura system which has reduced speed restrictions, track failures, and will therefore provide a throughput benefit as the rail network will be available more often. 		
Reductions in operational delays	 The Blackwater duplications will reduce reliance on passing loops and passing manoeuvres. The Blackwater duplications have contributed to an improved cycle time of up to 60 minutes, and improved train service delays previously due to crossing activities. 		
Signalling renewals	Aurizon Network has renewed the signalling equipment in the Blackwater system and on the NCL as part of the WIRP programme. Aurizon Network said that the signal delays per train service in the Blackwater system has been trending downwards since the start of 2014.		
Improvements in performance to plan and cancellation measures ⁴⁰⁶	Aurizon Network said 'the operational efficiencies created as a result of the WIRP programme have resulted in strong improvements in below-rail cancellations and performance to plan'. The figures provided for the Blackwater and Moura systems are: • performance to plan annual percentages from 2012–13 to 2015–16 YTD • all cancellations annual percentages from 2012–13 to 2015–16 YTD • below rail cancellations annual percentages from 2012–13 to 2015–16 YTD • improvements in weekly performance to plan percentages from January 2014 to August 2015.		
	Network efficiencies		
General benefits	Prior to the WIRP programme, maintaining infrastructure in single line sections often required extensive network closures. Duplication of the remaining single line sections will minimise the occurrence of whole system closures and provide greater flexibility for maintenance activities. This will also create flow on effects such as: • reducing asset wear and tear, as volumes are spread across two tracks instead of one, thus slowing the rate of tonnage-driven maintenance requirements • maintenance cost savings which have been incorporated onto the maintenance cost allowances proposed by Aurizon Network as part of the 2014 DAU.		
Improvements in network resilience	The WIRP programme implemented new track design methods in the Moura East segment, which has improved the network resilience during severe flooding, as demonstrated by the significantly lower damage resulting from Tropical Cyclone Marcia in 2015 compared to Tropical Cycle Oswald in 2013.		
Improvements in flood immunity	The WIRP programme included the installation of culverts to decrease the risk of flooding.		
Capital expenditure efficiencies			
General	The WIRP project has created cost savings associated with non-WIRP renewal works in the Blackwater system.		

⁴⁰⁶ Aurizon Network, 2014 DAU, sub. 109: 22.

WIRP users

In response to our WIRP draft decision, WIRP users undertook the following analysis to quantify the system wide benefits associated with WIRP capital works:

- Dynamic capacity modelling—to determine the minimum WIRP infrastructure for the delivery of WIRP volumes and acceptable performance standards (e.g. average cycle time, delay per cycle and below-rail transit time (BRTT)), with capital works beyond this level deemed to be of benefit of all users of the particular system.
- Scope and cost allocation review—to identify WIRP capital costs that would have been better classified as renewals or system enhancements, and allocated outside of the WIRP costs.

WIRP users later submitted an addendum to clarify certain matters in its original submission on our WIRP draft decision. As part of this addendum, WIRP users provided new information to demonstrate the difference in dynamic capacity modelling results between 'without closures' and 'with closures' scenarios.

Dynamic capacity modelling

The table below summarises WIRP users' interpretation of their dynamic capacity modelling results, for the Blackwater system across five scenarios. 408

Table 80 Summary of WIRP User Group's capacity modelling results^a

Scenario	Description	Results of the capacity modelling			
	Pre-WIRP scenarios (with and without 5mtpa access queue)				
1a	This scenario sought to represent pre-WIRP operations where the Blackwater volume target was set at 70 mtpa (64 mtpa export plus 6 mtpa domestic).	WIRP users said modelling results showed a 2.5 mtpa shortfall in export demand target. This indicated that the Blackwater system (pre-WIRP) had a capacity deficit. 409			
2a	This scenario sought to assess the impact of the pre-WIRP access queue on pre-existing system performance. The volume target included 70 mtpa from the base case (1a) and the additional 5 mtpa access queue. Three additional consists were included in this scenario.	WIRP users said results showed that the additional three consists delivered an additional 5.5 mtpa, delivering the increased demand but only reducing the pre-existing capacity deficit from 2.5 to 2 mtpa. The deficit was not eliminated due to greater congestion compared to scenario 1a, reflected in the noticeable deterioration in system performance metrics. 410			
2b	This scenario represented scenario 2a plus two duplications (Rocklands–Gracemere and Umolo–Parnabal). This sought to analyse whether the additional infrastructure would reduce capacity shortfall and improve system performance.	WIRP users said the results showed the addition of two duplications were beneficial in enabling the 2 mtpa shortfall to be achieved with improved system performance compared to scenario 2a. 411			
	WIRP scenarios				
3a	The target tonnages comprised 75 mtpa from scenario 2a plus the WIRP volume (23.5 mtpa).	WIRP users said the results showed that the minimum WIRP scope (five duplications) was			

⁴⁰⁷ WIRP Users, 2014 DAU, sub. 107: 8.

⁴⁰⁸ WIRP Users, 2014 DAU, sub. 107.

⁴⁰⁹ WIRP Users, 2014 DAU, sub. 107: 20.

⁴¹⁰ WIRP Users, 2014 DAU, sub. 107: 24–25.

⁴¹¹ WIRP Users, 2014 DAU, sub. 107: 26–27.

Scenario	Description	Results of the capacity modelling
	The additional infrastructure included two holding roads and five Blackwater duplications. This scenario also assumed seven additional consists to attempt to achieve the target tonnages.	able to deliver the WIRP volume forecast and maintain non-WIRP users' throughput. The minimum WIRP scope also improved the system performance, through the creation of additional train paths, relative to scenario 2a.
3b	This comprised scenario 3a plus the balance of the WIRP programme to make up the full WIRP scope. The balance included the last two Blackwater duplications to make up the full seven duplications.	WIRP users said the results showed that the full WIRP scope achieves the benefits of scenario 3a plus: • additional system robustness derived from minimising track delays (improvement in system performance metrics) • provides capability to optimise rollingstock
		allocations to meet demand including operating over-length consists enables additional track maintenance which reduces risk of volume loss. 413

a WIRP users said given the uncertainty surrounding the accuracy of input data for track closures, its comparative analysis has not applied track closures. **b** Comprised of: Rocklands-Gracemere (also in scenario 2b); Gracemere-Kabra (also in scenario 2b); Kabra-Stanwell; Umolo-Parnabal; and Walton-Bluff.

WIRP users provided a number of caveats regarding its capacity modelling results including:

- Due to confidentiality and unavailability of input data, the inputs and assumptions applied to the capacity modelling (e.g. payloads, track closures and speed restrictions data) may be inconsistent with WIRP capacity modelling undertaken by Aurizon Network. For example, the comparative analysis did not apply track closures.
- Direct comparison of these results and Aurizon Network's capacity modelling is expected to produce different values as Aurizon Network has developed their capacity model over around 15 years with continual improvement to the operating logic.
- The limited time available to deliver this capacity modelling has restricted the ability to perform calibration work that would normally precede this type of modelling task. This could produce inconsistent data values between different scenarios. 414

Despite these limitations, WIRP users said that this modelling exercise provides useful information on the relative performance of different demand and infrastructure scenarios:

- The modelling results suggested two duplications (Rocklands-Gracemere and Umolo-Parnabal) would have been required to reliably and sustainably deliver the increased demand (5 mtpa) arising from the pre-WIRP access queue, hence it is unreasonable to solely allocate the associated costs to WIRP volumes.
- Similarly, the modelling results also showed that the final two duplications (Dingo-Umolo and Parnabal-Walton) benefit all Blackwater users (e.g. improvements in cycle time and BRTT). 415

In its submission, WIRP users proposed to allocate the costs of the final two duplications to existing users (\$100.2 million, excluding IDC) based on its capacity modelling results.

⁴¹² WIRP Users, 2014 DAU, sub. 107: 29–30.

⁴¹³ WIRP Users, 2014 DAU, sub. 107: 31–32.

⁴¹⁴ WIRP Users, 2014 DAU, sub. 107: 11.

⁴¹⁵ WIRP Users, 2014 DAU, sub. 107 (Addendum): 10.

Scope and cost allocation review

In addition to its capacity modelling analysis, WIRP users also identified a number of cost items (amounting to around \$65.0 million, excluding IDC)⁴¹⁶ that they said should be removed from WIRP costs and allocated to all Blackwater or Moura system customers. These related to either:

- works undertaken to replace or enhance existing assets (WIRP users said it was Aurizon Network's advice that some of these costs would be excluded from WIRP costs)
- works that do not form part of the WIRP project scope as outlined in the WIRP deed.

Overall proposed allocation

Overall, WIRP users proposed the following adjustments to our cost allocations:

- For the Blackwater system, \$150.0 million (excluding IDC) should be removed from the WIRP cost as it represents:
 - the costs of the two duplications (Dingo-Umolo and Parnabal-Walton) that the WIRP users deem to benefit all users (\$100.2 million, excluding IDC)
 - costs related to asset and system enhancements that the WIRP users said should be removed from WIRP costs (\$49.8 million, excluding IDC).
- For the Moura system, \$15.2 million (excluding IDC) should be removed from the WIRP costs. WIRP users said that the track upgrade works undertaken at Moura East, as explicitly stated in the WIRP deed, do not provide additional capacity.

Other stakeholders

Other stakeholders agreed with our WIRP draft decision that WIRP costs should not be allocated to non-WIRP users. Nevertheless, they questioned the validity of allocating a portion of the Wiggins Island balloon loop to existing Blackwater users. 419

Idemitsu said that capital costs should not be allocated to existing users until the benefits to existing users can be reliably demonstrated and quantified. 420

Aurizon Operations said there are clear and evident efficiency offsets associated with electrification of the Rolleston branchline and WIRP. Aurizon Operations considered that where Rolleston is required to pay an AT₅ rate which is consistent with its incremental costs, the value of these benefits should be transferred to the system price.

QCA analysis and consolidated draft decision

After having regard to the criteria listed in section 138(2) of the QCA Act and stakeholders' submissions, we have retained our WIRP draft decision to:

 refuse to approve Aurizon Network's proposed capital cost allocation approach for the Blackwater duplications project segment as set out in its 2014 DAU.

⁴¹⁶ WIRP Users, 2014 DAU, sub. 107: 46–47.

⁴¹⁷ WIRP Users, 2014 DAU, sub. 107: 35.

⁴¹⁸ WIRP Users, 2014 DAU, sub. 107: 46–47. Note that WIRP users did not include IDC in their detailed cost estimates. In addition, WIRP users advised that there may be some double counting in its cost estimates given that some cost items were embedded in the duplication costs.

⁴¹⁹ Asciano, 2014 DAU, sub. 112: 6; Anglo American, 2014 DAU, sub. 111: 5; BMA, 2014 DAU, sub. 105: 1.

⁴²⁰ Idemitsu, 2014 DAU, sub. 113: 2.

⁴²¹ Aurizon Operations, 2014 DAU, sub. 110: 6.

⁴²² Aurizon Operations, 2014 DAU, sub. 110: 6.

allocate a portion of the capital expenditure for the Wiggins Island balloon loop to an
existing Blackwater train service to reflect its expected use of this segment as reflected in
WIRP commercial arrangements.

We have made a slight modification to our cost allocation for WIRP following our assessment of new information provided by WIRP users.

The analysis underlying our consolidated draft decision is presented below.

Evidence of benefits to existing users

Our view is that an allocation of expansion costs to existing users may be appropriate if there are clear benefits to existing users based on the evidence provided. We have established a number of factors that we have regard to when assessing the evidence of benefits to existing (non-WIRP) users:

- Were the capital works reasonably required by existing users in the absence of WIRP (e.g. asset renewals)?
- Would the operational benefits reasonably and tangibly translate into economic benefits to the existing users?
- Is there evidence that existing users agreed to bear the costs of the particular capital works?

We consider that these criteria are consistent with the notion that users pay a price reflective of the service they receive. We consider this appropriately balances the interests of existing and expanding users (ss. 138(2)(e) and (h) of the QCA Act). Further, this is likely to promote the object of Part 5 of the QCA Act (ss. 69E and 138(2)(a) of the QCA Act).

The allocation of costs is particularly relevant to our consideration of the pricing principles contained in section 168A(b) of the QCA Act which provides that prices should allow for multipart pricing and price discrimination, when it aids efficiency.

We acknowledge Aurizon Network's claim that it may create a free-rider problem if the necessary condition for capital costs to be allocated to existing users is that they are willing to cover such costs. We consider that the willingness and appropriateness of existing users bearing specific costs associated with an expansion needs to be assessed with regard to the above three factors on a case-by-case basis. In the WIRP context, we consider that there is no clear evidence that existing users have been behaving unreasonably in refusing to pay a proportion of the WIRP costs. Submissions from existing users suggested that their key concern was the lack of clarity and evidence that they would benefit from WIRP. Existing users have not indicated that they would be unwilling to pay for the benefits if it was appropriate.

We note that Aurizon Network and WIRP users do not appear to agree on the benefits of the WIRP project to existing users. In submissions on our WIRP draft decision:

 Aurizon Network has maintained their view that 50 per cent of the Blackwater duplications project segment (\$212.4 million, including IDC) should be allocated to existing users. It has also agreed with our proposed allocation of a portion of the Wiggins Island balloon loop to an existing Blackwater train service (\$29.4 million, including IDC).

⁴²³ Anglo American, 2014 DAU, sub. 72: 3–5; Asciano, 2014 DAU, sub. 69: 9; Idemitsu, 2014 DAU, sub. 71: 2; Idemitsu, 2014 DAU, sub. 113: 2.

⁴²⁴ Aurizon Network, 2014 DAU, sub. 109: 42.

- WIRP users have proposed that costs associated with the Blackwater duplications (\$109.7 million, excluding IDC)⁴²⁵ should be allocated to existing users. In addition, the WIRP users have proposed allocating costs to existing customers for the following WIRP project segments:
 - Wiggins Island balloon loop (\$12.1 million, excluding IDC)
 - NCL upgrade (\$28.2 million, excluding IDC)
 - Moura East track upgrade (\$15.2 million, excluding IDC).

Performance metrics – Aurizon Network

While Aurizon Network has provided more detailed information to describe the operational benefits of WIRP, we consider that it has not provided sufficient evidence to justify this claim or quantify the extent of benefits to existing users. It has not attempted to estimate the monetary value of the operational benefits to non-WIRP users (e.g. increased reliability or savings from maintenance over time) to justify its claim that 50 per cent of Blackwater duplications should be allocated to existing Blackwater customers.

We are not convinced of the quantitative evidence provided by Aurizon Network in its submission. For example:

- There does not appear to be a significant increase in trend demonstrated for the improvements to weekly performance to plan⁴²⁷, with metrics broadly similar between 2013–14 (before WIRP operational commissioning) and 2015–16 year to date (post WIRP operational commissioning). Further, we are not convinced that the operational gains are not simply translated to additional capacity that is required for WIRP users.
- The metrics only presents the results over approximately three years, which is insufficient to draw robust conclusions from.
- The submission was made in September 2015, which means that the improvements in 2015–16 YTD, only represents a small part of the year.

We would expect the 2015–16 YTD improvements, given the under-utilisation of newly commissioned WIRP infrastructure during the WIRP ramp-up period. However, without further robust analysis, we cannot conclude whether this short-term benefit will continue into the future as WIRP approaches full utilisation, or whether the benefits will disappear.

It is unclear to us why Aurizon Network has not undertaken a capacity modelling exercise—as attempted by WIRP users—to quantify the operational benefits, especially given that:

- Aurizon Network is likely to be in the best position to undertake any capacity modelling
- Aurizon Network's December 2014 proposal is to allocate a significant portion of the Blackwater duplication costs (\$212.4 million, including IDC) to existing users.

Our understanding is that, leading up to WIRP, Aurizon Network's capacity modelling results indicated that the Blackwater duplications were only required for WIRP train services. Aurizon

⁴²⁵ This includes \$100.2 million (excluding IDC) associated with the costs of the final two duplications (Dingo–Umolo and Parnabal–Walton) and an additional \$9.5 million (excluding IDC) relating to asset and system enhancements.

⁴²⁶ WIRP Users, 2014 DAU, sub. 107: 46–47. Note that WIRP users did not include IDC in their detailed cost estimates.

⁴²⁷ Aurizon Network, 2014 DAU, sub. 109: 22–23.

Network has not provided any further clarification on such a matter throughout the 2014 DAU process.

In the absence of additional robust evidence, including estimation of the monetary value of the operational benefits, we are of the view that we cannot rely on this information provided by Aurizon Network to allocate additional costs to existing non-WIRP users.

Capacity modelling – WIRP users

We are encouraged by WIRP users' attempt to put forward a more comprehensive submission to quantify the benefits of WIRP to existing users. We consider that this type of analysis, coupled with the ability to monetise specific benefits to existing users, is critical in demonstrating that there are clear economic benefits to existing users.

Nevertheless, in its current form, we consider the WIRP users' capacity modelling analysis to be incomplete and inconclusive. Accordingly, we do not consider this analysis provides sufficient evidence to justify the allocation of the costs of the Blackwater duplications to the existing users.

We do not consider that the modelling results provided in WIRP users' submission are sufficiently developed to seek independent expert advice on the validity of the modelling outcomes.

We understand that WIRP users' capacity model has been developed independent of Aurizon Network's and other stakeholders' inputs. We have concerns with the reliability and robustness of the results given the information gaps in developing model inputs and the short timeframe for the development of this model, an issue also acknowledged by WIRP users. It is not clear to what extent these may impact on the conclusions drawn from this analysis. We are concerned about the extent to which model inputs align with realistic parameters or those contained in Aurizon Network's capacity model that according to WIRP users has been subject to extensive review and refinement over a long period of time.

We are also not clear on how closely the modelling scenario results align with actual historical performance or even with the capacity modelling undertaken by Aurizon Network at the time of WIRP consideration. Without this detailed review of the modelling results, we cannot identify whether the WIRP users' model is an accurate representation of the system.

Based on the information provided to us, our analysis of WIRP users' capacity modelling is summarised in the table below.

Table 81 QCA analysis of the WIRP users' capacity modelling issues

Issue	QCA analysis
Tonnage shortfall in scenario 1a and 2a	WIRP users said the modelling results suggested that there was a capacity deficit in the Blackwater system prior to WIRP (scenarios 1a and 2a). 428 We note however that the magnitude of this deficit could be partially driven by the anomaly in the model where the domestic tonnage target was overachieved.
Tonnages for WIRP Blackwater users	Moving from scenario 3a (minimum WIRP scope) to scenario 3b (full WIRP scope) has resulted in lower tonnes delivered for WIRP Blackwater users. WIRP users explained this anomaly as due to how the model allocates services on a system basis to meet demand. They considered that this was not a material issue that could be rectified with further calibration of their model. 429

⁴²⁸ WIRP Users, 2014 DAU, sub. 107: 20–24.

⁴²⁹ WIRP Users, 2014 DAU, sub. 107 (Addendum): 7.

Issue	QCA analysis
	The under-delivery of the WIRP Blackwater tonnes is closely matched by the over-delivery of the existing Blackwater tonnes. The WIRP users said that this is modelling anomaly resulting from the limited time available to fine tune the model. 430
	Despite the explanations provided by WIRP users, we remain concerned that these examples demonstrate that the model is incomplete and not accurate to a level that could be relied upon as the basis for making a material change to the WIRP cost allocation.
Existing tonnages and system performance in the Moura system	All post-WIRP scenarios (i.e. 3a and 3b) result in worsening performance metrics for existing Moura export users as compared with all pre-WIRP scenarios. WIRP users explained that the increases are within acceptable limits and that system continues to achieve desired performance levels. 431 However, without more information, we are not convinced that these increases are within acceptable limits, and we note that the tonnes delivered falls short of the 12.5 mtpa target.
	WIRP users explained the decline in non-WIRP Moura volumes is due to a technical modelling anomaly associated with the Barney Point Coal Terminal, which is not intended for ongoing use for coal exports. 432
	Despite the WIRP users' explanation, we remain concerned that these examples demonstrate that the model is incomplete and not accurate to a level that could be relied upon as the basis for making a material change to WIRP cost allocations.
Tonnages for WIRP Moura users	We note that it appears that the WIRP Moura users will generally be better off as a result of the track upgrades, compared to the existing Moura users.
With versus without track closure assumption	In the addendum to its initial submission, WIRP users compared the Blackwater system performance outcomes, without applying the track closure assumption, and then applying track closures. 433 We note that when comparing scenario 2a (pre-WIRP) to scenario 3a (minimum WIRP scope), the difference between the without and with track closure assumption, are relatively large compared to the other comparisons which are relative to the base case scenario 1a.
	This suggests that the comparison between scenarios 2a and 3a is potentially more sensitive to the track closure assumption than the others.
	We also note that information on this comparison (with versus without track closure assumption) has not been provided for the comparison between scenario 3a and 3b—the key scenario in terms of the WIRP users' proposed allocation of costs to existing users.
	As a result, we are not convinced that there is as close a relationship between the relative and absolute outputs as the WIRP users claim.

Notwithstanding the modelling issues above, we are not convinced that the relative improvements in the Blackwater system performance (without track closure assumption) between scenarios 3a (minimum WIRP scope) and 3b (full WIRP scope), as presented in WIRP users' submission, are significant enough to justify allocating the costs of the two Blackwater duplications (Dingo-Umolo and Parnabal-Walton) to the existing users. As shown in the table below, the relative improvement in Blackwater system performance between scenarios 3a and 3b (refer to the final two rows) appears to be minimal.

⁴³¹ WIRP Users, 2014 DAU, sub. 107 (Addendum): 7.

⁴³⁰ WIRP Users, 2014 DAU, sub. 107: 30–31.

 $^{^{\}rm 432}$ WIRP Users, 2014 DAU, sub. 107 (Addendum): 7.

⁴³³ WIRP Users, 2014 DAU, sub. 107 (Addendum): 7.

Table 82 Comparison of the WIRP users' dynamic capacity modelling results for the existing Blackwater export tonnages by scenario (without track closure assumption)

Scenario	Tonnes delivered (mtpa)	Target tonnes (mtpa)	Avg. cycle time (hh:mm)	Avg. delays per cycle (hh:mm)	Avg. BRTT (%)
Blackwater export coal (excluding WIRP)					
1a	60.5	63.0	22:26	0:35	119.9%
2a	66.1	68.0	23:39	0:49	125.6%
2b	67.2	68.0	23:11	0:46	121.1%
3a	68.3	68.0	23:09	0:44	112.7%
3b	71.0	68.0	23:04	0:41	111.0%

Source: WIRP Users, 2014 DAU, sub. 107.

Comparatively, the impact on system performance arising from the access queue (refer to the first two rows) appears to be more significant. WIRP users' modelling suggested that the delivery of the additional 5 mpta would result in:

- the average BRTT increasing from 119.9 per cent to 125.6 per cent (which was close to the BRTT threshold in the Blackwater system)
- the average cycle time also increasing by more than one hour
- a capacity deficit remaining in the Blackwater system.

Whilst this could suggest that some of the Blackwater duplications would be reasonably required in the absence of WIRP, we consider WIRP users' analysis incomplete. These findings also appear to contradict with Aurizon Network's previous advice that the provision of the additional 5 mpta would only require the construction of the Lilyvale passing loop. 434

We also consider that there needs to be a clear link between operational benefits to the system and the quantification of specific economic benefits to existing users.

As mentioned above, in its current form, we do not consider this analysis provides sufficient evidence to justify the allocation of the costs of the Blackwater duplications to the existing users.

Nevertheless, we seek stakeholders' view on WIRP users' capacity modelling results, particularly with respect to the access queue that existed prior to WIRP.

We consider that this exercise demonstrates the necessity for an effective and detailed baseline capacity analysis to be undertaken, as set out in Chapter 10. This would remove doubts about whether or not an expansion effectively addresses an existing capacity shortfall.

Analysis of individual cost items

We have assessed cost items that WIRP users believe should be removed from WIRP costs and allocated to all existing system users. Appendix C provides an outline of our detailed analysis of the cost items proposed for reallocation to existing users.

Overall, we have made a slight modification to our cost allocation for WIRP following our assessment of new information provided by WIRP users, with \$9.2 million of capital expenditure items of a renewal nature now shared with existing users. We consider that the following cost

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⁴³⁴ Aurizon Network, response to the QCA in a Request for Information (30 April 2015).

items should be reallocated from the WIRP capital indicator to the Blackwater system capital indicator:

- cross-drainage enhancement, culvert strengthening/replacement (Blackwater duplications project segment)
- upgrades to signalling equipment room at Mt Larcom and Mt Miller (NCL upgrades)
- level crossing removals (Blackwater duplications project segment).

We consider it appropriate to treat these works as asset renewals that were reasonably required in the absence of WIRP. For the purposes of modelling for this consolidated draft decision, we have adjusted the WIRP capital indicator to remove the estimated \$9.2 million associated with these costs.

However, we consider it inappropriate to allocate other cost elements to existing non-WIRP users, on the basis of a lack of clear evidence of the benefits for existing users associated with these cost items.

Allocation of Wiggins Island balloon loop costs

We note that while Aurizon Network agreed with our WIRP draft decision to allocate a portion of the costs of the Wiggins Island balloon loop to an existing Blackwater train service, it considered that our decision to allocate these costs based on the use of this infrastructure by an existing train service was inconsistent with our approach to allocation of costs for other WIRP project segments. Other non-WIRP users were also concerned with the basis for allocating a portion of these costs to non-WIRP users.

We consider that our approach to allocating the costs of the Wiggins Island balloon loop is consistent with our approach to allocating costs for other WIRP project segments. As is the case for other WIRP project segments, we have allocated the costs of the Wiggins Island balloon loop between customers based on the proportional share of the gtk contracted under WIRP arrangements.

Our view is informed by confidential information provided to us.

This decision is consistent with our principles for allocating expansion costs to existing train services. We consider that the agreement to access conditions provides clear evidence that the existing train service derives benefits associated with this expansion and is willing to pay for them.

Therefore our consolidated draft decision is to maintain our position that this portion of Wiggins Island balloon loop costs should be allocated to the existing Blackwater train services.

Overall assessment

On the basis of information available, we consider that some WIRP cost items should be removed from WIRP costs and allocated to all existing system users. Our consolidated draft decision is to remove these cost items from the WIRP capital indicator and reallocate them to the Blackwater capital indicator. For the purposes of modelling prices for this consolidated draft decision, we have used the cost estimates provided by the WIRP User Group (\$9.2 million).

We note that our consolidated draft decision to reallocate some cost items to existing system users does not impact does not result in any WIRP capital costs being reallocated to existing Moura customers.

Consistent with our WIRP draft decision, we consider that a portion of the Wiggins Island balloon loop costs should be allocated to existing Blackwater train services, reflecting the

expected use of this infrastructure by existing Blackwater train services as reflected in WIRP commercial arrangements.

We consider that our proposed cost allocation is consistent with the notion that users pay a price reflective of the service they receive. We considered this promotes efficient infrastructure investment (ss. 69E and 138(2)(a) of the QCA Act) and appropriately takes into account the interests of existing and expanding users (ss. 138(2)(e) and (h) of the QCA Act).

Consolidated draft decision 18.6

- (1) After considering Aurizon Network's proposed capital cost allocation to non-WIRP users, our consolidated draft decision is to refuse to approve Aurizon Network's original proposal.
- (2) The way in which we consider it is appropriate to amend the 2014 DAU is as follows:
 - (a) Adjust the capital allocation for the WICET balloon loop to reflect that existing Blackwater train paths are expected to use this project segment.
 - (b) Remove the capital allocation of Blackwater duplication costs to existing Blackwater system customers, for the purposes of defining incremental capital costs associated with WIRP infrastructure.
 - (c) Remove the cost items identified above as renewals in nature from the WIRP capital indicator and reallocate them to the Blackwater capital indicator.

We consider it appropriate to make this decision having regard to each of the matters set out in section 138(2) of the QCA Act for the reasons set out in our analysis above.

18.4.4 Operating and maintenance costs

Aurizon Network's proposal

In its August 2014 guidance note on its 2014 DAU pricing treatment of WIRP, Aurizon Network proposed that the maintenance and operating cost allocations to WIRP be calculated by expressing WIRP gtk as a percentage of total gtk (WIRP and non-WIRP) in the relevant system. 435

However in its December 2014 WIRP pricing proposal, Aurizon Network proposed zero incremental operating costs for WIRP train services. Aurizon Network said:

- it expects to make a number of productivity improvements over the 2014 DAU period and it has not costed any additional train control resources for WIRP train services
- given the WIRP related infrastructure is integrated with the existing Blackwater and Moura coal systems, it expects that the additional WIRP train services can be accommodated within its existing operating cost budget. 436

In addition, Aurizon Network significantly reduced its proposed maintenance costs for WIRP train services compared with its 2014 DAU proposal. Aurizon Network said it now expects minimal maintenance work will be required for new infrastructure constructed as part of the WIRP program, and the incremental maintenance task will be limited to scheduled preventative

⁴³⁵ Aurizon Network, 2014 DAU, sub. 6: 4.

⁴³⁶ Aurizon Network, 2014(g): 22.

works in the absence of a major weather or other event. Aurizon Network also said that the renewals and replacement of existing assets in the Blackwater and Moura systems included in the WIRP program should result in a reduction in future maintenance costs. 437

The table below compares the operating and maintenance costs allocated to WIRP train services in each of Aurizon Network's WIRP pricing proposals.

Table 83 Allocation of operating and maintenance costs to WIRP (\$ million, nominal)

WIRP costs	2015–16	2016–17		
WIRP operating costs				
Aurizon Network–December 2013	13.6	15.3		
Aurizon Network–December 2014	-	-		
WIRP maintenance costs				
Aurizon Network–December 2013	31.7	34.8		
Aurizon Network–December 2014	1.8	2.6		

Source: Aurizon Network December 2013 Financial Model; Aurizon Network 2014(g).

Summary of the WIRP draft decision

We assessed the appropriateness of Aurizon Network's proposed operating and maintenance costs in both WIRP pricing proposals in the context of the factors set out in section 138(2) of the QCA Act.

We considered that the operating and maintenance costs assigned to WIRP train services should, as closely as possible, align with the concept of incremental costs defined in the undertaking. That is, these costs should reflect the costs that would not be incurred in the absence of WIRP train services. We were of the view that this meets the requirements of the pricing principles in section 168A of the QCA Act.

We did not consider Aurizon Network's 2014 DAU proposal to allocate operating and maintenance costs between new and existing customers on a gtk basis consistent with the concept of incremental costs. We further assessed the appropriateness of Aurizon Network's December 2014 WIRP pricing proposal as outlined below.

Incremental operating costs

We agreed with Aurizon Network's proposition in its December 2014 proposal that incremental operating costs for WIRP train services should be immaterial. As a result, we accepted Aurizon Network's December 2014 proposal which presented zero incremental operating costs for WIRP train services.

We considered this position to be appropriate, having regard to the factors set out in section 138(2) of the QCA Act, including the interests of access seekers, access holders and the legitimate business interests of Aurizon Network.

Incremental maintenance costs

We accepted the incremental maintenance costs proposed by Aurizon Network in its December 2014 WIRP pricing proposal.

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⁴³⁷ Aurizon Network, 2014(g): 21–22.

Aurizon Network said it expected that the new infrastructure constructed as part of the WIRP programme will initially require a low level of maintenance work. Aurizon Network said that this view is consistent with the views the QCA and industry stakeholders expressed as part of our consideration of the GAPE DAAU.

We accepted that an existing mainline and a duplication of part of that mainline may have differing maintenance requirements. Newer infrastructure could require a lower level of maintenance work simply because it is newer. This would indicate a lower incremental cost, particularly in the short to medium term.

We assessed Aurizon Network's approach to forming its incremental maintenance estimates and considered the estimates were derived on a consistent basis to the direct maintenance costs we assessed in our MAR draft decision.

Accordingly, we accepted Aurizon Network's December 2014 proposed WIRP maintenance costs for 2015–16 and 2016–17. We considered this position to be appropriate, having regard to the factors set out in section 138(2) of the QCA Act, including the interests of access seekers, access holders and the legitimate business interests of Aurizon Network.

Stakeholders' comments on the WIRP draft decision

Aurizon Network

Aurizon Network agreed with our WIRP draft decision provided these cost will not be deducted from the operating and maintenance cost allowance proposed by Aurizon Network in its response to our MAR draft decision. 438

Other stakeholders

Asciano agreed with our WIRP draft decision to accept Aurizon Network's operating cost of zero, on the basis that the incremental operating cost is immaterial. However, this should be revisited should the costs become material. 439

While Idemitsu accepted our WIRP draft decision, they also raised the following general concerns:

- Aurizon Network has not provided evidence to show that the substantial increase in its operating and maintenance cost across the CQCN are largely attributable to volume increases.
- Aurizon Network's view on the relationship between costs and volumes appears to be inconsistent across submissions. 440

BMA would like the QCA to clarify:

- how the zero operating cost and minimal maintenance cost would be applied going forwards
- if the maintenance allowance in the MAR draft decision would be reduced as a result of the reduced capital indicator, and lower operating and maintenance cost associated with WIRP train services.

The WIRP users agreed with our WIRP draft decision and emphasised that the maintenance costs should continue to remain low in the short to medium term. 442

⁴⁴⁰ Idemitsu, 2014 DAU, sub. 113: 2–3.

⁴³⁸ Aurizon Network, 2014 DAU, sub. 109: 8.

⁴³⁹ Asciano, 2014 DAU, sub. 112: 7.

⁴⁴¹ BMA, 2014 DAU, sub. 105: 1–2.

QCA analysis and consolidated draft decision

After having regard to the criteria listed in section 138(2) of the QCA Act and stakeholders' submissions, we refuse to approve Aurizon Network's proposed allocation of operating and maintenance costs to WIRP train services in the 2014 DAU.

Our proposed operating and maintenance cost allowances in Chapters 22 and 23 related to the provision of efficient services for the whole of the CQCN including WIRP train services. Therefore, the operating and maintenance costs associated with WIRP train services will be a component of these overall cost allowances.

We consider that the operating and maintenance costs assigned to WIRP train services going forward should continue to align, as closely as possible, with the concept of incremental costs defined in the undertaking. We note that the pricing limit principle in the 2010 AU and the 2014 DAU specifies that the relevant access charge for a train service should at least cover the expected incremental costs of providing access for that train service. We are of the view that this meets the requirements of the pricing principles in section 168A of the QCA Act.

Given that Aurizon Network has accepted our WIRP draft decision, and no other stakeholders have provided any new information or arguments that would change our position, our consolidated draft decision remains to accept Aurizon Network's December 2014 proposed WIRP operating and maintenance costs for 2015–16 and 2016–17.

We considered this position to be appropriate, having regard to the factors set out in section 138(2) of the QCA Act, including in particular the interests of access seekers, access holders and the legitimate business interests of Aurizon Network.

Consolidated draft decision 18.7

- (1) After considering Aurizon Network's proposed allocation of operating and maintenance costs to WIRP train services, our consolidated draft decision is to refuse to approve Aurizon Network's original proposal.
- (2) The way in which we consider it is appropriate that Aurizon Network amend its draft access undertaking is to:
 - (a) use Aurizon Network's December 2014 proposed WIRP operating and maintenance costs for 2015–16 and 2016–17.

We consider it appropriate to make this decision having regard to each of the matters set out in section 138(2) of the QCA Act for the reasons set out in our analysis above.

18.4.5 Volumes for WIRP train services Aurizon Network's proposal

In its 2014 DAU proposal, Aurizon Network proposed that volume forecasts for WIRP train services be set at 90 per cent of contracted tonnages through WICET in the relevant year. We rejected these volume forecasts in our MAR draft decision, instead proposing to adopt the CQCN volume forecasts provided by our consultant, Energy Economics. 443

⁴⁴² WIRP Users, 2014 DAU, sub. 107: 52.

⁴⁴³ QCA, 2014(h): 41–42.

In its December 2014 WIRP pricing proposal, Aurizon Network expressed the following concerns about our MAR draft decision volume forecasts for WIRP train services:

- Our proposed volume forecasts did not adequately reflect the impact of take-or-pay obligations.
- Energy Economics did not engage with WIRP users directly in setting its volume forecasts.
- A level of forecast error is contained in our forecasts given the significant discrepancy between actual CQCN railings in 2013–14 and the corresponding Energy Economics forecasts released in April 2013. 444

As a result, Aurizon Network proposed revised forecasts for WIRP train services, based on the findings of an independent production review undertaken by John T Boyd Company (JT Boyd). JT Boyd's report was prepared for WICET's financiers to assess each mine's ability to satisfy their allocated WICET Stage 1 capacity. It focused on supply-side factors such as mine approval processes, ramp-up schedules and the availability of supporting infrastructure. 445

The different volume forecasts for WIRP train services are presented in the table below. The exception is the revised volumes proposed by Aurizon Network in the December 2014 pricing proposal, which are excluded due to confidentiality restrictions. 446

Table 84 Volume forecasts for WIRP train services (Mt)

Volume forecasts	2014–15	2015–16	2016–17
Aurizon Network—April 2013	9.0	18.7	24.3
Energy Economics—April 2014	2.1	6.7	10.8

Source: Aurizon Network, 2013 DAU, sub. 3: 20; Energy Economics, 2014; Energy Economics, 2015.

Summary of the WIRP draft decision

Consultant's assessment

For our supplementary draft decision on WIRP train services, we engaged Energy Economics to produce an independent assessment of volume forecasts of WIRP train services to mitigate stakeholder concerns regarding any risk of bias. As part of our engagement with Energy Economics, we also updated the volume forecasts for all train services in the Blackwater and Moura systems. In developing its updated estimates, Energy Economics said it considered various factors including mine and port capacity, take-or-pay rail and port contracts, production rates, coal reserves and resources, potential mining and/or market issues and mine expansion plans.

Energy Economics sought to engage with relevant stakeholders including WIRP and non-WIRP users to ensure that all available information is incorporated in the revised estimates.

The table below summarises Energy Economics' updated volume forecasts developed for our WIRP draft decision.

⁴⁴⁴ Aurizon Network, 2014(g): 30–31.

⁴⁴⁵ WICET, 2014 DAU, sub. 56.

⁴⁴⁶ The JT Boyd report was provided to us by WICET Pty Ltd as part of its submission on our MAR draft decision. WICET Pty Ltd said the volume forecasts should be kept confidential by the QCA. A redacted version of this report is available on our website with other submissions on our MAR draft decision.

Table 85 Energy Economics' updated (July 2015) volume forecasts

Volume forecasts	2015–16	2016–17	
By system			
Moura	13.6	14.3	
Blackwater	63.9	67.8	
WIRP			
WIRP train services	12.1	18.6	

Note: Blackwater and Moura volume forecasts include volumes associated with WIRP train services. Source: Energy Economics, 2015(a).

A key point raised by Energy Economics was the incentive for WIRP users to prioritise fulfilment of WICET obligations over railings to other destinations. Energy Economics' forecasts for WIRP train services included redirection of some tonnage from other destinations to WICET. ⁴⁴⁷ This was driven by what appears to be more stringent take-or-pay conditions on WICET throughput allocations relative to other destinations, meaning that WIRP users that have access to other destinations in addition to WICET are expected to give precedence to fulfilling WICET take-or-pay volumes.

QCA analysis

We considered the incremental volumes associated with WIRP train services should reflect additional coal railings that would not have occurred in the absence of WIRP contracted capacity. This is consistent with our view on incremental costs which relate to additional costs incurred by Aurizon Network (or to the extent funded under a Standard User Funding Agreement) in fulfilling these train service entitlements (TSEs).

However, in measuring the volumes associated with WIRP infrastructure, a key issue that emerged from Energy Economics' assessment is the substitutability of train services and the implications this has for defining incremental volumes. The alternative approaches to estimating a reasonable volume associated with WIRP are discussed below.

Our WIRP draft decision was to adopt Energy Economics' forecast of expected railings of WIRP train services, capped to below-rail contract entitlements, as a proxy of WIRP incremental volumes. It was our view this is the most appropriate approach to setting volumes associated with WIRP train services.

Substitutability of train services

The estimation of incremental volumes is relatively straightforward for WIRP train services associated with new mines that only have TSEs to WICET. Any forecast coal railings associated with these new mines would be treated as incremental volume for pricing purposes.

However, the situation is more complicated for existing brown-field mines that have been operating prior to WIRP. These mines have both WIRP (i.e. to WICET) and non-WIRP (i.e. to other Port of Gladstone terminals) TSEs, which are largely substitutable. The incremental volume associated with WIRP train services is not easily observable in this case.

In effect, we were of the view that it is not possible to derive a true incremental volume when there are substitutable train services of this type. We therefore considered whether it is

⁴⁴⁷ Energy Economics, 2015(a): 6.

possible to derive proxy incremental volumes to enable us to estimate a reasonable volume associated with WIRP.

Approaches to estimating proxy incremental volumes

We identified two alternative approaches to estimating proxy incremental volumes for mines with WIRP and non-WIRP TSEs where substitutability is an issue:

- Adopt the best estimate of these mines' expected railings of WIRP train services.
- Develop an apportionment mechanism. 448

We assessed the advantages and disadvantages of these options in the table below.

Table 86 Options for proxy incremental volumes

Option	Advantages	Disadvantages
Expected railings of WIRP and non-WIRP train services	 Volumes will more accurately reflect actual railings to WICET. An objective method that does not require arbitrary adjustments and provides certainty should volume forecasts change. 	Volume splits based on expected railings could lead to a material increase in existing (non-WIRP) users' access charges. This is because they are based on the assumption that individual mine production volumes will be prioritised to WIRP train services before existing (non-WIRP) train services (as WIRP and non-WIRP train services are substitutable).
Apportionment mechanism	 This method may be used to manage the impact on existing non-WIRP users. This method would be appropriate if there was general industry agreement on how the apportionment would apply to WIRP and non-WIRP railings. 	 This method is somewhat arbitrary and could be skewed to a desired outcome. This option would result in derived volumes being different to expected railings for WIRP and non-WIRP train services. This could lead to adverse implications for take-or-pay obligations and/or revenue cap adjustments for non-WIRP users if a separate reference tariff for WIRP was implemented. To address this, an adjustment mechanism to reduce these impacts on non-WIRP users would be necessary, however this would increase the complexity of the pricing arrangements.

Overall we considered that the option of expected railings of WIRP and non-WIRP volumes is the appropriate method for deriving a proxy incremental volume.

We noted that the expected railings to WICET at the individual train service level, as forecast by Energy Economics, is in some instances higher than the volumes actually contracted to WICET. This could mean that tariffs for existing users are increased to a level that is not representative

It is possible that WIRP users may over-rail to WICET and under-rail to other Port of Gladstone terminals relative to our derived volumes for pricing. If a separate reference tariff was implemented for WIRP (with separate take-or-pay and revenue cap arrangements), it could trigger system take-or-pay or lead to material under-recovery of revenue in the non-WIRP system.

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⁴⁴⁸ For example, the forecast railings allocated to WIRP train services could be based on an estimate of the net increase in the mine's total coal railings as compared with a base level reflecting its historical railings prior to the commissioning of WIRP.

of contracted volumes, which we regarded as an unreasonable outcome, and one that we considered to be inappropriate, having regard to the factors set out in section 138(2) of the QCA Act. ⁴⁵⁰ As a result, we proposed that the WIRP volumes be amended by ensuring substitution of tonnages to WICET does not exceed the volumes actually contracted to WICET for the purposes of determining tariffs.

We considered this method to be appropriate, having regard to the factors set out in section 138(2) of the QCA Act, including the interests of access seekers and access holders.

Proposed WIRP volume forecasts

When applying our preferred methodological approach, our WIRP draft decision adopted Energy Economics' volume forecasts at both the aggregate and individual mine levels. We also adjusted Energy Economics' volume forecasts at the individual train service level (i.e. the mine to port level) to cap volumes for WIRP train services at the contracted volume ramp-up in below-rail access agreements. Our reasons were the following:

- We considered Energy Economics' forecasts to be the best available as they are based on more up-to-date information and a bottom-up approach to developing forecasts at an individual mine level. In addition, we considered Energy Economics' forecasts to be more transparent, with visibility of WIRP forecasts and the underlying justification for all affected stakeholders.
- At the individual train service level, we compared Energy Economics' forecasts with the
 contracted volume ramp-up negotiated between Aurizon Network and each individual WIRP
 user reflected in WIRP access agreements. We considered that prices for WIRP train services
 should reflect the use of TSEs in WIRP access agreements, and that this negotiated ramp-up
 reflects a cap to the shifting of tonnages to WICET.

Accordingly, we adjusted Energy Economics' forecasts for WIRP train services as summarised in the table below. 451

Table 87 QCA proposed volume forecasts in the WIRP draft decision—WIRP train services (Mt)

Volume forecasts	2015–16	2016–17
Energy Economics—July 2015	12.1	18.6
QCA WIRP draft decision adjustments	(1.1)	(2.1)
QCA proposed volume forecasts in the WIRP draft decision	11.0	16.5

Source: Energy Economics, 2015(a); QCA analysis.

Stakeholders' comments on the WIRP draft decision

Aurizon Network

Aurizon Network agreed with our WIRP draft decision to use expected WIRP railings as a proxy for incremental volumes provided that our methodology is only limited to calculating the incremental volumes for WIRP train services, and not non-WIRP train services.

While WIRP users may be able to transfer additional TSEs to WICET, capping provisions in Aurizon Network's 2014 DAU (or our proposed amendments to this) would not allow the user to offset revenue from overrailings to WICET against take-or-pay liabilities associated with under-railings in non-WIRP train services.

⁴⁵¹ This adjustment to WIRP volumes will be exactly offset by a corresponding adjustment to non-WIRP train services, maintaining the Energy Economics' volume forecasts at the individual mine and aggregate levels.

Aurizon Network said while they could agree with our WIRP draft decision to cap WIRP volumes to contracted volumes, they could not comment on the reasonableness of the WIRP draft decision due to insufficient information. Aurizon Network said, if we intend to apply a cap on WIRP volumes, then the non-WIRP volumes should be treated on a consistent basis and also be capped. 452

Aurizon Network did not agree with our decision to use Energy Economics' volumes forecasts on the basis that they were not provided with detailed volume forecasts to assess the validity of these forecasts. Aurizon Network said it was concerned that we had refused to provide them with detailed volume forecasts, as it was impossible for them to assess the validity of the forecasts and it may adversely impact their ability to comply with the QCA's final decision on the 2014 DAU. Aurizon Network said the QCA should approve Aurizon Network's proposed WIRP forecasts in its December 2014 WIRP pricing proposal, given that these are not materially different from the Energy Economics' forecasts at the aggregate level. 453

Other stakeholders

Asciano stated they would like clarification on how the substitutability of train services affects take-or-pay, and whether one path (WIRP or non-WIRP) can offset the take-or-pay liability of another path (WIRP or non-WIRP).⁴⁵⁴

WIRP users were of the view that volume forecasts should be set equal to contracted entitlements as this is the best proxy for the remainder of UT4 and UT5 as WIRP and WICET matures. 455

QCA analysis and consolidated draft decision

After having regard to the criteria listed in section 138(2) of the QCA Act and stakeholders' submissions, we refuse to approve Aurizon Network's proposed volume forecasts for WIRP train services in the 2014 DAU. Our consolidated draft decision is to adopt Energy Economics' forecast of expected railings of WIRP train services, capped to below-rail contract entitlements.

Since our WIRP draft decision, Energy Economics has provided revised and up-to-date volumes forecasts for all coal systems in the CQCN. While no changes have been made to the volume forecasts for WIRP train services, there have been some small changes to the volume forecasts for existing Blackwater train services.

As we discuss further in Chapter 21, we note that Aurizon Network's December 2014 volume forecasts for 2015–16 and 2016–17 are higher for all coal systems in the CQCN, compared with the corresponding up-to-date estimates prepared by Energy Economics. We consider that overestimating volumes would not reflect the legitimate business interests of Aurizon Network and would not be in the public interest or the interests of relevant stakeholders.

The table below compares volume forecasts provided by Aurizon Network in December 2014 with the updated Energy Economics forecasts for the Moura and Blackwater catchment areas.

⁴⁵² Aurizon Network, 2014 DAU, sub. 109: 43–44.

⁴⁵³ Aurizon Network, 2014 DAU, sub. 109: 44–45.

⁴⁵⁴ Asciano, 2014 DAU, sub. 112: 7.

⁴⁵⁵ WIRP Users, 2014 DAU, sub. 107: 60.

Table 88 Volume forecasts for Blackwater and Moura (Mt)¹

Volume forecasts	2015–16	2016–17	
Aurizon Network forecasts—December 2014			
Moura	13.5	15.8	
Blackwater	68.3	70.6	
Total	81.8	86.4	
Energy Economics forecasts—October 2015			
Moura	13.6	14.3	
Blackwater	66.2	67.8	
Total	79.8	82.1	
Difference			
Absolute difference (total)	-2.0	-4.3	
% difference	-2.4%	-5.0%	

Note: Blackwater and Moura volume forecasts include volumes associated with WIRP train services. Source: Aurizon Network December 2014 WIRP Financial Model; Energy Economics, 2015(b).

The following table presents the different volume forecasts for WIRP train services

Table 89 Volume forecasts for WIRP train services (Mt)

Volume forecasts	2015–16	2016–17
Aurizon Network—2014 DAU	18.7	24.3
QCA initial draft decision—September 2014	6.7	10.8
Aurizon Network—December 2014 WIRP proposal	13.7	16.3
Energy Economics—October 2015	12.1	18.6
QCA—CDD ^a	11.0	16.5

a The QCA CDD volume forecasts differ from the Energy Economics' estimates due to the capping of WIRP volumes to contracted levels. Source: Aurizon Network, 2013 DAU, sub. 3: 20; Aurizon Network, 2014 DAU, sub. 109; Energy Economics, 2015(b).

While the JT Boyd forecasts for WIRP train services are not materially different to our proposed volume forecasts at the aggregate level, we note there are differences at the individual train service level. JT Boyd's report was prepared for WICET's financiers to assess each mine's ability to satisfy their allocated WICET Stage 1 capacity. It focused on supply-side factors such as mine approval processes, ramp-up schedules and the availability of supporting infrastructure. It does not appear to have taken into account demand side factors or the impacts of take-or-pay rail and port contracts, and has not raised the possibility this may lead to existing volumes being transferred from non-WIRP train services (due to the substitutability of WIRP and non-WIRP train services for brownfield expansions).

This issue of substitutable train services is illustrated in Energy Economics' volume forecasts, with WIRP volume forecasts comprised of both 'incremental' and 'existing' (transferred from another destination) tonnages.

⁴⁵⁶ WICET, 2014 DAU, sub. 56.

We also note that Aurizon Network has applied a different estimation approach for WIRP and non-WIRP train services. Given the substitutability of train services for brownfield expansions, we consider that it is important to have a consistent estimation approach so that total (WIRP and non-WIRP) train services for a particular mine aligns with the expected mine production volume. We consider that the using Energy Economics' forecasts enables comparison of the unit costs of WIRP and non-WIRP train services as part of an assessment of socialisation impacts using volume forecasts that are consistent in accounting for transfers of forecast tonnages between WIRP and non-WIRP train services.

In addition, we also consider that Energy Economics' volume forecasts are more up-to-date and take into account changing market and mine-specific conditions that have occurred since the JT Boyd report was compiled in late-2014.

In terms of Aurizon Network's concerns with not being provided access to our detailed volume forecasts, we are satisfied for the reasons outlined above that our detailed volume forecasts are the best available volume forecasts for pricing purposes. As outlined in our draft decision, the detailed forecast information requested by Aurizon Network is confidential as it is based on information provided to our volumes consultant that were provided on a confidential basis. That is, the underlying volume forecast information for future periods relied on by the QCA was provided to the QCA on the basis that it would be kept confidential by the QCA.

We considered the use of independent volume forecasts for pricing purposes is appropriate in balancing the interests of access seekers and access holders under section 138(2) of the QCA Act. We also considered this to be consistent with section 137(1A) (cost allocation) and section 168A (pricing principles).

By setting volume forecasts based on actual volumes and up-to-date data, our proposed amendments also appropriately balance Aurizon Network's interests, the public interest, and the interests of relevant stakeholders (s. 138(2)(b), (d), (e) and (h) of the QCA Act).

Capping of WIRP volumes

We do not consider that capping is relevant for non-WIRP volumes, as our understanding is that volumes are being shifted from non-WIRP to WIRP train services. We can confirm that all non-WIRP train services are forecast to rail within contracted volumes. We note that Aurizon Network applied a similar approach in its December 2014 WIRP pricing proposal, using a WIRP Moura forecast that was lower than the JT Boyd forecast to reflect discussions with the relevant customer with respect to deferring their contracted volume ramp-up. 457

We do not consider it appropriate to apply the approach suggested by WIRP users to set volumes for WIRP train services for pricing purposes based on the full contract entitlement. We consider there is limited evidence that this is a reasonable estimate of expected utilisation. Under this approach, the non-WIRP forecast would be based on expected railings and the WIRP forecast set at contractual entitlements, which will increase the likelihood of triggering take-orpay liability for existing Blackwater and Moura system users, as expected utilisation will be lower than the forecast.

By setting volume forecasts based on all available data including contractual entitlements for individual train services, our proposed capping adjustment would also appropriately balance Aurizon Network's interests, the public interest, and the interests of relevant stakeholders (s. 138(2)(b), (d), (e) and (h) of the QCA Act).

⁴⁵⁷ Aurizon Network, 2014(g): 32.

Consolidated draft decision 18.8

- (1) After considering Aurizon Network's proposed volume forecasts for WIRP train services, our consolidated draft decision is to refuse to approve Aurizon Network's original proposal.
- (2) The way in which we consider it is appropriate that Aurizon Network amend its draft access undertaking is to:
 - (a) use expected railings of WIRP and non-WIRP volumes option rather than a apportionment mechanism
 - (b) adopt the forecast volumes for WIRP and non-WIRP train services consistent with Energy Economics' forecasts with adjustments to cap WIRP volumes to contracted volumes.

We consider it appropriate to make this decision having regard to each of the matters set out in section 138(2) of the QCA Act for the reasons set out in our analysis above.

18.5 Assessment of WIRP pricing options

18.5.1 Aurizon Network's proposal

Aurizon Network has applied two different approaches to determining the reference tariff applicable to WIRP train services:

- Aurizon Network's 2014 DAU submission was guided by the pricing principles in its 2014 DAU
 and legislative requirements of the QCA under section 138 of the QCA Act, applying a
 socialisation test consistent with what was proposed in clause 6.2.4(i) of its 2014 DAU
- Aurizon Network's December 2014 pricing proposal applied subclause 4.1.2 of the 2010 AU.

Both approaches involved applying a test to assess if costs associated with WIRP train services should be socialised within the Blackwater and Moura systems and hence whether the system reference tariffs should apply to these train services.

18.5.2 Summary of the WIRP draft decision QCA assessment approach

In our WIRP draft decision, we considered that Aurizon Network's assessments of WIRP pricing in its 2014 DAU and December 2014 proposals were too narrow to provide a sufficient basis for us to make an informed decision on WIRP pricing arrangements. Consequently, we considered it to be necessary to review a range of potential approaches to pricing WIRP train services.

We identified three pricing options:

- socialised pricing approach all WIRP and non-WIRP train services pay the same system reference tariff (with combined take-or-pay arrangements and revenue cap)
- system premium approach a system reference tariff is set, but in addition, WIRP users pay a premium to reflect their higher incremental costs (combined take-or-pay arrangements and revenue cap still apply as described above in the socialised pricing approach)

 separate reference tariff — allocating WIRP costs and volumes to a new coal system⁴⁵⁸ or separate expansion tariff for pricing purposes (with separate take-or-pay arrangements and revenue cap).

For the NCL train service⁴⁵⁹, we assessed whether it was appropriate to apply similar pricing arrangements to those we approved for the Colton to Barney Point train service in April 2012 (see Section 18.6).⁴⁶⁰

To evaluate these pricing options, we developed a set of assessment criteria to take into account the statutory requirements under the QCA Act.

Assessment criteria

The table below presents the set of assessment criteria we applied to evaluate alternative pricing and cost allocation options for WIRP train services. We were of the view these were consistent with achieving an appropriate balance of the section 138(2) matters which we are required to have regard to under the QCA Act.

Table 90 QCA approach to assessing WIRP pricing arrangements

Assessment criterion	Rationale
Do the pricing arrangements allow Aurizon Network to recover its efficient costs?	The WIRP pricing arrangements should allow Aurizon Network to recover at least its efficient costs, as provided for in section 138(2)(b) and 168(A)(a) of the QCA Act.
	However, given the other statutory factors set out in section 138(2), we also considered the WIRP pricing arrangements should also allow Aurizon Network to recover no more than its efficient costs, as identified earlier in this consolidated draft decision (including in Chapters 2 and 16).
Are the pricing and tariff arrangements cost reflective?	The WIRP pricing arrangements should support cost reflective pricing. If the price for access is not cost reflective pricing signals can lead to undesirable responses. For instance, access seekers and holders may have the incentive to over contract (if they are not paying the full cost of access to that part of the network) or may pay more than their efficient costs. This is not consistent with the object of Part 5 of the QCA Act, the public interest or the interests of access seekers and access holders.
Do the pricing arrangements reflect an appropriate allocation of risk between access holders, access seekers and Aurizon Network?	An appropriate allocation of risk between WIRP users, non-WIRP users and Aurizon Network is an important consideration in developing the pricing arrangements to apply to WIRP and non-WIRP users. Risk allocation should consider the implications of any existing risk allocation arrangements and the extent to which access holders who do not require the expansion should bear any risk associated with the expansion.
Do the pricing and cost allocation arrangements promote transparency and certainty, and minimise complexity?	The pricing and cost allocation arrangements should be transparent and certain, and limit complexity, to the extent practicable. This promotes confidence in the regulatory arrangements.

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⁴⁵⁸ Consistent with the pricing approach for the Goonyella to Abbot Point (GAP) system.

 $^{^{\}rm 459}$ This refers to the Colton to WICET train service.

⁴⁶⁰ QCA, 2012(e).

Previous considerations of expansion pricing

We noted that we had previously considered the pricing treatment of a major expansion in the context of GAPE train services. At that time, we approved Aurizon Network's proposal to establish a separate GAPE system and tariff. The approach adopted for GAPE was consistent with our view then on how best to price capital expansions in rail and ports. Our discussion paper, Capacity Expansion and Access Pricing for Rail and Ports, reflected that view and introduced the proposition of 'averaging down/incremental up'—which later played a role in the expansion pricing framework under Aurizon Network's 2014 DAU. 461

When we assessed Aurizon Network's proposed expansion pricing framework for our initial draft decision on its 2014 DAU, we established that certain principles should form the basis of the expansion pricing framework. The principles are:

- the user(s) requiring the expansion should generally pay an access charge that reflects at least the full incremental costs (capital and operating) of access
- existing users should not experience a material increase in tariffs due to an expansion triggered by access seekers
- if new/expanding users face a higher cost than existing users, a zero CCC from expanding users is generally acceptable
- an allocation of expansion costs to existing users may be appropriate where an expansion has clear benefits to those users.

Our initial draft decision also proposed no future expansions be socialised within an existing system until we could apply a more stringent take-or-pay regime (which we termed as the 'fixed-cost' regime) to all train services. We considered under the current take-or-pay regime, existing users might still bear part of the costs of the expansion, even if the expansion initially led to lower tariffs for those users.

However, in our WIRP draft decision we recognised that the ability to isolate an expansion ⁴⁶² is complicated when existing and expansion train services are substitutable. As a result, the decision about whether to socialise an expansion into an existing system becomes less clear-cut, and we therefore took into account other factors when we made our WIRP draft decision.

In certain circumstances, even if an expansion fails a simple mechanistic socialisation test, socialisation may be the best option. These issues are considered below.

Overall assessment approach

Overall, we considered that:

 requiring WIRP train services to bear at least incremental costs is consistent with costreflective pricing arrangements and appropriately allocating costs without unfairly differentiating in a material way between access holders and seekers

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⁴⁶¹ This proposition specifies that if average costs are decreasing substantially with capacity, adding the expansion costs to the cost base of the established capacity will usually provide an acceptably efficient and fair outcome. Conversely, if average costs are increasing substantially with capacity, a separate access price should normally be calculated and charged to those whose capacity underwrites the new tranche of capacity that reflects the average cost of that new capacity.

⁴⁶² In the manner described in our initial draft decision on Aurizon Network's 2014 DAU.

- allocating WIRP costs to non-WIRP users where WIRP has clear benefits to them is consistent with cost-reflective pricing arrangements and appropriate allocation of costs
- minimising the impact on existing users (non-WIRP users) of an expansion triggered by other users (WIRP users) is consistent with appropriate allocation of costs and risks
- imposing a CCC on WIRP users is not necessarily required for cost-reflective pricing arrangements and appropriate allocation of risks and costs. This is because a zero CCC from WIRP users, other things equal, does not make non-WIRP users 'worse off'.

(Refer, for example, to Sections 137(1A)(a), 138(2)(d), (e), (g), and (h) and 168A(b) of the QCA Act).

We noted that this was consistent with the four principles previously established in our WIRP draft decision on Aurizon Network's 2014 DAU for the expansion pricing framework. We were also of the view that it is consistent with our assessment criteria and the factors set out in section 138(2) of the QCA Act.

We considered it was necessary to firstly assess whether WIRP should be socialised using a simple mechanistic socialisation test. If that test suggested WIRP should not be socialised, we would consider what the potential implications of not socialising WIRP were. We would then consider whether these implications should influence the decision about whether to socialise WIRP and, if so, how socialisation could be undertaken.

Against this background, we assessed whether WIRP should be socialised based on adopting mechanistic socialisation tests. Thereafter we considered the implications of the result of this with respect to:

- under-utilisation of WIRP TSEs
- volume risks and substitutability of train services
- complexity, transparency and certainty of pricing arrangements.

Assessment of socialisation impacts

We assessed whether a socialised outcome (i.e. all WIRP train services pay the system reference tariff) would increase the baseline system reference tariff for existing non-WIRP train services in Blackwater and Moura. We undertook our assessment in two steps:

- (1) We established the baseline system reference tariff (on a \$/nt basis excluding costs allocated to WIRP train services) for the Blackwater and Moura systems.
- (2) We compared the baseline system reference tariff to the same tariff (on a \$/nt basis) once the WIRP costs and volumes are socialised within the system. 463

Establish the baseline system reference tariff

The baseline system reference tariff reflects the tariff that would apply to existing users if we completely isolated existing users from the costs and volumes associated with WIRP. 464

We established the baseline system reference tariff for the Blackwater system by firstly assessing whether incremental Rolleston spur costs should be included in the calculation of the

⁴⁶³ We have applied a revenue smoothing factor for WIRP allowable revenue in our calculation of this socialised price, consistent with Aurizon Network's proposed approach.

⁴⁶⁴ That is, the price that would apply to existing users if a separate reference tariff was applied to WIRP train services that recovered all of the costs and volumes associated with WIRP train services.

baseline Blackwater system reference tariff. In our January 2015 initial draft decision, we excluded costs associated with existing Rolleston train services in our calculation of the non-electric tariff components (i.e. AT_1 to AT_4) of the Blackwater system reference tariff. This is because the existing Rolleston train service failed our application of the 2010 AU 'system entry' test. 467

The Moura system did not have this complication and we have derived the baseline system reference tariff based on all costs and volumes excluding those allocated to WIRP train services.

Application of subclause 4.1.2 to existing Rolleston spur line (Blackwater system)

Under subclause 4.1.2 of Schedule F, Part B of the 2010 AU:

In order to reflect the requirements of Subclause 4.1.1, the Reference Tariff applicable for a new coal carrying Train Service will be the higher of (on a \$/ntk basis):

- (c) the Reference Tariff for the relevant Individual Coal System Infrastructure; or
- (d) the sum of the new coal carrying Train Service's Private Incremental Costs (if any), the Incremental Costs of using any Rail Infrastructure specifically related to the new coal carrying Train Service and the required minimum Common Cost contribution ...

provided that the Access Charge payable to QR (now Aurizon) Network for the operation of that new coal carrying Train Service is calculated as the applicable Reference Tariff less the Private Incremental Costs (if any).

In Aurizon Network's 2014 DAU proposal, its application of subclause 4.1.2 resulted in a system premium being required for the Rolleston (non-WIRP) train service. However, in its December 2014 WIRP pricing proposal, no system premium was applied.

The table below presents our application of subclause 4.1.2 for existing Rolleston train services. Criterion (a) in the table was derived on a similar basis to the Blackwater system reference tariff presented in our initial draft decision—that is; excluding costs associated with existing Rolleston train services (and excluding costs associated with WIRP). Criterion (b) in the table shows the alternative reference tariff that would apply to Rolleston if it exactly covered its incremental costs and minimum CCC. 468

Table 91 Application of subclause 4.1.2 for Rolleston non-electric tariff (\$/ntk, nominal)

Application of subclause 4.1.2	2015–16	2016–17
Rolleston—non-electric (\$/ntk, nominal)		
Criterion (a)—reference tariff ^a	0.0132	0.0139
Criterion (b)—incremental costs + CCC	0.0169	0.0183

a Base system reference tariff, after an adjustment to remove the incremental costs and minimum CCC attributable to Rolleston train services. We note that in Aurizon Network's December 2014 WIRP pricing proposal, it did not deduct the minimum CCC in deriving criterion (a). However, this does not affect the outcome of this test using our proposed costs and volumes.

⁴⁶⁵ This is applied to the non-electric tariff only, as the system premium that eventuates from the 'system entry' test is applied to the AT₃ which is a non-electric tariff component.

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⁴⁶⁶ Rolleston train services were assigned a higher reference tariff that covered their spur line incremental costs and a minimum CCC. This higher reference tariff was presented in the form of a system premium in addition to the Blackwater system reference tariff.

 $^{^{467}}$ The 2010 AU 'system entry' test refers to the application of subclause 4.1.2 of Schedule F of the 2010 AU.

The minimum CCC is defined in subclause 4.1.1 of Schedule F of the 2010 AU as equal to the sum of AT_2 and 50 per cent of AT_3 for the distance the particular train service will travel on the Blackwater system mainline.

The table above shows the tariff required to cover Rolleston spur line incremental costs and minimum CCC (criterion (b)) is higher than the baseline system reference tariff (criterion (a)). This means:

- existing Rolleston train services should continue to pay a system premium in addition to the non-electric component of the Blackwater system reference tariff to ensure they pay at least the incremental costs and minimum CCC attributable to their train service
- the baseline system reference tariff for the Blackwater system (excluding costs allocated to WIRP train services) should not include the costs and volumes associated with existing Rolleston train services.

As existing Rolleston train services did not pass the system entry test, for the purposes of the analytical exercise we excluded the associated costs (including CCC) from the calculation of the baseline Blackwater system reference tariff used in our comparisons below.

Baseline system reference tariff for Blackwater and Moura

The table below shows the baseline system reference tariffs we applied in the next section, in our assessment of socialisation impacts.

Table 92 Baseline system reference tariff for Blackwater and Moura (\$/nt, nominal)

Baseline system reference tariff	2015–16	2016–17
Blackwater system		
Non-electric only (AT ₁ –AT ₄) ^a	4.91	5.15
Total non-electric and electric (AT ₁ –AT ₅) ^b	6.60	6.49
Moura system		
Total non-electric and electric (AT ₁ –AT ₅)	3.23	3.59

a Base system reference tariff, after the adjustment to remove the minimum CCC attributable to Rolleston train services. **b** Excludes Rolleston electrification costs.

Compare the baseline and socialised system reference tariff

In this step, we applied a mechanistic socialisation test to compare the average access charge, on a \$/nt basis, applicable to existing customers under:

- the baseline system reference tariff (excluding costs allocated to WIRP train services)
- the same tariff once the WIRP costs and volumes are socialised within the system.

We applied this test separately for Blackwater and Moura systems, over the remaining years of the 2014 DAU post WIRP commissioning (2015–16 and 2016–17). Our analysis showed that a socialised outcome would result in an increase in the Blackwater and Moura system reference tariffs; that is, existing users would pay more. This indicated that, based on cost and volume in our WIRP draft decision, the pure socialisation approach is not consistent with our assessment criteria.

The table below compares the average access charge for existing non-WIRP train services⁴⁶⁹ with and without socialisation of WIRP costs and volumes.

⁴⁶⁹ We undertook this analysis from the perspective of those existing train services that pay the system reference tariff (with no system premium). For the Blackwater system, the average system reference tariff.

Table 93 Comparison of average access charge for existing train services (\$/nt, nominal)

Average access charge	2015–16	2016–17	
Blackwater system			
Existing system excluding WIRP ^a	6.60	6.49	
Existing system including WIRP (socialised) ^{b,c}	6.79	6.75	
Difference (%)	2.9%	4.1%	
Moura system			
Existing system excluding WIRP	3.23	3.59	
Existing system including WIRP (socialised) ^c	3.29	3.72	
Difference (%)	1.9%	3.7%	

a Excludes existing (non-WIRP) Rolleston train services, for which an additional system premium would apply.
 b Excludes Rolleston WIRP and non-WIRP train services, for which an additional system premium would apply.
 c We have applied a revenue smoothing factor for WIRP allowable revenue in our calculation of this socialised price, consistent with Aurizon Network's proposed approach. Source: QCA analysis.

Assessment of WIRP pricing options

While the preceding analysis provided a strong argument against pure socialisation for the Blackwater and Moura systems, we undertook further analysis to take into account:

- under-utilisation of WIRP TSEs
- volume risks and substitutability of train services
- complexity and transparency of pricing arrangements.

Under-utilisation of WIRP train service entitlements

In the context of our WIRP draft decision under-utilisation relates to the circumstances where contracted uptake for an expansion occurs over a ramp-up period resulting in spare capacity being available for a time.

An option to address under-utilisation is to align WIRP-related revenue with the ramp-up of WIRP volumes. In both of its WIRP pricing proposals, Aurizon Network proposed a form of revenue smoothing factor so that revenue is escalated at the same percentage increase as volumes, where volumes are specified according to the forecasts provided in Aurizon Network's submission. We also applied this revenue smoothing factor to WIRP allowable revenue in our assessment and calculation of reference tariffs for WIRP train services.

We noted that Aurizon Network also proposed a revenue deferral approach in 2013 in the context of the Newlands to Abbot Point expansion (NAPE) customer share of GAPE project costs. ⁴⁷¹ The rationale put forward by Aurizon Network in the GAPE DAAU application was that:

would not apply to Rolleston train services, as these would face an additional system premium under both the baseline and socialised scenarios.

⁴⁷⁰ Aurizon Network, 2014 DAU, sub. 6: 5; Aurizon Network, 2014(g): 26; This approach derives a smoothed revenue profile over 2015–16 and 2016–17 with an equivalent present value as the unsmoothed revenue stream. Aurizon Network proposed this approach in both its 2014 DAU and December 2014 WIRP pricing proposal.

⁴⁷¹ In addition to this measure for NAPE train services, GAPE pricing arrangements also included the deferral of all depreciation associated with this \$1.0 billion project over the initial two years (2011–12 and 2012–13).

- customers operating during the ramp-up period would benefit as they would not be subject to the 'full cost recovery' tariff at a time when capacity would not be fully utilised
- the purpose was to ensure that existing users did not see a material impact in their access charge
- this would otherwise be the case if the NAPE customer share of GAPE capital costs were included immediately in the applicable reference tariff
- deferring this portion of GAPE project capital would better align the inclusion of capital to the tonnage ramp-up profile; presenting a clear benefit to customers.

We considered that a similar capital expenditure deferral approach may be justified to take into account under-utilisation in the context of WIRP pricing arrangements.

Volume risks and substitutability of WIRP train services

Under a socialised price or system premium approach, non-WIRP users are exposed to volume risks associated with WIRP. On this basis, establishing a separate reference tariff (with separate take-or-pay arrangements and revenue cap) for WIRP train services would normally provide greater protection for non-WIRP users from this volume risk.

However, this protection is compromised when WIRP access holders have WIRP and non-WIRP TSEs and these are substitutable. Further, as noted in our discussion regarding volumes, some WIRP users may have incentives to prioritise WIRP TSEs over existing entitlements.

WIRP users who have both existing and WIRP access entitlements have the option of choosing the order and extent to which they use each of their entitlements. In addition, this choice is influenced by the matching port obligations and it is reasonable to assume a user would seek to maximise tonnage while minimising costs (both rail and port).

We considered users may, given the choice, prioritise fulfilment of WIRP obligations first.⁴⁷² Assuming this, and faced with lower than expected volumes, the use of WIRP access entitlements may lead to an under-utilisation of existing access entitlements resulting in:

- under a system premium approach—every user in the system (WIRP and non-WIRP) bears
 the take-or-pay liability if the system take-or-pay is triggered due to WIRP volumes failing to
 materialise
- under a separate tariff approach—take-or-pay may only be triggered in the existing system but not the WIRP system. This means:
 - existing users would bear the extent of any under-recovery of the system revenue cap caused by WIRP users choosing to use WIRP, over existing access entitlements
 - WIRP users with only WIRP (no existing) access entitlements, would be shielded from this volume and substitutability risk.

We were of the view that without a rule that prioritises WIRP users' existing TSEs over WIRP entitlements for billing purposes, existing users could effectively bear the down-side risks associated with WIRP volumes, particularly under the separate tariff approach.

Beyond the 2014 DAU period, there could be an increase in volumes transferred from other destinations to WICET as contracted access volumes increase, and/or if coal market conditions worsen. WIRP users could still have the incentive to transfer coal railings from other

⁴⁷² Due to more stringent take-or-pay obligations at WICET.

destinations to WICET, and this could lead to a further significant increase in existing (non-WIRP) users' access charges.

We considered that prioritisation of access entitlements for billing purposes may be an option.

Complexity, transparency and certainty

In our WIRP draft decision, we considered establishing a separate reference tariff is more complicated than adopting the socialised or system premium approach as it results in the creation of a set of additional system tariffs. However, this is a lesser concern given this approach has a precedent in the form of pricing arrangements for GAPE train services. In general, although more complex, separate tariffs are more transparent and provide greater certainty in terms of cost reflectivity than socialised tariffs. However, transparency issues still arise, mainly in how to determine incremental volumes in a system where train services are substitutable.

Evaluation of options against the criteria

Our WIRP draft decision analysis is summarised in the table below. In this table, we evaluated the three options against our assessment criteria.

Table 94 Potential options for pricing WIRP train services in the Blackwater and Moura systems

Approach	Supporting points	Opposing points
Socialised pricing (system reference tariff applied to all WIRP and non-	Ease of application as everyone pays the same tariff and avoids complexities associated with creating a new system for WIRP.	Our modelling results show a socialised outcome would result in an increase in the Blackwater and Moura system reference tariffs for existing users.
WIRP users)	Would avoid the issue of substitutability of WIRP train services as both WIRP and non- WIRP train services pay the same tariff.	Existing users will be exposed to the volume risk associated with WIRP users. If WIRP is under-utilised or WIRP users under-rail, under-recoveries may be shared across all users via revenue cap mechanisms.
System premium (partial socialisation)	 Ease of application as partial socialisation results in the same tariff being applied for most customers. Also, avoids complexities with creating a new system for WIRP. WIRP users, as a group, pay an access charge that reflects at least the full incremental costs of access. 	The substitutability of train services means that we cannot derive a true measure of WIRP incremental volumes. Existing users will be exposed to the volume risk associated with WIRP users. If WIRP is under-utilised or if WIRP users under-rail, under-recoveries will be shared across all users via revenue cap mechanisms.
Separate reference tariff	 WIRP users, as a group, pay an access charge that reflects at least the full incremental costs of access. Consistent with positions we have established previously, including our position regarding GAPE train services. 	The substitutability of train services means that we cannot derive a true measure of WIRP incremental volumes. The substitutability of WIRP train services means that part of this volume risk associated with WIRP train services may still be effectively passed to existing users. If WIRP users prioritise WIRP over non-WIRP train services, this could lead to under-railings in the existing system being recovered from a smaller group of users than under a system premium approach.

18.5.3 Summary of the WIRP draft decision

Based on an analysis of all available information, and having regard to the factors set out in section 138(2) of the QCA Act, we did not consider that it is appropriate to fully socialise WIRP costs within the existing coal systems. We considered that WIRP costs are significant and would, if added to existing system costs, result in a socialised tariff that is higher for all users, including existing users.

As such, both the system premium and separate tariff are viable options that would be consistent with economic efficiency and cost reflectivity as they allow for incremental pricing options where practical.

However, we considered the system premium option has clear advantages over separate tariffs as:

- it is less complex—it does not result in additional system tariffs
- from a volume and risk sharing perspective—while all parties share the cost and volume risk
 of WIRP to some extent, this approach minimises the impact volume substitutability could
 have on existing users.

It was our view that the proposed WIRP pricing arrangements should use the system premium approach. This approach is appropriate as it takes into account, and provides a balance between, the interests of Aurizon Network, access seekers and access holders, and is generally consistent with the other factors set out in section 138(2) of the QCA Act.

18.5.4 Stakeholders' comments on the WIRP draft decision Aurizon Network

The table below summarises Aurizon Network's comments on our assessment of WIRP pricing options.

Table 95 Aurizon Network's comments on our WIRP draft decision on WIRP pricing options

Issues	Aurizon Network's comments
Assessing the baseline system reference tariff	Aurizon Network disagreed with our modelling approach to deduct the Rolleston contribution to common cost from the Blackwater baseline system reference tariff. They said the CCC would still be incurred in the absence of Rolleston, and should therefore be recovered from the baseline tariff. Aurizon Network's own calculation, based on not deducting Rolleston's CCC from the system reference tariff, indicated that existing Rolleston train services should be socialised within the Blackwater system. 473
Application of socialisation test	Aurizon Network said that we have applied an inconsistent approach to assess non-WIRP and WIRP Rolleston train services because average prices were expressed in dollars per ntk and dollars per nt respectively. They are concerned that this can create different outcomes for different customers.
System premium approach for pricing WIRP train services	Aurizon Network agreed with our WIRP draft decision to apply a system premium approach to WIRP train services. 475 However, they reiterated the provisions of the 2010 AU should prevail and that subclause 4.1.2 does not exclude access for new coal carrying trains that involves a major expansion. 476 Their submission concluded that under subclause 4.1.2, both WIRP Blackwater and WIRP Rolleston should be socialised into Blackwater, and WIRP Moura should pay a system premium in addition to the Moura reference tariff. 477

Other stakeholders

The table below summarises other stakeholders' comments on our proposed WIRP pricing approach.

Table 96 Stakeholders' comments on our WIRP draft decision on WIRP pricing options

Issues	Stakeholders' comments
System premium approach for pricing WIRP train services	The QRC said that stakeholders, and particularly WIRP users, have suffered an extended period of uncertainty regarding the pricing of WIRP train services. They considered that we should provide our current thinking on the pricing of WIRP train services under future undertakings, specifically:
	 clarification of whether we would re-run the socialisation test under UT5 that may result in WIRP Blackwater customers being required to pay a system premium, or whether socialisation will simply be maintained
	 the circumstances that would Aurizon Network to commence charging for the deferred revenues. 478
	While Asciano supported a system premium approach, they also said that:
	 there should be a separate and transparent system premium for WIRP Blackwater and WIRP Rolleston users so that existing Blackwater users are not exposed to the volume risks, and therefore take-or-pay liabilities, of WIRP users
	when an access holder has both WIRP and non-WIRP TSEs, the non-WIRP TSEs contracted prior to WIRP, should be exhausted before the TSEs of WIRP

⁴⁷³ Aurizon Network, 2014 DAU, sub. 109: 50–53.

⁴⁷⁴ Aurizon Network, 2014 DAU, sub. 109: 50–53.

Aurizon Network, 2014 DAU, sub. 109: 8.

⁴⁷⁶ Aurizon Network, 2014 DAU, sub. 109: 50–53.

⁴⁷⁷ Aurizon Network, 2014 DAU, sub. 109: 50–53.

⁴⁷⁸ QRC, 2014 DAU, sub. 114: 1–2.

Issues	Stakeholders' comments	
	realistic volume forecasts should be used to minimise take-or-pay liability. 479	
	Anglo American said WIRP should adopt the same approach as GAPE–that is, a separate system tariff, with priority billing as raised by the QCA. They also said that there is a reasonable risk of WIRP users under-railing. 480	
	Idemitsu consider that the volume risks of a system premium approach to be manageable over the remaining UT4 period. However, they support a separate system reference tariff approach beyond the UT4 regulatory period. 481	
	BMA supported a system premium approach as it appropriately balances the interests of WIRP and non-WIRP users. However they would like the QCA to clarify the proposed pricing principles beyond the UT4 regulatory period. 482	
	The WIRP users disagreed with our WIRP draft decision, and based on their own assessment, they said:	
	a fully socialised pricing approach is the most effective, fair and prudent pricing option for the long-term pricing of WIRP related train services	
	a fully socialised pricing approach (without the proposed allocation of WIRP Blackwater cost to existing users) will result in lower tariffs for all Blackwater users across all years except 2015–16 (results modelled to 2025–26) with the results becoming more favourable once the proposed allocations are applied	
	the results of a fully socialised pricing approach for Moura, was found to be similar to that of Blackwater, with the results becoming more favourable once the proposed allocations are applied. 483	
	Based on their assessment, the WIRP users concluded that no system premiums are required in the Blackwater or Moura systems.	

18.5.5 QCA analysis and consolidated draft decision

After having regard to the criteria listed in section 138(2) of the QCA Act and stakeholders' submissions, we refuse to approve Aurizon Network's proposed socialisation of WIRP costs within existing coal systems in the 2014 DAU. We consider that WIRP costs are significant and would, if added to existing Blackwater and Moura system costs, result in socialised tariffs that are higher for all users, including existing users.

We have undertaken our analysis of WIRP pricing options based on our consolidated draft decision costs and volumes, taking into account stakeholder submissions we have received since our WIRP draft decision.

Assessment approach

We consider that our proposed set of assessment criteria for evaluating alternative pricing options for WIRP train services (as outlined in Section 18.5.2 above) are consistent with achieving an appropriate balance of the section 138(2) matters which we are required to have regard to under the QCA Act.

We also consider that Aurizon Network's proposed expansion pricing principles are consistent with the object of Part 5 of the QCA Act. We consider that these expansion pricing principles promote economically efficient investment in the network (ss. 69E and 138(2)(a) of the QCA

⁴⁷⁹ Asciano, 2014 DAU, sub. 112: 8–9.

⁴⁸⁰ Anglo American, 2014 DAU, sub. 111: 6.

⁴⁸¹ Idemitsu, 2014 DAU, sub. 113: 2.

⁴⁸² BMA, 2014 DAU, sub. 105: 1.

⁴⁸³ WIRP Users, 2014 DAU, sub. 107: 55–57.

Act) and appropriately balance the legitimate business interests of Aurizon Network and existing and expanding users (s. 138(2)(c), (e) and (h) of the QCA Act).

As outlined in Section 18.3.3, we consider that the GAPE pricing arrangements provide a precedent that existing arrangements in the 2010 AU (i.e. subclause 4.1.2 or the equivalent provision for cross-system train services) are not determinative in circumstances where a major expansion is involved. As part of the GAPE pricing arrangements that we approved as an amendment to the 2010 AU, we considered it reasonable that:

- new users did not pay less than the cost their incremental demand causes⁴⁸⁴
- expanding customers did not make a contribution to common costs, since the expanding users faced a higher cost than existing users and this contribution would increase the cost burden on expanding customers⁴⁸⁵
- costs associated with the expansion were not shared with other users that do not use or benefit from the expansion. 486

We consider that our assessment approach for WIRP train services is broadly consistent with these principles that were applied in the GAPE context under the 2010 AU.

We consider that WIRP pricing arrangements should reflect an appropriate balance of the section 138(2) matters which we are required to have regard to under the QCA Act. We consider that our assessment approach reflects these matters and (bearing in mind our earlier comments regarding the relevance of the 2010 AU) is consistent with the 2010 AU pricing principles relating to price differentiation, price limits and revenue adequacy, as outlined in the table below.

Table 97 Application of 2010 AU pricing principles in our assessment approach

2010 AU principle	2010 AU principle Description Consistency with ou	
Limits on price differentiation (2010 AU, cl. 6.1.2)	Aurizon Network will not differentiate access charges between access seekers or between access seekers and access holders unless there is a difference in cost or risk in providing access for the train service.	We consider that requiring WIRP train services to bear at least incremental costs will allow price differentiation for expanding train services that reflects the cost of capacity expansion.
Application of pricing limits (2010 AU, cl. 6.2)	Price limits apply to establishing access charges for a train service over the evaluation period that: (a) will not fall below the level that will recover the expected incremental cost for providing access to that train service; and (b) will not exceed the level that will recover the expected standalone costs of providing access for that service.	Under our assessment approach, WIRP train services will be required to bear at least incremental costs. This is consistent with meeting the lower price limit of the pricing limits principle in the 2010 AU. Our proposed approach also ensures that WIRP train services pay no more than their full incremental cost or the system reference tariff. We note the system reference tariffs are not designed to recover more than the stand-alone costs of the system.
Revenue adequacy (2010 AU, cl. 6.3.2)	Provided that Aurizon Network complies with the pricing constraints in clauses 6.1.2 and 6.2, Aurizon	Under our assessment approach, WIRP train services will be required to pay the efficient costs associated with its access.

⁴⁸⁴ QCA, 2013(f): 13.

⁴⁸⁵ QCA, 2013(f): 17.

⁴⁸⁶ QCA, 2013(f): 20.

2010 AU principle Description		Consistency with our assessment approach
	Network is entitled to earn revenue from the provision of access that is sufficient to achieve full recovery of efficient costs.	Aurizon Network is able to recover the efficient costs of providing the infrastructure over the estimated economic life of the asset.

We consider our assessment approach consistent with the 2010 AU (as amended to account for the GAPE DAAU decision), and to be appropriate after having regard to the factors under section 138(2) of the QCA Act. We have therefore retained our assessment approach outlined in section 18.5.1 for our consolidated draft decision.

Assessment of socialisation impacts (for Blackwater and Moura)

Based on our consolidated draft decisions on MAR and volumes and taking into account stakeholder submissions, we have reassessed whether a socialised WIRP outcome would increase the baseline system reference tariff for existing non-WIRP train services in Blackwater and Moura.

Application of subclause 4.1.2 to existing Rolleston spur line (Blackwater system)

We are not convinced by Aurizon Network's claim that we should not have deducted the minimum CCC from the baseline system reference tariff. We consider that our treatment of the minimum CCC reflects the underlying principle for the subclause 4.1.2 test (i.e. subclause 4.1.1 which states that a particular train service will be expected to pay a reference tariff that covers, in addition to its mine-specific incremental costs, at least a minimum CCC). This may not always be the case if we instead compared the incremental cost plus minimum CCC to the base system reference tariff (with no adjustment to exclude the CCC).

We note that our treatment of the minimum Rolleston CCC in deriving criterion (a) of subclause 4.1.2 in our WIRP draft decision is consistent with the corresponding treatment in:

- our January 2015 initial draft decision approach to deriving criterion (a) for existing Rolleston train services
- Aurizon Network's 2014 DAU modelling approach in which it deducted the minimum CCC attributable to Rolleston train services from the base system reference tariff (criterion (a)) in calculating its proposed reference tariffs in Schedule F of its 2014 DAU.

In both cases above, the outcome of the subclause 4.1.2 test was to apply a system premium to existing Rolleston train services over the UT4 period. 490

⁴⁸⁸ For instance, at the point at which the base system reference tariff (excluding the CCC) just equals the incremental cost plus minimum CCC, the system reference tariff will apply to the new train service. However, the resultant tariff payable (after socialisation of the incremental costs and volumes) would not cover the incremental cost plus minimum CCC.

Aurizon Network said it removed the CCC from its calculation of the base system reference tariff as these costs would still be incurred if Rolleston was not railing. However, it said that incremental maintenance costs were deducted as these costs could arguably be avoided without Rolleston volumes.

⁴⁸⁷ Subclause 4.1.1 of the 2010 AU requires that coal-carrying train service will pay at least its incremental costs and a minimum CCC. The 'system entry test' outlined in subclause 4.1.2 aims to reflect the requirement of subclause 4.1.1.

⁴⁹⁰ In the case of Aurizon Network's 2014 DAU proposal, it also applied a subsequent discount to Rolleston train services to reflect its proposed application of a discount in place of rebates for its mine-specific spur line costs.

The table below presents our application of subclause 4.1.2 for existing Rolleston train services, based on updated MAR and volumes consistent with our consolidated draft decision. We note that if we were to apply Aurizon Network's modified treatment of the Rolleston minimum CCC⁴⁹¹, the same outcome would still apply using our proposed costs and volumes.

Table 98 Application of subclause 4.1.2 for Rolleston non-electric tariff (\$/ntk, nominal)

Application of subclause 4.1.2	2015–16	2016–17
Rolleston—non-electric (\$/ntk, nominal)		
Criterion (a)—reference tariff ^a	0.0140	0.0152
Criterion (a)—reference tariff (modified approach) ^b	0.0147	0.0158
Criterion (b)—incremental costs + CCC	0.0170	0.0186

a Base system reference tariff, after an adjustment to remove the incremental costs and minimum CCC attributable to Rolleston train services. **b** Base system reference tariff, calculated using Aurizon Network's modified approach which removes the incremental costs but not the minimum CCC attributable to existing Rolleston train services.

The above table shows the tariff required to cover Rolleston non-electric incremental costs and minimum CCC (criterion (b)) is higher than the baseline system reference tariff (criterion (a)). This means:

- existing Rolleston train services should continue to pay a system premium in addition to the non-electric component of the Blackwater system reference tariff to ensure they pay at least the incremental costs and minimum CCC attributable to their train service
- the baseline system reference tariff for the Blackwater system (excluding costs allocated to WIRP train services) should not include the costs and volumes associated with existing Rolleston train services.

We note that Aurizon Network's updated assessment of the existing Rolleston non-electric access charges against subclause 4.1.2 indicated that a socialised Blackwater system reference tariff should apply for existing Rolleston train services. ⁴⁹² However, a key driver of this outcome appears to be Aurizon Network's proposed allocation of 50 per cent of Blackwater duplication costs to existing Blackwater users (resulting in a higher baseline system reference tariff in criterion (a)).

Comparison of the baseline and socialised system reference tariff

In this next step, we compared the average system reference tariff applicable to existing customers under:

- the baseline system reference tariff (excluding costs allocated to WIRP train services)
- the same tariff once the WIRP costs and volumes are socialised within the system.

In our WIRP draft decision, we undertook this analysis of average tariffs on a \$/nt basis, consistent with the approach followed by Aurizon Network in its 2014 DAU WIRP pricing proposal. 493 Aurizon Network said it was concerned that we had assessed existing (i.e. non-WIRP) Rolleston train services on the basis of a \$/ntk calculation, while WIRP was assessed using a \$/nt approach, possibly creating different outcomes for different customer groups.

⁴⁹¹ As applied by Aurizon Network in its December 2014 WIRP pricing proposal.

⁴⁹² Aurizon Network, 2014 DAU, sub. 109: 50.

⁴⁹³ Aurizon Network, 2014 DAU, sub. 6: 6–7.

We can confirm that the outcomes of the average price analysis in our supplementary draft decision remain unchanged whether we used a \$/nt or \$/ntk approach. We acknowledge Aurizon Network's concern that an inconsistent approach to assessing unit costs may result in different outcomes for different customer groups. Our assessment in this consolidated draft decision has also assessed WIRP using a \$/ntk basis so that a consistent approach is applied.

We have reassessed whether a socialised WIRP outcome would increase the baseline system reference tariff for existing non-WIRP train services in Blackwater and Moura. The table below compares the average access charges on a \$/nt basis for existing non-WIRP train services 494, with and without socialisation of WIRP costs and volumes.

Table 99 Comparison of average access charge for existing train services (\$/nt, nominal)

Average access charge	2015–16	2016–17
Blackwater system		
Existing system excluding WIRP ^a	6.69	6.88
Existing system including WIRP (socialised) ^{b,c}	6.81	7.06
Difference (%)	1.8%	2.7%
Moura system		
Existing system excluding WIRP	3.03	3.35
Existing system including WIRP (socialised) ^c	3.09	3.50
Difference (%)	2.1%	4.3%

a Excluding existing (non-WIRP) Rolleston train services. **b** Excluding Rolleston WIRP and non-WIRP train services. **c** We have applied a revenue smoothing factor for WIRP allowable revenue in our calculation of this socialised price, consistent with Aurizon Network's proposed approach. Source: QCA analysis.

The table below compares the average access charges on a \$/ntk basis for existing non-WIRP train services with and without socialisation of WIRP costs and volumes.

Table 100 Comparison of average access charge for existing train services (\$/ntk, nominal)

Average access charge	2015–16	2016–17	
Blackwater system			
Existing system excluding WIRP ^a	0.0199	0.0200	
Existing system including WIRP (socialised) ^{b,c}	0.0204	0.0209	
Difference (%)	2.9%	4.3%	
Moura system			
Existing system excluding WIRP	0.0188	0.0204	
Existing system including WIRP (socialised) ^c	0.0190	0.0207	
Difference (%)	1.0%	1.6%	

a Excluding existing (non-WIRP) Rolleston train services. **b** Excluding Rolleston WIRP and non-WIRP train services. **c** We have applied a revenue smoothing factor for WIRP allowable revenue in our calculation of this socialised price, consistent with Aurizon Network's proposed approach. Source: QCA analysis.

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⁴⁹⁴ We have undertaken this analysis from the perspective of those existing train services that pay the system reference tariff (with no system premium). We separately assess Rolleston train services in section 18.6.2.

The comparisons for Blackwater in the tables above are partly influenced by lower unit incremental costs for WIRP electric assets. However, some train services in the Blackwater system do not use electric traction services. The table below presents the impact on the average access charge for Blackwater customers with non-electric train services.

Table 101 Comparison of average non-electric access charges—Blackwater excluding Rolleston (\$ per NT, nominal)

Average access charge	2015–16	2016–17	
Blackwater excluding Rolleston (\$/nt)			
Existing system excluding WIRP ^a	5.11	5.63	
Existing system including WIRP (socialised) ^{b,c}	5.31	5.86	
Difference (%)	4.0% 4.0%		
Blackwater excluding Rolleston (\$/ntk)			
Existing system excluding WIRP ^a	0.0152	0.0164	
Existing system including WIRP (socialised) ^{b,c}	0.0159	0.0173	
Difference (%)	5.2%	5.7%	

a Excluding existing (non-WIRP) Rolleston train services. **b** Excluding Rolleston WIRP and non-WIRP train services. **c** We have applied a revenue smoothing factor for WIRP allowable revenue in our calculation of this socialised price, consistent with Aurizon Network's proposed approach. Source: QCA analysis.

Our analysis shows that a socialised outcome would result in an increase in the Blackwater and Moura system reference tariffs, that is, existing users would pay more. In addition, this analysis shows that a socialised outcome will not result in WIRP train services bearing at least the full incremental costs of access. This indicates that, based on our updated MAR and volume estimates in our consolidated draft decision, the pure socialisation approach is not consistent with our assessment criteria (see Section 18.5.1).

We note that this outcome remains unchanged if we were to apply the test outlined in subclause 4.1.2 of the 2010 AU to assess whether the incremental cost of the new WIRP train services are higher than the existing system reference tariff (on a \$/ntk basis). In our application of this test in the table below, we have not imposed a minimum CCC on WIRP train services. As noted in our assessment approach, we consider a zero CCC from expanding users may be acceptable if expanding users face a higher cost than existing users.

The table below shows the outcomes of this test for WIRP Blackwater (excluding WIRP Rolleston) and WIRP Moura train services.

Table 102Application of subclause 4.1.2 for WIRP non-electric tariffs (\$/ntk, nominal)

Application of subclause 4.1.2	2015–16	2016–17	
WIRP Blackwater ^a - non-electric (\$/ntk, nominal)			
Criterion (a)—reference tariff ^b	0.0167	0.0181	
Criterion (b)—incremental costs ^c	0.0263 0.0269		
WIRP Moura (\$/ntk, nominal)			
Criterion (a)—reference tariff ^b	0.0172	0.0189	
Criterion (b)—incremental costs ^c	0.0217	0.0223	

a Excludes Rolleston WIRP train services, as the incremental cost of this train service is compared with the Rolleston reference tariff (on a \$/ntk basis). **b** Base system reference tariff (on a \$/ntk basis), using the characteristics of the WIRP Blackwater or WIRP Moura train services (e.g. forecast nt and gtk). **c** Does not impose a CCC on WIRP Blackwater or WIRP Moura train services.

Assessment of WIRP pricing options

We acknowledge that the incremental volume associated with WIRP train services is not easily observable due to the issue of substitutable train services. This could lead to non-WIRP users being exposed to volume risks associated with WIRP.

Use of an apportionment mechanism

Without an apportionment mechanism that prioritises WIRP users' existing TSEs over WIRP entitlements for billing purposes, existing users could effectively bear the down-side risks associated with WIRP volumes, particularly under the separate tariff approach. In response to us seeking views on this issue in our supplementary draft decision, some non-WIRP stakeholders⁴⁹⁵ proposed the use of a priority rule whereby existing TSEs would be deemed to be used for billing purposes before WIRP TSEs.

However, we do not consider that such a threshold would be equitable given that most existing users do not rail up to 100 per cent of their contracted entitlement. This issue could potentially be overcome using a threshold based on a percentage of contracted volume. However, the setting of a threshold would be somewhat arbitrary, with different thresholds having material differences across customer groups.

We consider that an apportionment mechanism would be appropriate if there was general industry agreement on how the apportionment would apply to WIRP and non-WIRP railings. For future expansion projects, this type of mechanism could be set out as part of the Pricing Proposal that is required to be submitted to the QCA, as required in clause 6.4.3 of our CDD amended DAU (see section 16.5).

Volume risks and substitutability of train services

As outlined in our supplementary draft decision, the substitutability of train services means that existing users will be exposed to the volume risk associated with WIRP train services under either a system premium or separate reference tariff approach.

We consider that the volume risk associated with WIRP train services is manageable under a system premium approach over the remainder of the UT4 period for the following reasons:

⁴⁹⁵ Asciano, 2014 DAU, sub. 112: 8–9; Anglo American, 2014 DAU, sub. 111: 6.

- The contracted WIRP volume ramp-up, in combination with our proposed capping of WIRP volumes to contracted volumes, will constrain the substitution of WIRP tonnages over the UT4 period, for the purposes of determining tariffs.
- We consider that our proposed volume forecasts are a realistic view of expected volumes at
 the individual train service level over the remainder of the UT4 period. These forecasts are
 based on an independent assessment of volume forecasts at the individual train service
 level, taking into account factors such as input from individual customers, up-to-date
 information on market and mine-level conditions and take-or-pay obligations.

However, beyond the UT4 period there could be an increase in existing volumes transferred to WIRP as contracted below-rail access volumes increase. In addition, if expansion volumes do not eventuate or coal market conditions worsen, substitution of volumes could lead to a further significant increase in existing (non-WIRP) users' access charges.

We therefore consider that the pricing approach for WIRP train services should be reassessed as part of the UT5 approval process.

Conclusion

It remains our view that WIRP pricing arrangements are based on the system premium approach over the remainder of the UT4 period. If a separate reference tariff is applied in the Blackwater and Moura systems, the substitutability of volumes could have the effect of shifting volume risk to existing customers.

This approach is appropriate as it takes into account, and provides a balance between, the interests of Aurizon Network, access seekers and access holders, and is generally consistent with the other factors set out in section 138(2) of the QCA Act.

Consolidated draft decision 18.9

- (1) After considering Aurizon Network's proposed pricing approach for WIRP train services, our consolidated draft decision is to refuse to approve Aurizon Network's original proposal.
- (2) The way in which we consider it is appropriate that Aurizon Network amend its draft access undertaking is to:
 - (a) use a system premium pricing approach.

We consider it appropriate to make this decision having regard to each of the matters set out in section 138(2) of the QCA Act for the reasons set out in our analysis above.

18.6 Pricing arrangements for WIRP train services

18.6.1 2014–15 WIRP train services

Summary of the WIRP draft decision

For the small number of WIRP train services that operated in 2014–15, and consistent with the transition arrangements proposed in Aurizon Network's December 2014 WIRP pricing proposal,

we considered it to be appropriate that the relevant Blackwater or Moura system reference tariffs apply given: 496

- volumes for WIRP train services are minimal and did not commence until March 2015
- the commissioning date of the WIRP infrastructure, as accepted in our MAR draft decision, is 2015–16 for pricing purposes.

Stakeholders' comments on the WIRP draft decision

Stakeholders did not comment on our WIRP draft decision.

QCA analysis and consolidated draft decision

As we have not received any new stakeholders' submissions on this provision, our consolidated draft decision confirms our WIRP draft decision acceptance of Aurizon Network's December 2014 WIRP pricing proposal.

We consider that any access revenues received for WIRP train services in 2014–15 should be considered as part of the revenue cap adjustment process for 2015–16. As a result, this will require no changes to Aurizon Network's 2014 DAU.

18.6.2 WIRP train services in Blackwater—2015–16 and 2016–17

Summary of the WIRP draft decision

Tariff derivation steps

The table below outlines the key steps we undertook in our WIRP draft decision in determining the applicable reference tariff for WIRP and non-WIRP train services in the Blackwater system.

⁴⁹⁶ As presented in our January 2015 initial draft decision (QCA, 2015(a)).

⁴⁹⁷ This timing is also consistent with the updated WIRP capital indicator provided by Aurizon Network in its December 2014 WIRP pricing proposal, which we have accepted in this consolidated draft decision.

Table 103 QCA's proposed tariff derivation approach for Blackwater

Step	QCA analysis
Apply subclause 4.1.2 of the 2010 AU to existing mine-specific spur lines	We considered that the existing Rolleston train services should continue to pay a system premium in addition to the non-electric component of the Blackwater system reference tariff so that they pay at least the incremental costs and minimum CCC attributable to their train service.
	In addition, existing Rolleston electric train services would need to pay a system premium in addition to the Blackwater electric AT_5 tariff to cover the incremental costs attributable to Rolleston electrification.
Assess whether a system premium is applicable for WIRP train services	In this step, we assessed whether WIRP train services should be subject to a system premium in addition to the Blackwater system reference tariff for the following train services:
	WIRP Rolleston
	Our analysis showed that both the non-electric and electric incremental cost associated with the WIRP Rolleston train service was less than the incremental cost associated with the existing Rolleston train service.
	However, when WIRP and non-WIRP Rolleston train services were combined, our analysis showed higher incremental costs than the existing non-electric and non-electric components of the Blackwater system reference tariff.
	WIRP Blackwater
	When doing a similar comparison for other WIRP Blackwater customers, our analysis showed the costs associated with WIRP Blackwater resulted in a higher tariff than the existing Blackwater system reference tariff.

WIRP Blackwater customers had a higher incremental cost, primarily because some WIRP train services were not expected to rail for the remainder of the 2014 DAU period. Our assessment of the appropriateness of applying a revenue deferral mechanism during this period is set out below.

Revenue deferral

Our view was there is a significant impact on the tariff for railing WIRP Blackwater customers if the timing of the recovery of the return on and of WIRP capital expenditure is not adjusted to reflect short-term expected low volume profiles. If the revenue recovery profile is not adjusted to reflect this, it results in a premium for all WIRP users in the Blackwater system. This premium would effectively cover the cost of WIRP users not railing. In this respect, we noted that one WIRP user (Bandanna Energy Limited)⁴⁹⁸ has gone into administration and another is not expected to rail in the UT4 regulatory period.

Against this background, we considered it to be appropriate to defer the inclusion of the capital costs of all WIRP train services not expected to rail during the 2014 DAU period.

The benefit of this approach is that customers that do rail will not be impacted by customers who are not railing. Further, the under-recovery will be capitalised at the approved 2014 DAU WACC for the remainder of the regulatory period. This ensures that Aurizon Network recovers the return on and of WIRP infrastructure over the estimated economic life of the asset in a net present value neutral manner.

⁴⁹⁸ Aurizon Network, 2014(g): 32.

We noted that Aurizon Network proposed a similar arrangement in 2013 in the context of the NAPE customer share of GAPE project costs. 499

We considered our WIRP draft decision appropriately balanced the interests of access seekers, access holders with Aurizon Network's legitimate business interests (s. 138(2)(b), (d) and (e) of the QCA Act). We also considered this provides temporary assistance in maintaining the competitiveness of Queensland's mining industry on the global coal market which is in the public interest and aligns with object of Part 5 of the QCA Act (ss. 69E, 138(2)(a),(d) of the QCA Act).

We also considered the temporary nature of revenue deferral is consistent with the application of the pricing principles (ss. 138(g) and 168(A) of the QCA Act). Indeed, the fact that Aurizon Network is able to recover the efficient costs of providing the infrastructure over the economic life of the asset aligns with its legitimate business interests (s. 138(b) of the QCA Act).

Summary of proposed approach

In developing our proposed WIRP pricing approach, a key principle we applied (consistent with the GAPE pricing decision under the 2010 AU) is the incremental up/socialise down approach. That is, if an expansion results in higher average costs for existing users, we set a higher charge for the new user. If the expansion results in lower average costs, we apply a lower average price for all customers.

For this reason, our proposed pricing arrangements for WIRP train services were:

- for WIRP Blackwater users (excluding WIRP Rolleston users)—the Blackwater system
 reference tariff will apply. This tariff is able to socialise a portion of WIRP Blackwater costs
 within the existing Blackwater system by deferring the recovery of the remaining WIRP
 Blackwater costs that relate to WIRP train services not expected to operate in UT4.
- for WIRP Rolleston users—a system premium in addition to the Blackwater system reference tariff will apply for both WIRP and non-WIRP Rolleston train services. This reflects the higher costs associated with Rolleston train services, including costs associated with WIRP.

This resulted in each customer grouping in the Blackwater system being allocated, to the extent practicable, the costs related to their access. In particular:

- WIRP Blackwater users (excluding WIRP Rolleston)—the allocation of the WIRP project costs attributable to the additional access rights for train services unloading at WICET, excluding Rolleston and those customers for which revenue has been deferred, as outlined above.
- Rolleston users—the total of
 - Rolleston mine-specific spur line costs plus a minimum CCC for the access rights for train services unloading at non-WICET destinations
 - the allocation of WIRP project costs attributable to the additional access rights for train services unloading at WICET
 - Rolleston electrification costs, since the incremental cost of this new electric investment results in a higher tariff than the Blackwater AT₅ tariff.
- Existing Blackwater users—all remaining costs associated with the Blackwater system. This
 comprises costs associated with existing Blackwater system assets, excluding Rolleston.

⁴⁹⁹ Aurizon Network, 2013(a): 21.

We also applied the revenue smoothing factor to WIRP allowable revenue in our calculation of reference tariffs for WIRP train services. 500

We considered this to be a transparent and consistent approach to calculating reference tariffs in the CQCN and, as such, is in the interests of access seekers and holders (s. 138(2)(e) and (h) of the QCA Act).

Under the system premium approach and our proposed revenue deferral:

- Rolleston train services (both WIRP and non-WIRP) will pay a system premium in addition to the Blackwater system reference tariff
- all other train services (both WIRP and non-WIRP) will pay the Blackwater system reference tariff.

We considered this approach to be appropriate over the remainder of the 2014 DAU period given the existing pricing and take-or-pay arrangements. The alternative approach of a separate reference tariff may increase the risk that non-WIRP users would face higher take-or-pay charges as a result of the substitution effect. These non-WIRP users may in effect be forced to assume the risk of under-railings, which we consider is not appropriate since these users are not best placed to manage such risk.

Stakeholders' comments on the WIRP draft decision

Aurizon Network

Aurizon Network agreed with our WIRP draft decision to socialise WIRP Blackwater with Blackwater. However, they said that WIRP Rolleston train services should not be subject to a premium, and considered instead that these train services should also pay a socialised Blackwater system reference tariff. ⁵⁰¹

Aurizon Network agreed with our WIRP draft decision to defer revenues for WIRP trains that are not expected to rail over the UT4 period, on the condition that the quantum of the deferral is calculated with reference to their own volume forecasts, and there is an explicit end date. They recommended this end date be set at 30 June 2017. 502

Other stakeholders

The QRC were also concerned that customers that are not expected to rail under UT4 would still be subject to take-or-pay charges if take-or-pay is triggered at the overall system level. The take-or-pay for these non-railing customers may be substantial, yet their contributions are not recognised in Aurizon Network's 'revenue received' calculation. This means if these customers are subject to a system premium in UT5, they would effectively be paying high prices for access due to the failure to recognise revenue received from these customers during the UT4 period. ⁵⁰³

BMA supported our WIRP draft decision to defer revenues associated with WIRP train services not expected to rail during the UT4 regulatory period. 504

⁵⁰⁰ This approach derives a smoothed revenue profile over 2015–16 and 2016–17 with an equivalent present value as the unsmoothed revenue stream. Aurizon Network proposed this in both its 2014 DAU and its December 2014 WIRP pricing proposal.

⁵⁰¹ Aurizon Network, 2014 DAU, sub. 109: 55–56.

 $^{^{502}}$ Aurizon Network, 2014 DAU, sub. 109: 57.

⁵⁰³ QRC, 2014 DAU, sub. 114: 2.

⁵⁰⁴ BMA, 2014 DAU, sub. 105: 2.

The WIRP users disagreed with our WIRP draft decision and said a fully socialised pricing approach will result in lower tariffs for all Blackwater users across all years except 2015–16. They said they could not comment on the suitability of the revenue deferral mechanism; however, if applied a sunset date should be set. 506

Aurizon Operations considered that our WIRP draft decision does not sufficiently detail the nature, quantum or allocations of the costs pertaining to the overhead power system. 507 Aurizon Operations sought further information as to whether the critical assumptions that underpin the WIRP draft decision outcomes for AT $_5$ result in Rolleston being required to make a contribution to the common costs for overhead systems. 508

Aurizon Operations said that the WIRP draft decision does not independently assess the socialisation impacts of electric and non-electric investments. In doing so, Aurizon Operations considered that the WIRP draft decision can yield price outcomes that are inconsistent with promoting the efficient use of, operation and investment in overhead power systems. Aurizon Operations considered that the QCA's proposed expansion pricing principles would not require expanding users to pay a system premium on AT₅—as the existing user's AT₅ tariff is lower than it otherwise would be without the expanding user.

Aurizon Operations said that there was no reason for Rolleston electric train services to make a contribution to common (electric) costs if its incremental electric costs exceed the Blackwater system AT_5 rate. Aurizon Operations said that a zero contribution to common electric costs is consistent with previous undertakings, and is also consistent with the QCA's expansion pricing principles. ⁵¹²

QCA analysis and consolidated draft decision

After having regard to the criteria listed in section 138(2) of the QCA Act and stakeholders' submissions, we refuse to approve Aurizon Network's proposed pricing approach for WIRP train services in Blackwater in the 2014 DAU.

We have reassessed the applicable reference tariffs for WIRP and non-WIRP train services in the Blackwater system based on consolidated draft decision MAR and volumes.

Revenue deferral

We consider it is appropriate to defer the inclusion of the capital costs of all WIRP train services not expected to rail during the 2014 DAU period for the following reasons:

- WIRP Blackwater customers that do rail will not be impacted by customers who are not railing.
- The under-recovery will be capitalised at the approved WACC for the remainder of UT4, ensuring that Aurizon Network recovers the return on and of WIRP infrastructure over the estimated economic life of the asset in a net present value neutral manner.

⁵⁰⁵ WIRP Users, 2014 DAU, sub. 107: 55–57.

⁵⁰⁶ WIRP Users, 2014 DAU, sub. 107: 59.

⁵⁰⁷ Aurizon Operations, 2014 DAU, sub. 110: 2.

⁵⁰⁸ Aurizon Operations, 2014 DAU, sub. 110: 3.

 $^{^{509}}$ Aurizon Operations, 2014 DAU, sub. 110: 2.

⁵¹⁰ Aurizon Operations, 2014 DAU, sub. 110: 2.

⁵¹¹ Aurizon Operations, 2014 DAU, sub. 110: 3.

⁵¹² Aurizon Operations, 2014 DAU, sub. 110: 5–6.

Consistent with our WIRP draft decision, we have set the capital expenditure deferral amount equal to the WIRP capital expenditure allocated to the two WIRP train services not expected to rail during the 2014 DAU period. This allocation approach is consistent with how we have allocated capital expenditure between all WIRP users—that is, using contract gtk at full utilisation that Aurizon Network used to allocate WIRP capital expenditure in its submission to our WIRP draft decision. ⁵¹³

We will consider the continued applicability of this capital deferral mechanism as part of our UT5 approval process. Amongst other factors, we will consider whether non-railing WIRP users over UT4 will be expected to rail over UT5, and whether increased volume ramp-up for other WIRP Blackwater customers can absorb these costs without increasing the existing Blackwater system reference tariff.

QRC noted that a system premium approach can lead to non-symmetrical risk outcomes in specific circumstances. This includes the situation where non-railing WIRP Blackwater customers are required to pay take-or-pay charges due to forecast volumes not being achieved by other Blackwater customers. We consider that all customers, including non-railing customers, should bear a level of take-or-pay risk proportionate to their level of under-railings to full contract entitlement. The pricing of these customers will be considered in detail in UT5.

We have also retained the revenue smoothing factor to WIRP allowable revenue in our calculation of reference tariffs for WIRP train services. 515

We consider that the revenue deferral approach is in the interests of WIRP access holders as it prevents the implementation of a full cost recovery tariff during a period of potential underutilisation (s. 138(2)(e) and (h) of the QCA Act). This promotes the economically efficient operation of WIRP (which accords with the object of Part 5 of the QCA Act) by maximising the early usage of WIRP by keeping user costs down.

Further, we are of the view that this provides temporary assistance in maintaining the competitiveness of Queensland's mining industry on the global coal market, thereby seeking to minimise any potential under-utilisation. We consider this is to be in the public interest and aligns with object of Part 5 of the QCA Act (ss. 69E, 138(2)(a),(d) of the QCA Act).

We also consider the temporary nature of revenue deferral is consistent with the application of the pricing principles (ss. 138(g), 168(A) of the QCA Act). Indeed, the fact that Aurizon Network is able to recover the efficient costs of providing the infrastructure, including a regulated return on the investment on a net present value neutral basis, over the estimated economic life of the asset aligns with its legitimate business interests (s. 138(2)(b) of the QCA Act).

Assessment of WIRP pricing arrangements

We have separately assessed whether WIRP Blackwater users (excluding WIRP Rolleston users) and Rolleston users (WIRP and non-WIRP) should pay a system premium in addition to the Blackwater system reference tariff. Note that the analysis in this section has been undertaken after the application of our proposed revenue deferral mechanism.

⁵¹³ Aurizon Network, 2014 DAU, sub. 109: 38, 42; Aurizon Network, response to the QCA in a Request for Information (November 2015).

⁵¹⁴ QRC, 2014 DAU, sub. 114: 2.

⁵¹⁵ This approach derives a smoothed revenue profile over 2015–16 and 2016–17 with an equivalent present value as the unsmoothed revenue stream. Aurizon Network proposed this in both its 2014 DAU and its December 2014 WIRP pricing proposal.

Non-electric access charges

The table below shows the outcomes of this test for WIRP Blackwater (excluding WIRP Rolleston) and Rolleston train services. We have outlined this in \$/ntk terms for consistency with Aurizon Network's presentation of results in its response to our WIRP draft decision. ⁵¹⁶ This table shows that Rolleston is required to pay a system premium in addition to the Blackwater system reference tariff in 2015–16 only.

Table 104 Comparison of average non-electric access charges (\$/ntk, nominal)

Average access charge	ccess charge 2015–16 2016–1		
WIRP Blackwater ^a - non-electric (\$/ntk, nominal)			
Blackwater system reference tariff (excluding WIRP) ^b	0.0167	0.0181	
WIRP Blackwater non-electric incremental costs ^c	cremental costs ^c 0.0141		
Rolleston – non-electric (\$/ntk, nominal)			
Blackwater system reference tariff (excluding WIRP) ^b	0.0140	0.0152	
Rolleston non-electric incremental costs ^{c,d}	0.0145	0.0147	

Note: This comparison has been undertaken after the application of our proposed revenue deferral mechanism.

Electric access charges

In our WIRP draft decision, we proposed that all Rolleston users (i.e. both WIRP and non-WIRP) would pay a system premium since the incremental cost of the new Rolleston electrification investment resulted in a higher tariff than the Blackwater AT₅ tariff.

We consider that users of Rolleston electric investment should pay a system premium when the incremental cost of the new investment results in a higher tariff than the Blackwater AT_5 tariff. When users' incremental cost does not result in a higher Blackwater AT_5 tariff, they would pay a socialised Blackwater AT_5 electric tariff in 2015–16 and 2016–17.

With the smoothing of Rolleston electric MAR over the UT4 period (as discussed in section 17.5.5), our analysis shows that a system premium should apply in addition to the Blackwater AT_5 electric tariff over the UT4 period (see table below).

Table 105Comparison of average electric access charge (\$/'000 egtk, nominal)

Average access charge (\$/egtk)	2014–15	2015–16	2016–17
Pre-WIRP			
Blackwater system reference tariff	3.29	3.46	2.71
Rolleston electric incremental costs	4.23	4.34	4.44
Post-WIRP			
Existing system excluding WIRP Rolleston ^a	3.29	3.38	2.62
Rolleston electric incremental costs ^b	4.23	3.44	2.86

Note: This comparison has been undertaken after the application of our proposed revenue deferral mechanism.

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a Excludes WIRP Rolleston train services. **b** Base system reference tariff (on a \$/ntk basis), using the characteristics of the WIRP Blackwater or WIRP Moura train services (e.g. forecast nt and gtk). **c** Does not impose a CCC on WIRP train services. **d** Includes a CCC on existing Rolleston non-electric train services.

⁵¹⁶ We note that the outcomes remain unchanged if we present this table on a \$/nt basis.

a Includes WIRP Blackwater train services. b Includes WIRP Rolleston train services. Source: QCA analysis.

We agree with Aurizon Operations' concerns that the socialisation test for the AT_5 rate should be conducted independently from the non-electric investments. We can confirm that our assessment of whether a system premium for the AT_5 was applicable for Rolleston electric train services was on a \$/egtk basis as outlined above in both our initial draft decision and WIRP draft decision.

We consider that a transparent and consistent approach to calculating reference tariffs in the CQCN was in the interests of access seekers and holders (s. 138(2)(e) and (h) of the QCA Act). This also recognised Aurizon Network's legitimate business interests as it did not adversely affect Aurizon Network's ability to earn revenue that reflected its efficient costs and appropriate rate of return (s. 138(2)(b) and (g) of the QCA Act).

Proposed pricing approach

Our proposed pricing arrangements for WIRP train services are:

- for WIRP Blackwater users (excluding WIRP Rolleston users)—the Blackwater system
 reference tariff will apply. This tariff socialises a portion of WIRP Blackwater costs within the
 existing Blackwater system, while deferring the recovery of some WIRP Blackwater costs.
- for Rolleston users (both WIRP and non-WIRP):
 - for the non-electric component of the reference tariff, a system premium in addition to the Blackwater system reference tariff will apply in 2015–16 only.
 - for the electric component of the reference tariff, a system premium in addition to the
 Blackwater system reference tariff will apply in both 2015–16 and 2016–17.

These arrangements result in each customer grouping in the Blackwater system being allocated, to the extent practicable, the costs related to their access.

We considered this to be a transparent and consistent approach to calculating reference tariffs in the CQCN and, as such, is in the interests of access seekers and holders (s. 138(2)(e) and (h) of the QCA Act).

We considered this approach to be appropriate over the remainder of the 2014 DAU period given the existing pricing and take-or-pay arrangements. The alternative approach of a separate reference tariff may increase the risk that non-WIRP users would face higher take-or-pay charges as a result of the substitution effect. These non-WIRP users may in effect be forced to assume the risk of under-railings, which we consider is not appropriate since these users are not best placed to manage such risk.

Consolidated draft decision 18.10

- (1) After considering Aurizon Network's proposed pricing approach for WIRP train services in Blackwater, our consolidated draft decision is to refuse to approve Aurizon Network's original proposal.
- (2) The way in which we consider it is appropriate that Aurizon Network amend its draft access undertaking is to:
 - (a) address the impact of WIRP users that are not expected to rail during the 2014 DAU period, by application of our proposed revenue deferral mechanism to address the impact on expanding users resulting from the underutilisation of WIRP capacity over the remainder of the 2014 DAU period
 - (b) apply the pricing arrangements outlined in this chapter for WIRP users, including applying a system premium for Rolleston train services.

We consider it appropriate to make this decision having regard to each of the matters set out in section 138(2) of the QCA Act for the reasons set out in our analysis above.

18.6.3 WIRP train services in Moura Summary of the WIRP draft decision

We also considered the application of a system premium for WIRP train services in Moura to be appropriate in order to ensure WIRP users pay efficient costs and to minimise the impact on existing Moura customers.

While this approach differs to that proposed by Aurizon Network in its 2014 DAU, it is consistent with the approach put forward by Aurizon Network in its December 2014 WIRP pricing proposal.

We did not consider that a revenue deferral mechanism is appropriate in this case as the system premium reflects the share of WIRP project costs attributable to the one WIRP customer in Moura. Hence, any price changes due to under-railing of WIRP volumes would not affect other WIRP users (as is the case in the Blackwater system where there are multiple WIRP users). In the Moura system, the risk of under-railings would flow to the party that is best placed to manage this risk.

We considered that a transparent, certain and consistent approach to calculating reference tariffs in the CQCN to be in the interests of access seekers and holders (s. 138(2)(e) and (h) of the QCA Act).

Stakeholders' comments on the WIRP draft decision

Aurizon Network

Aurizon Network agreed that WIRP Moura train services should pay a system premium, however the premium should be reduced. 517

Other stakeholders

Anglo American said that the WIRP Moura customer should be subject to a separate reference tariff, system allowable revenue and take-or-pay arrangement from existing Moura customers. In addition, it said that existing train service entitlements should be prioritised over WIRP

⁵¹⁷ Aurizon Network, 2014 DAU, sub. 109: 58.

entitlements for calculating take-or-pay and billing purposes. They said that the GAPE approach should be applied to Moura as both situations are similar (i.e. there are no benefits to existing users and the expansion was built for expanding users). 518

The WIRP users disagreed with our WIRP draft decision and said a fully socialised pricing approach will result in lower tariffs for all Moura users. ⁵¹⁹

QCA analysis and consolidated draft decision

After having regard to the criteria listed in section 138(2) of the QCA Act and stakeholders' submissions, we refuse to approve Aurizon Network's proposed pricing approach for WIRP train services in Moura in the 2014 DAU.

We have reassessed the applicable reference tariffs for WIRP and non-WIRP train services in the Moura system based on consolidated draft decision MAR and volumes.

We acknowledge that there are some differences between the volume risks faced by existing customers in the Blackwater and Moura systems. The extent to which WIRP volumes can be substituted from existing volumes in the Moura system is reduced as compared with the Blackwater system. In addition, there is only one WIRP customer in the Moura system, so there is no volume risk between expanding users.

We have retained our view in the WIRP draft decision that the volume risk associated with WIRP train services is manageable under a system premium approach over the remainder of the UT4 period as we consider our proposed volume forecasts are a realistic view of expected volumes at the individual train service level. These forecasts are based on an independent assessment of volume forecasts at the individual train service level, taking into account factors such as input from individual customers, up-to-date information on market and mine-level conditions and take-or-pay obligations.

We note, however, the WIRP Moura customer (Cockatoo Coal) was placed into administration on 16 November 2015. At the time of this consolidated draft decision, there was not sufficient information available for us to assess the implications of this and as such we have not reflected this in our consolidated draft decision. We consider that the full implications of this development may require amendments to our proposed volume forecasts for WIRP Moura and additional mechanisms to ensure that existing Moura customers do not experience a material impact in their access charge associated with the WIRP expansion.

We consider that a transparent, certain and consistent approach to calculating reference tariffs in the CQCN to be in the interests of access seekers and holders (s. 138(2)(e) and (h) of the QCA Act).

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⁵¹⁸ Anglo American, 2014 DAU, sub. 111: 6–7.

⁵¹⁹ WIRP Users, 2014 DAU, sub. 107: 55–57.

Consolidated draft decision 18.11

- (1) After considering Aurizon Network's proposed pricing approach for WIRP train services in Moura, our consolidated draft decision is to refuse to approve Aurizon Network's original proposal.
- (2) The way in which we consider it is appropriate that Aurizon Network amend its draft access undertaking is to:
 - (a) apply a system premium for WIRP Moura train services consistent with the pricing arrangements outlined in this consolidated draft decision.

We consider it appropriate to make this decision having regard to each of the matters set out in section 138(2) of the QCA Act for the reasons set out in our analysis above.

18.6.4 WIRP train services—NCL Summary of the WIRP draft decision

We recognised the unique circumstances of the Colton to Gladstone Port train service in our March 2012 consolidated draft decision on Aurizon Network's proposed alternative access charge for this train service. In particular, the rationale for an alternative approach to developing a reference tariff for this train service had regard for the unusual characteristics of this train service, including:

- the relatively short (eight kilometre) section of Aurizon Network's rail network being used
- use of significantly shorter trains than those operating on the Blackwater and Moura systems.

We considered that the pricing arrangements do not appear to adversely impact on existing access holders' rights and entitlements. We considered that the strict application of undertaking requirements would likely lead to an adverse outcome for the Colton customer, without providing any benefits to existing access holders. 520

We noted that the CCC calculation outlined in subclauses 4.1.1 and 4.1.2 of the 2010 AU do not appear reasonable for Colton, as the train service will only use a short distance of track. We accepted the escalation of the existing CCC for Colton train services, but consider a more appropriate escalation factor to be CPI, consistent with our escalation of many other cost components.

As a consequence, we considered that it be appropriate to refuse to approve Aurizon Network's approach to pricing arrangements for WIRP NCL, and to recommend that the escalation factor used be amended to be in accordance with CPI over the 2014 DAU regulatory period. ⁵²¹

We considered this to be appropriate to balance the interests of Aurizon Network and access seekers/holders under section 138(2) of the QCA Act, and consistent with the application of the pricing principles (ss. 138(g), 168(A) of the QCA Act).

⁵²⁰ No stakeholder has provided any reasons to oppose Aurizon Network's proposed pricing approach.

We note these prices have been developed using contracted volumes, consistent with the pricing approach in our final decision on the Colton train service (QCA, 2012(e)).

Stakeholders' comments on the WIRP draft decision

Aurizon Network agreed with our WIRP draft decision.

Idemitsu provided the following comments⁵²²:

- WIRP NCL should be allocated a portion of the WICET balloon loop cost.
- Despite the short use of track, WIRP NCL customers will prevent other users from using this
 section of the network and occupy time at the unloading facility, consuming more system
 capacity than their relative use of track.

The WIRP users agreed with our WIRP draft decision. 523

QCA analysis and consolidated draft decision

As Aurizon Network agreed with our WIRP draft decision and we have not received any new information from other stakeholders, our consolidated draft decision is to maintain our WIRP draft decision on the pricing of WIRP NCL train services.

In relation to the comments from Idemitsu:

- We can confirm that the WIRP NCL train service is allocated a portion of the WICET balloon loop cost in accordance to their contracted gtk at full utilisation.
- We previously considered in our final decision on Colton train services that the CCC calculation approach resulted in an access charge that represented a reasonable reflection of the opportunity cost of train paths that will be utilised by the Colton train service.

We consider this to be another example in which we do not consider it appropriate to mechanistically apply the undertaking provisions without having regard to section 138(2) factors of the QCA Act.

We considered the pricing approach for WIRP NCL train services is appropriate in terms of balancing the interests of Aurizon Network and access seekers/holders under section 138(2) of the QCA Act, and is consistent with the application of the pricing principles (ss. 138(g), 168(A) of the QCA Act).

⁵²² Idemitsu, 2014 DAU, sub. 113: 3.

⁵²³ WIRP Users, 2014 DAU, sub. 107: 57.

⁵²⁴ QCA, 2012(e): 5

Consolidated draft decision 18.12

- (1) After considering Aurizon Network's proposed pricing approach for WIRP NCL train services from Colton, our consolidated draft decision is to refuse to approve Aurizon Network's original proposal.
- (2) The way in which we consider it is appropriate that Aurizon Network amend its draft access undertaking is to:
 - (a) apply the approach outlined in Aurizon Network's December 2014 WIRP pricing proposal, with the CCC for WIRP NCL train services escalated in accordance with CPI over the 2014 DAU regulatory period.

We consider it appropriate to make this decision having regard to each of the matters set out in section 138(2) of the QCA Act for the reasons set out in our analysis above.

19 TAKE OR PAY ARRANGEMENTS

Take-or-pay arrangements aim to encourage efficient use of infrastructure by providing incentives for users to only contract for capacity that they are likely to need and to make surplus capacity available to other potential users. Clause 2.4 of Schedule F of Aurizon Network's 2014 DAU outlines the proposed take-or-pay arrangements that apply for contracted train services.

By applying the factors in section 138(2) of the QCA Act, and determining that we do not consider the take-or-pay provision in Schedule F of Aurizon Network's 2014 DAU to be appropriate, our consolidated draft decision is to refuse to approve Aurizon Network's proposed take-or-pay arrangements. We require amendments to clause 2.4 of Schedule F to:

- remove proposed operator capping arrangements
- improve the clarity and consistency of the proposed mine capping arrangements
- remove special arrangements for access holders with UT1 access agreements for the purposes of calculating take-or-pay charges
- make specific drafting changes to improve the transparency and certainty of take-or-pay arrangements.

The detailed drafting of our proposed clause 3 of Schedule F attached to this consolidated draft decision is consistent with our approach and shows all of the amendments required.

19.1 Introduction

Access holders contract with Aurizon Network to receive train service entitlements (TSEs), which are rights to operate a number of train services from an origin to a destination over a year.

When an access holder chooses not to run a train service, Aurizon Network is unable to obtain revenue from that service unless there are alternative arrangements to recover the foregone revenue. In effect, access holders are using scarce capacity without paying for the reservation of that capacity. Take-or-pay charges are one avenue for Aurizon Network to recover this revenue.

Take-or-pay charges also provide a price signal to customers about efficient contracting. These arrangements can reduce the incentive to over-contract. Over-contracting could potentially reduce access for other access seekers or require costly new expansions.

Since UT1, all access undertakings have provided for Aurizon Network to levy take-or-pay charges. However, take-or-pay arrangements differ across access holders depending on when particular access agreements were executed. This introduces a number of potential inequities across different access holders, including differences in the holding cost for access.

Take-or-pay arrangements in post–UT1 access agreements⁵²⁵ include capping mechanisms that limit the application of individual take-or-pay obligations where at an aggregate level the take-or-pay obligations are satisfied. The proposed 2014 DAU take-or-pay arrangements include a wider range of capping mechanisms with the proposed introduction of operator capping. This

⁵²⁵ Post-UT1 agreements refer to access agreements executed or renewed on or after 30 June 2006.

could have further implications for the distribution of risk between Aurizon Network and the holders of specific access agreements.

19.2 Overview

19.2.1 Aurizon Network's proposal

Aurizon Network's take-or-pay mechanism seeks to achieve two objectives: 526

First, it provides some protection to Aurizon Network's revenue steam where an access holder does not rail its contracted services (unless this is due to an Aurizon Network Cause). Second, it makes users accountable for their capacity entitlements and discourages capacity hoarding, which can unfairly disadvantage other access seekers or holders.

Aurizon Network said that the lack of capping provisions in UT1 access agreements⁵²⁷ resulted in greater take-or-pay costs and risks for UT1 access holders compared with post-UT1 access holders.⁵²⁸ Aurizon Network proposed the following special arrangements for still existing UT1 access agreements for the purpose of calculating take-or-pay charges:

- Exclude any volumes for train services where Wiggins Island Coal Export Terminal (WICET) is a destination.
- Where an access holder has a UT1 access agreement and a post-UT1 access agreement for a specific origin—destination pair, then any Aurizon Network Cause paths would be allocated to the UT1 agreement before other agreements.

Consistent with previous access undertakings⁵²⁹, Aurizon Network proposed for the 2014 DAU a take-or-pay trigger test to determine whether take-or-pay charges will be levied. Take-or-pay obligations would be activated if the total gtk for all coal-carrying train services operated that are subject to a particular reference tariff are less than:

- 100 per cent of forecast gtk for that particular reference tariff, minus
- gtk not provided due to an Aurizon Network Cause.

This take-or-pay trigger test is consistent with the 2010 AU. 531

The proposed 2014 DAU take-or-pay arrangements include a wider range of capping mechanisms with the proposed introduction of operator capping. The proposed 2014 DAU now includes three levels of capping—mine capping, applied first; then operator capping; and finally tariff capping.

The 2014 DAU's mine and operator capping provisions allow an access holder to offset revenue over-recoveries from over-railings in one access agreement against take-or-pay liabilities associated with under-railings in another access agreement. Tariff capping reduces take-or-pay liabilities for users to the allowable revenue that Aurizon Network is allowed to earn for that particular tariff.

⁵³¹ 2010 AU, Schedule F, Part B, clause 2.2.4.

⁵²⁶ Aurizon Network, 2013 DAU, sub. 2: 263.

⁵²⁷ UT1 agreements refer to access agreements executed or renewed prior to 30 June 2006.

⁵²⁸ Aurizon Network, 2013 DAU, sub. 2: 265–267.

⁵²⁹ For example, 2010 AU, Schedule F, Part B, clause 2.2.4.

⁵³⁰ 2014 DAU, Schedule F, clause 2.4(g).

19.2.2 Scope of assessment

This chapter deals with the key issues we have identified in relation to Aurizon Network's approach to take-or-pay arrangements. Our consolidated draft decisions in this chapter have considered the application of section 138(2) of the QCA Act as set out in Section 15.2 of this consolidated draft decision.

As outlined in Chapter 15, we believe that many of Aurizon Network's proposed changes for tariffs in the 2014 DAU will make pricing arrangements even more complex, with the impact of changes across different users being unclear.

We recognise there are various take-or-pay vintages depending on when particular access agreements were executed. This introduces a number of potential inequities across different access holders that are difficult to resolve while there are still UT1 and UT2 access agreements in place that provide take-or-pay arrangements as per the access agreement rather than the access undertaking currently in force.

We consider there are benefits to Aurizon Network developing proposals to streamline the pricing arrangements for UT5, including considering opportunities for the simplification and harmonisation of take-or-pay arrangements.

For this reason, we have been careful, in developing our consolidated draft decision for the 2014 DAU, not to introduce changes that further impact on the distribution of take-or-pay risk between users.

We consider that while the existing pricing structures and take-or-pay arrangements should be simplified, this should occur as part of a broader review of prices and tariffs by Aurizon Network during the UT5 process.

19.3 Take-or-pay capping provisions

19.3.1 Aurizon Network's proposal

Aurizon Network's proposed 2014 DAU provides three levels of capping—mine, operator tariff capping (see the table below). 532

Table 106 Aurizon Network's proposed capping provisions

Capping	Description	Schedule F Clause
Mine capping	Take-or-pay offsets between access agreements with the same origin—destination pair (regardless of who the access holder is).	2.4(I)
	Applies to UT3 and UT4 access agreements.	
Operator	Take-or-pay offsets between an operator's:	2.4(m)–(n)
capping	own access agreements or	
	train operations agreements related to relevant end user access agreements (under the alternative-form access agreements).	
	Take-or-pay offsets between access agreements held by end users through access holder access agreements.	
	Applies to UT3 and UT4 access agreements.	
Tariff capping	Take-or-pay reductions for access holders where total actual revenue exceeds the allowable revenue for a particular system reference tariff Applies to post-UT1 access agreements.	2.4(o)–(q)

Source: Aurizon Network's 2014 DAU, Schedule F, clauses 2.4(I)–(q)

⁵³² 2014 DAU, Schedule F, clause 2.4(I)–(q).

Mine capping

Aurizon Network said its mine capping provision is intended to provide flexibility to all access holders (and, where relevant, their customers) to offset revenue over-recoveries in one access agreement against take-or-pay liabilities of another access agreement with the same origindestination pair. 533 A simple example of mine capping under Aurizon Network's proposed 2014 DAU is provided in the box below.

Box 6: Example of mine capping

An end user (or its operator) has two access agreements for Mine A to Port B, and each agreement has 100 train paths. If, for some reason, an end user elected to use a 90:110 path allocation rather than a 100:100 allocation, the end user can reduce take-or-pay liabilities in the first agreement by the extent of revenue over-recovery in the other agreement.

Aurizon Network said mine capping was introduced in UT3 to allow an end user who contracted via more than one operator (i.e. through a standard operator access agreement) to not be disadvantaged, compared with an end user who contracted directly with Aurizon Network (i.e. through an end user agreement).⁵³⁴ However, Aurizon Network considered the mine capping provision in the 2010 AU⁵³⁵ was unclear. Aurizon Network said that to address this the 2014 DAU has sought to retain the same intent as the 2010 AU but amend the relevant provision to improve interpretation. 536

Asciano and the QRC submitted that the mine capping arrangements could be extended to all of an end user's mine-port combinations in a system. The QRC provided drafting for consideration. 537

Operator capping

Aurizon Network proposed a new operator capping arrangement to provide further take-or-pay offsets. 538 Operator capping allows operators to nominate a group of TSEs for which take-orpay offsets can be applied. The TSEs need not relate to the same origin-destination pair but must have access charges set by reference to the same reference tariff. 539

A simple example of operator capping under Aurizon Network's proposed 2014 DAU is provided in the box below.

⁵³³ Aurizon Network, 2013 DAU, sub. 2: 270.

⁵³⁴ Aurizon Network, 2013 DAU, sub. 2: 270.

^{535 2010} AU, Schedule F, Part B, clause 2.2.5.

⁵³⁶ Aurizon Network, 2013 DAU, sub. 2: 272.

⁵³⁷ Asciano, 2013 DAU, sub. 43: 56–57; QRC, 2013 DAU, sub. 46: 92.

⁵³⁸ 2014 DAU, Schedule F, clause 2.4(m)–(n).

⁵³⁹ For example, for a coal system with a system reference tariff and no expansion tariffs, the TSEs grouped for operator capping purposes should relate to the same coal system.

Box 7: Example of operator capping

An operator could nominate its Company A and Company B mine–port combinations (in the Goonyella coal system) into a take-or-pay grouping for operator capping purposes. This approach would allow revenue over-recoveries in Company A's mine–port combinations to be offset against take-or-pay liabilities of Company B's mine–port combinations.

The operator capping arrangements would only apply to access agreements negotiated (or renewed) under UT3 and UT4 provisions. 541

Aurizon Network said operator capping would create efficiency benefits by providing operators with a higher degree of flexibility in managing take-or-pay risks for their customers. Aurizon Network said operator capping:

... recognises that operators will distribute the revenue recovered from train services in excess of Train Service Entitlements commensurate with the commercial arrangements reflected in the haulage agreements. The operator may also nominate multiple groupings, which would allow it to provide a broader diversification benefit to coal producers with more than one mine or where the operator's customers are able to collectively agree how such diversification benefits should be allocated. ⁵⁴³

The 2014 DAU also proposed that operators would have up to 31 May in the particular contract year to nominate their take-or-pay groupings for operator capping.

In its November 2013 response submission to stakeholders, Aurizon Network acknowledged stakeholder concerns that operator capping would favour larger operators over operators with a smaller customer base which could create a barrier to entry and discourage investment. 544

However, Aurizon Network said the primary benefit of operator capping is associated with mine production variability, not operator scale. Aurizon Network said an operator may be incentivised to keep the number of access agreements nominated in a take-or-pay grouping small, because:

 \dots the excess revenue collected from a particular haul that has over-railed is distributed over a smaller number of mines, which will be seen as more valuable. 545

Aurizon Network agreed with stakeholders that having short-term capacity transfers would be beneficial for managing variations of TSE usage and surge capacity, and, in turn, mitigate take-or-pay liabilities. Aurizon Network said one way to effect this was through the system rules, which would require access holders to nominate any temporary capacity swaps as part of the weekly train ordering process. However, Aurizon Network said such a mechanism could only be endorsed if no existing access holders are made worse off from these proposed arrangements. Far

⁵⁴² Aurizon Network, 2013 DAU, sub. 2: 270.

This would not extend to end users that only contract under the access holder access agreement. Those end users would only be able to group their access agreements across their own mines and ports, and could not benefit from using their operator(s)' groupings of access agreements.

⁵⁴¹ 2014 DAU, Schedule F, clause 2.4(n).

⁵⁴³ Aurizon Network, 2013 DAU, sub. 2: 271.

⁵⁴⁴ Aurizon Network, 2013 DAU, sub. 77: 29.

⁵⁴⁵ Aurizon Network, 2013 DAU, sub. 77: 30.

⁵⁴⁶ Aurizon Network, 2013 DAU, sub. 77: 28.

⁵⁴⁷ Aurizon Network, 2013 DAU, sub. 77: 29.

Tariff capping

Aurizon Network's proposed tariff capping provisions have remained largely unchanged from the system capping provisions in the 2010 AU. The change in terminology to 'tariff capping' reflects the introduction of the expansion tariff concept, with these capping provisions applying at the reference tariff level (i.e. individual system reference tariff or expansion tariff) rather than the system level only.

19.3.2 Summary of our initial draft decision

Our initial draft decision was to approve Aurizon Network's proposed mine and tariff capping provisions, and to refuse to approve the operator capping provisions. We considered it appropriate that amendments be made to Schedule F of the 2014 DAU to remove the operator capping provisions.

Specifically, our initial draft decision 18.1 was as follows:

Our Draft Decision is to refuse to approve Aurizon Network's proposed take-or-pay capping provisions in Schedule F of the 2014 DAU. We would approve these provisions with amendments, to:

- (a) provide greater clarity (without changing the intent)
- (b) remove Aurizon Network's proposed operator capping arrangements.

Our full analysis and reasoning is contained in Section 18.3 of the initial draft decision. We adopt that analysis and reasoning for the purposes of this consolidated draft decision, subject to the comments in the remainder of this section. We also set out a summary of the analysis in our initial draft decision below.

Mine capping

The 2010 AU already allows mine capping.⁵⁴⁸ However, the mine capping provision in the 2010 AU is based on the number of train services being run across the relevant access agreements rather than on the associated revenue liabilities.

A simple comparison example of the mine capping approach under the 2010 AU and Aurizon Network's proposed 2014 DAU is provided the box below.

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⁵⁴⁸ 2010 AU, Schedule F, clause 2.2.5.

Box 8: Example of mine capping, 2010 AU and 2014 DAU

An end user (or its operator) has two access agreements for Mine A to Port B, and each agreement has 100 train paths. If, for some reason, the end user elected to use a 90:110 path allocation rather than a 100:100 allocation, the take-or-pay liability would apply as follows:

- 2010 AU provisions would allow the end user to eliminate its overall take-or pay liability
 by using a 90:110 path allocation, even if the revenue over-recovery for the second access
 agreement is lower than the take-or-pay liability for the first agreement. In this scenario,
 other access holders would be worse off because Aurizon Network can recoup this
 difference through the revenue cap arrangements.
- 2014 DAU provisions would allow the end user to still use a 90:110 path allocation but reduce its overall take-or-pay liability by only the extent of the revenue over-recovery.

Our initial draft decision accepted Aurizon Network's proposed clarification for mine capping on the basis that mine capping arrangements for take-or-pay are not intended to provide a mechanism for an access holder to adjust its contractual obligations; that is, to favour one agreement over another if there are better terms. Allowing such an arrangement would potentially increase the revenue to be recovered from other users under the revenue cap.

Additionally, we proposed an amendment to improve the clarity and consistency of the mine capping provision. In particular, there appeared to be some inconsistency in the treatment of additional revenue to reduce the take-or-pay liability across multiple other access agreements between subclauses 2.4(I)(iii) and (v) in Schedule F of Aurizon Network's DAU. Our revised drafting reflected that if there is more than one other agreement, the additional revenue should be pro-rated across all other applicable agreements (subclause 3.3(j)(iii) of our amended Schedule F).

We considered that our position on mine capping was consistent with the interests of access seekers and holders (s. 138(2)(e) and (h) of the QCA Act) and recognised Aurizon Network's legitimate business interests, since Aurizon Network's ability to earn revenue that reflects its efficient costs or reasonable rate of return would not be adversely affected (s. 138(2)(b) and (g) of the QCA Act).

We did not accept the suggestion by Asciano and the QRC that mine capping should be extended to other origin—destination pairs under the ownership of the same end user. We considered that a capacity trading mechanism is likely to achieve the same outcome of enabling users to manage take-or-pay liabilities and promotes better use of existing capacity.

Operator capping

We considered concerns of stakeholders (including QRC⁵⁴⁹) that operator capping could favour a large, related-party access provider (i.e. Aurizon Holdings) over smaller operators (i.e. Pacific National and BMA Rail). We understood the concern that operator capping would allow Aurizon Holdings to provide better offerings to end users because of the greater scope to manage take-or-pay liabilities, which could translate into less incentive for end users to select smaller operators to discharge their access rights.

⁵⁴⁹ QRC, 2013 DAU, sub. 46: 92.

We were not convinced that operator capping as proposed in the 2014 DAU would not unfairly differentiate between access seekers or users in a material way (s. 168C(1) of the QCA Act) or act as a barrier to promoting effective above-rail competition (s. 138(2)(a) of the QCA Act).

More generally, we considered that stakeholders overall were concerned that operator capping appeared to be a partial response to the broader issue of how to better manage available capacity in the supply chain. We shared this view and considered that a capacity trading mechanism provides a more appropriate mechanism to both allow users to efficiently manage take-or-pay liabilities and promote the efficient use of infrastructure (s. 138(2)(a) of the QCA Act).

Our initial draft decision did not accept Aurizon Network's proposed operator capping provisions for the reasons outlined above.

Tariff capping

We noted that the tariff capping provisions are largely unchanged from the system capping provisions in UT2 and UT3. These provisions ensure that take-or-pay charges for post-UT1 access holders are capped to the extent necessary to ensure that Aurizon Network does not recover more than the allowable revenue in relation to a particular reference tariff.

We considered that the tariff capping arrangements were consistent with ensuring Aurizon Network generated revenue for a service that is sufficient to meet the efficient costs of providing access to the service (ss. 138(2)(g) and 168A(a) of the QCA Act).

19.3.3 Stakeholders' comments on the initial draft decision

Aurizon Network

Aurizon Network agreed with our proposed amendments to the mine capping provision.

In terms of our proposed removal of operator capping provisions, Aurizon Network agreed on the basis that they have subsequently consulted with stakeholders and submitted an alternative proposal for a capacity swapping mechanism intended to allow access holders and their end customers to better manage take-or-pay exposures. ⁵⁵⁰

Other stakeholders

The QRC supported our amendments to take-or-pay (clause 3 of schedule F), including our refusal to approve Aurizon Network's proposed operator capping arrangements. 551

19.3.4 QCA analysis and consolidated draft decision

Given that Aurizon Network has accepted our initial draft decision, and no other stakeholders have provided any new information or arguments, our consolidated draft decision is to:

- approve Aurizon Network's proposed mine capping provision, retaining our initial draft decision amendment to improve the clarity and consistency of this provision
- approve Aurizon Network's proposed tariff capping provisions
- refuse to approve Aurizon Network's proposed operator capping arrangements.

⁵⁵⁰ Aurizon Network, 2014 DAU, sub. 82: 264.

⁵⁵¹ QCR. 2014 DAU, sub. 84: 42.

Our reasoning and analysis supporting this decision is already set out in detail in section 18.3.3 of our initial draft decision and is adopted for the purpose of this consolidated draft decision.

Given our refusal to approve Aurizon Network's proposed operator capping arrangements, we consider it appropriate that Aurizon Network make the amendments to Schedule F of the 2014 DAU we have proposed to remove the operator capping provisions.

Consolidated draft decision 19.1

- (1) After considering Aurizon Network's proposed changes to its take-or-pay capping arrangements, our consolidated draft decision is to refuse to approve Aurizon Network's original proposal.
- (2) The way in which we consider it is appropriate that Aurizon Network amend its draft access undertaking is to:
 - (a) improve the clarity and consistency of this provision
 - (b) remove the operator capping provisions.

We consider it appropriate to make this decision having regard to each of the matters set out in section 138(2) of the QCA Act for the reasons set out in our analysis above.

19.4 Potential inequities between different take-or-pay arrangements

Since 2001 all access undertakings have provided for Aurizon Network to levy take-or-pay charges; however, the triggers and calculations for these charges have differed.

Take-or-pay arrangements in the standard access agreements executed during the UT1 and UT2 regulatory periods are linked to the respective access undertakings. However, the UT3 standard access agreements include provisions in Schedule 3 (Part 3) that take-or-pay conditions will be updated to be consistent with the take-or-pay arrangements in the current access undertaking.

There are a number of differences between 2001 AU (UT1) and post-UT1 access undertakings (as summarised in table below).

Table 107 Take-or-pay arrangements across different access undertakings

Element	UT1	Post-UT1 ^b
Take-or-pay trigger ^a	Annual component: 100% of system forecast gtk less Aurizon Network Cause gtk Variable component:	Annual component: 100% of system forecast gtk less Aurizon Network Cause gtk
	90% of access holder's contracted gtk less Aurizon Network Cause gtk and	
	for last 3 months the actual (mine-level) volume is less than or equal to 90% of contract volume less Aurizon Network Cause gtk.	
Applicable tariff components	 30% AT₃ 30% AT₄ 	 100% AT₂ 100% AT₃ 100% AT₄
Take-or-pay volumes	Applicable to shortfall against 100% of contract volume for annual component, and shortfall against 90% of contracted volume for variable component.	Applicable to shortfall against 100% of contract volume
Capping provisions	None	Tariff capping Mine capping and proposed operator capping for post-UT2

a Under Aurizon Network's proposed 2014 DAU, this trigger only applies to system reference tariffs and not to expansion tariffs. **b** Note that take-or-pay arrangements for UT2 access holders are fixed to the provisions in the access undertaking in force at the time that the relevant access agreement was entered into. In contrast, take-or-pay arrangements for post-UT2 access holders can vary over time in line with the access undertaking in force.

19.4.1 Aurizon Network's proposal

Aurizon Network said that the lack of capping provisions in UT1 access agreements resulted in greater take-or-pay costs and risks for UT1 as compared with post-UT1 access holders. ⁵⁵² Aurizon Network proposed a number of special arrangements for UT1 access arrangements for the purpose of calculating take-or-pay charges:

- (a) Exclude any volumes for train services where Wiggins Island Coal Export Terminal (WICET) is a destination.
- (b) Where an access holder has a UT1 and post-UT1 access agreement for a specific origindestination pair, then any Aurizon Network Cause paths would be allocated to the UT1 agreement before other agreements.

Exclude WICET volumes for UT1 take-or-pay calculations

In producing the system forecast gtk for the Blackwater coal system from financial year 2015–16, Aurizon Network must prepare a forecast of the use of the three ports serving the system (i.e. RG Tanna, Barney Point Coal Terminal and WICET).

Aurizon Network said that RG Tanna and Barney Point traffics should be based on expected use, while WICET traffic should be based on 90 per cent of contracted tonnages through that

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⁵⁵² Aurizon Network, 2013 DAU, sub. 2: 265–267.

terminal.⁵⁵³ Aurizon Network said the 90 per cent forecast relating to WICET is higher than its expected use, and take-or-pay charges would definitely arise in the Blackwater system since its forecast has overall been set higher than the expected use.⁵⁵⁴

Aurizon Network proposed that system gtks under UT1 would not include any gtks for train services where WICET is a destination. Aurizon Network reasoned that if this exclusion was not in place, the likelihood of UT1 access holders paying take-or-pay charges would be significantly higher than that of UT2–UT4 access holders, especially since the UT1 take-or-pay calculation does not benefit from any capping arrangements.

In particular, Aurizon Network said:

Assuming that system forecasts are informed by current market conditions (that is, the likelihood that users will under-rail relative to contract), on the balance of probabilities take or pay liability is disproportionately allocated to UT1 access agreements.⁵⁵⁷

Allocation of Aurizon Network Cause paths

Aurizon Network also proposed that where an access holder has a UT1 access agreement and a post-UT1 access agreement for a specific origin–destination pair, any Aurizon Network Cause paths would be allocated to the UT1 agreement before other agreements.⁵⁵⁸

Other options for addressing differences in take-or-pay risk

Aurizon Network also sought stakeholder views on alternative ways to address what it considered to be the material imbalance between take-or-pay risks for UT1 and post-UT1 access holders. One of these suggestions was to:

Cap UT1 to the extent necessary to achieve [system allowable revenue], noting that this still exposes a UT1 access holder to more risk than a post-UT1 access holder, as capping would only occur where take-or-pay is not payable under a post-UT1 access agreement. 559

Aurizon Network said it recognised that an unintended consequence of the AT_2 proposal is that, relative to UT3, an access holder's exposure to UT1 take-or-pay charges will be lower relative to other access holders. However, Aurizon Network considered that any effect is insignificant and likely negligible in the future, as most UT1 access agreements will expire during the UT4 period. 561

19.4.2 Summary of our initial draft decision

In our initial draft decision we refused to approve Aurizon Network's proposed changes that seek to provide special arrangements for UT1 access arrangements for the purpose of calculating take-or-pay charges. We were not convinced of the need to provide separate take-or-pay arrangements for holders of UT1 access agreements and did not consider this

⁵⁵³ Aurizon Network, 2013 DAU, sub. 2: 269.

Aurizon Network said this volume measure was used due to the materiality of the capital investment and the preference of stakeholders to not assume incremental costs or risks for expansions.

⁵⁵⁵ 2014 DAU, Schedule F, clause 2.4(b)(i)(A).

⁵⁵⁶ Aurizon Network, 2013 DAU, sub. 2: 269.

⁵⁵⁷ Aurizon Network, 2013 DAU, sub. 2: 267.

⁵⁵⁸ 2014 DAU, Schedule F, clause 2.4(e)(ii).

⁵⁵⁹ Aurizon Network, 2013 DAU, sub. 2: 268.

This may occur since UT1 take-or-pay charges are calculated with reference to AT_3 and AT_4 reference tariff components only, while post-UT1 take-or-pay charges also include the AT_2 reference tariff component (for which Aurizon Network proposed significant increases in some coal systems in its 2014 DAU submission).

⁵⁶¹ Aurizon Network, 2013 DAU, sub. 77: 81.

appropriate in terms of the statutory factors in section 138(2) of the QCA Act. Further, we noted the QRC's comment that these access holders can transit to the current access agreements at any time. ⁵⁶²

Specifically, our initial draft decision 18.2 was as follows:

Our Draft Decision is to refuse to approve Aurizon Network's proposed take-or-pay arrangements for UT1 access holders in Schedule F of the 2014 DAU. We would approve these provisions with amendments, to:

- (a) remove the exclusion of WICET gtks from the take-or-pay trigger test for UT1 access holders
- (b) remove Aurizon Network's provision to shift Aurizon Network Cause paths from a post-UT1 agreement to a UT1 agreement regarding a particular origin—destination pair.

Our full analysis and reasoning is contained in Section 18.4 of the initial draft decision. We adopt that analysis and reasoning for the purposes of this consolidated draft decision, subject to the comments in the remainder of this section. We also set out a summary of the analysis in our initial draft decision below.

In our initial draft decision we considered that Aurizon Network's proposal to provide special take-or-pay arrangements for UT1 access holders will reduce the likelihood of a take-or-pay event for UT1 access holders. Given the tariff capping provisions in place for post-UT1 access holders, Aurizon Network's proposal is likely to have the effect of shifting UT1 take-or-pay liabilities to post-UT1 access holders. Effectively, post-UT1 access holders could be subsidising UT1 take-or-pay obligations.

We also considered that this proposal appears to provide an advantage to UT1 access holders as reduced take-or-pay liabilities from these mechanisms may enable UT1 access holders to offer more competitive above-rail contracts to their customers. This is not consistent with the object of Part 5 of the QCA Act, which provides that upstream and downstream competition is an important factor in our considerations.

In addition, to the extent that a related party to Aurizon Network is a UT1 access holder, we considered that these proposals appear to provide terms and conditions that are more favourable for a related-party operator relative to a third party operator (ss. 138(2)(g) and 168A(c) of the QCA Act). Aurizon Network has an obligation under the QCA Act not to offer a related party more favourable fees, tariffs or other payments compared with that provided to other access seekers/holders (s. 104(1)–(3) of the QCA Act).

Therefore, in our initial draft decision we refused to approve Aurizon Network's proposed changes that seek to provide special arrangements for UT1 access arrangements for the purpose of calculating take-or-pay charges.

Future options for UT5 for addressing inequities between access holders

In our initial draft decision we considered options to address the different take-or-pay costs and risks for UT1 and post–UT1 access holders that could be applied for the next undertaking. We outlined a possible approach under which UT1 access holders would have separate pricing arrangements from post-UT1 access holders. This approach would separate the allowable revenues and reference tariffs between UT1 and post-UT1 access holders.

⁵⁶² QRC, 2013 DAU, sub. 46: 89.

We considered this approach would benefit both UT1 and post-UT1 access holders given take-or-pay costs and risks are contained to groups with the same take-or-pay arrangement. Consequently, inequities between the different take-or-pay arrangements should be eliminated.

We considered there is merit in reviewing the future structure of reference tariffs and the role of take-or-pay. Our longer-term objective is to harmonise take-or-pay arrangements for all access holders because we consider this is necessary to achieve the efficient use of and investment in infrastructure. This will remove potential inequities between different access holders depending on the vintage of their access agreement. In addition, removal of the take-or-pay trigger test will provide stronger signalling of the holding cost of capacity and provide greater accountability of contract volumes held by different users.

We sought stakeholders' comments on whether this approach for UT5 may be appropriate as an interim measure to align take-or-pay costs and risks across all access holders and remove possible incentives for access holders to remain on a UT1 access agreement.

19.4.3 Stakeholders' comments on the initial draft decision

Aurizon Network

Aurizon Network's comments on our initial draft decision are summarised in the table below.

Table 108 Aurizon Network's comments—take-or-pay across access undertakings

Issue	Aurizon Network's comment
Exclusion of WICET gtks from the UT1 take-or-pay trigger test	Aurizon Network noted that in their December 2014 WIRP pricing proposal they used a forecast for WIRP train services lower than the proposed 90 per cent of contract in the 2014 DAU. As a result, they noted that the cross-subsidisation for UT1 access holders would now be proportionately less than under its 2014 DAU proposal.
	Aurizon Network said they are therefore, prepared to agree with our initial draft decision if we approve their December 2014 pricing proposal for WIRP. 563
Provisions to allocate Aurizon Network	Aurizon Network disagreed with our proposal.
Cause paths to UT1 access holders first	Aurizon Network said they are willing to propose drafting in the Standard Access Agreements to ensure alignment of the consumption of TSEs and the allocation of Aurizon Network Cause for all access holders in circumstances where the access holder and origin-destination pair are the same.
	Aurizon Network requested that if the QCA rejects their alternative proposal, then for the purposes of ensuring compliance with the 'entitled to earn' requirements for take-or-pay set out in Schedule F, the QCA should set out:
	how Aurizon Network should allocate TSE consumption between UT1, UT2 and UT3 and UT4 Access Agreements for access holders with multiple access agreements for the same origin-destination pair
	how Aurizon Network Cause should be allocated for access holders with multiple access agreements for the same origin- destination pair. 564

⁵⁶⁴ Aurizon Network, 2014 DAU, sub. 82: 265–266.

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⁵⁶³ Aurizon Network, 2014 DAU, sub. 82: 264.

Other stakeholders

Other stakeholders did not provide comments on the issue of inequities between different takeor-pay arrangements.

19.4.4 QCA analysis and consolidated draft decision

Our consolidated draft decision is to refuse to approve Aurizon Network's proposed changes (that seek to provide special arrangements for UT1 access arrangements for the purpose of calculating take-or-pay charges) for the reasons outlined below.

Removal of the exclusion of WICET gtks from the UT1 take-or-pay trigger

Aurizon Network said they are prepared to accept the removal of the clause related to WICET, if we accept their December 2014 WIRP pricing proposal in which they proposed to use a forecast that was lower than 90 per cent contract tonnages for WICET users. 565

In our WIRP draft decision, we used forecast tonnages for WIRP train services which are different from those proposed by Aurizon Network. Our forecasts of WIRP train services were based on expected railings over the remainder of UT4, and are also lower than 90 per cent of contract tonnages for WIRP train services. We consider that our WIRP forecasts based on expected railings will not increase the likelihood of triggering take-or-pay liability for Blackwater system users and, as a result, do not consider this proposed clause remains relevant.

Moreover, we note that UT1 access holders can transit to current agreements at any time.

Consequently, our consolidated draft decision is to refuse to approve Aurizon Network's proposal. We consider that our consolidated draft decision is consistent with the object of Part 5 of the QCA Act, which provides that upstream and downstream competition is an important factor in the our considerations.

Removal of provisions to allocate Aurizon Network Cause paths to UT1 access holders first

We consider allocation of Aurizon Network Cause to UT1 access holders first is inappropriate, as it appears to provide an advantage to UT1 access holders relative to other access holders.

We agree with Aurizon Network's alternative proposal that allocation of Aurizon Network Cause for all access holders in the circumstances where the access holder and origin—destination pair are the same, is aligned with the consumption of TSEs.

We consider the inclusion of this in the undertaking, rather than in the Standard Access Agreement, appropriate as it reduces uncertainty to all access holders. Our proposed drafting reflects this.

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⁵⁶⁵ Aurizon Network, 2014 DAU, sub. 82: 264.

Consolidated draft decision 19.2

- (1) After considering Aurizon Network's proposed changes to its take-or-pay capping arrangements, our consolidated draft decision is to refuse to approve Aurizon Network's original proposal.
- (2) The way in which we consider it is appropriate that Aurizon Network amend its draft access undertaking is to remove:
 - (a) the exclusion of WICET gtks from the take-or-pay trigger test for UT1 access holders
 - (b) the provision to shift Aurizon Network Cause paths from a post-UT1 agreement to a UT1 agreement regarding a particular origin–destination pair.

We consider it appropriate to make these decisions having regard to each of the matters set out in section 138(2) of the QCA Act for the reasons set out in our analysis above.

19.5 Other specific drafting

19.5.1 Summary of the initial draft decision

In addition to the issues discussed above, we also proposed specific amendments to the drafting for take-or-pay arrangements contained in Schedule F of the 2014 DAU. We considered these proposed amendments would provide additional clarity and certainty to take-or-pay arrangements, particularly given the high level of drafting complexity of the arrangements and the risk of misunderstandings and interpretative disputes.

Treatment of the capacity multiplier

We removed subclause 2.4(h)(i) in Schedule F of Aurizon Network's 2014 DAU as we were concerned this clause could reduce transparency and potentially provide Aurizon Network with greater discretion by, in certain circumstances, basing take-or-pay calculations on terms only included in access agreements.

Clarification of terminology

We proposed new drafting on the application of historical take-or-pay arrangements (subclause 3.2 of Schedule F of our proposed 2014 DAU) to improve clarity without changing the intent. This included the use of terminologies like 'new' and 'old' access to provide clarity when referring to specific access agreements nominated by access holders having more than one access agreements.

19.5.2 Stakeholders' comments on the initial draft decision

Aurizon Network

Aurizon Network's comments on our initial draft decision are summarised in the table below.

Table 109 Aurizon Network's comments—other specific drafting

Issue	Aurizon Network's comment
Treatment of the capacity multiplier	Aurizon Network said they are prepared to accept the drafting ⁵⁶⁶ on the condition that we confirm that the AT ₂ component of take-or-pay includes the capacity multiplier where applicable. Otherwise, the provision should be retained. ⁵⁶⁷
Clarification of terminology	Aurizon Network were concerned that the clarification of terminology we applied in our proposed drafting of Schedule F may have inadvertently changed the intent. Aurizon Network said the use of the defined terms 'New Access Agreement' and 'Old Access Agreement' for example, should be reviewed. Aurizon Network said they are willing to discuss with us about alternative drafting to overcome this concern. 568

Other stakeholders

Other stakeholders did not provide comments on the specific drafting outlined in this section.

19.5.3 QCA analysis and consolidated draft decision

Our consolidated draft decision is to refuse to approve Aurizon Network's proposal for the reasons outlined below.

Treatment of the capacity multiplier

We have retained our initial draft decision to remove subclause 2.4(h)(i) in Schedule F of Aurizon Network's 2014 DAU.

Consistent with our initial draft decision, we have removed subclause 2.4(h)(i) in Schedule F of Aurizon Network's 2014 DAU as we are concerned this clause could reduce transparency and potentially provide Aurizon Network with greater discretion. Calculating the take-or-pay arrangements 'in a manner consistent' with the relevant TSE (as proposed in subclause 2.4(h)(i)(B)) appears to provide Aurizon Network with undue discretion within the calculation process thereby reducing certainty for access seekers and holders.

In addition, we consider that subclause 2.4(h)(i) in Schedule F is not required in terms of outlining the application of the capacity multiplier in take-or-pay calculations, as the application of this multiplier is covered under:

- clause 6.2.2(d) in Part 6 of Aurizon Network's 2014 DAU
- clause 6.2.3(c) in Part 6 of our proposed 2014 DAU
- clause 3.3(d)(iii) in Schedule F of our CDD amended DAU.

Therefore, our consolidated draft decision is to refuse to approve Aurizon Network's proposal to include this subclause in its 2014 DAU.

Clarification of terminology

The intent of using terminologies like 'new' and 'old' access agreements in our proposed 2014 DAU is to provide clarity when referring to specific access agreements nominated by access holders having more than one access agreement.

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⁵⁶⁶ Specifically, our proposed removal of clause 2.4(h)(i) of Schedule F of Aurizon Network's proposed 2014 DAU.

⁵⁶⁷ Aurizon Network, 2014 DAU, sub. 82: 264.

⁵⁶⁸ Aurizon Network, 2014 DAU, sub. 82: 264.

Aurizon Network said while Schedule F makes specific mention to 'old' and 'new' access agreements, our drafting did not include their definitions.

Our updated drafting in this consolidated draft decision has addressed Aurizon Network's concerns where applicable. We note that a further consultation period has been provided in which Aurizon Network has an opportunity to discuss with us any alternative drafting if it considers that our amended drafting still raises concerns.

Therefore, our consolidated draft decision is to refuse to approve Aurizon Network's proposed drafting. We consider it appropriate that the 2014 DAU is amended in the manner set out in the decision box below.

Consolidated draft decision 19.3

- (1) After considering Aurizon Network's proposed drafting relating to take-or-pay arrangements, our consolidated draft decision is to refuse to approve Aurizon Network's original proposal.
- (2) The way in which we consider it is appropriate that Aurizon Network amend its draft access undertaking is to:
 - (a) remove subclause 2.4(h)(i) in Schedule F of Aurizon Network's 2014 DAU
 - (b) amend Aurizon Network's take-or-pay provisions (as presented in our CDD amended DAU) to improve the clarity and certainty of take-or-pay arrangements.

We consider it appropriate to make these decisions having regard to each of the matters set out in section 138(2) of the QCA Act for the reasons set out in our analysis above.

APPENDIX A: SUMMARY OF QCA PROPOSED CHANGES TO COST AND VOLUME ASSUMPTIONS

Table 110 Summary of QCA proposed changes to Aurizon Network's 2014 DAU cost and volume assumptions

Item	Issue	Aurizon Network 2014 DAU proposal	QCA consolidated draft decision	Rationale for QCA proposed change			
2. Vo	2. Volumes						
1	Proposed forecast volumes for pricing purposes	Aurizon Network's proposed volume forecasts are based on expected railings with the exception of train services associated with GAPE and WIRP (both of which are set at 90 per cent of contract volumes). 569 In its December 2014 WIRP pricing proposal, Aurizon Network proposed: • for WIRP train services in Blackwater, to adopt the mid-case volume forecasts developed by JT Boyd • for WIRP train services in Moura, to adopt a lower forecast than that proposed by JT Boyd, to reflect discussions with the relevant customer with deferring their contracted volume ramp-up. 570	We refuse to approve Aurizon Network's proposed volume forecasts. We consider it appropriate that Aurizon Network amend the 2014 DAU, by using the actual volumes for 2013–14 and 2014–15, and adopt Energy Economics' revised forecasts (October 2015) for 2015–16 and 2016–17, where the WIRP train services are capped to below-rail contract entitlements. We also propose to adopt updated volume information including mine-to-port distances, consists and diesel traffic percentages based on Aurizon Network's December 2014 WIRP pricing proposal.	We consider Energy Economics' forecasts to be the best available as they are based on more upto-date information and a bottom-up approach to developing forecasts at an individual mine level. In addition, we consider the Energy Economics' forecasts are more transparent, with visibility of WIRP forecasts and the underlying justification for all affected stakeholders. Energy Economics' forecasts also take into account transfers of forecast tonnages between existing train services and WIRP train services. In terms of our adjustment to cap WIRP volumes, we consider that prices for WIRP train services should reflect the use of TSEs in WIRP access agreements, and consider that this negotiated ramp-up reflects the shifting of tonnages to WIRP.			
3. M	AR estimates						
2	Cash flow timing	Aurizon Network proposed to use a post-tax revenue model (PTRM) framework that assumed that all revenue is received at the end of the year. Aurizon Network proposed using end of year dollars as the basis of its modelling.	We refuse to approve the use of end-of-year dollars. We propose to adopt a mid-year dollars approach by discounting the net depreciation and return on capital by the post-tax nominal (vanilla) WACC for half a year.	We conclude that Aurizon Network's proposal to change its modelling approach from UT3 to one which models end-of-year cash flows will result in a material revenue bias in favour of Aurizon Network.			

⁵⁶⁹ Aurizon Network, 2013 DAU, sub. 2: 269.

⁵⁷⁰ Aurizon Network, 2014(g): 32.

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				This outcome is not consistent with our application of section 138(2) of the QCA Act as set out in section 29.1 of this CDD, as well as our analysis in Chapter 2 (Legislative framework) of this consolidated draft decision.
3	Working capital allowance	Aurizon Network has not proposed a working capital allowance because it is not necessary under an end-of-year dollars modelling approach. However Aurizon Network submitted that a return on inventory is needed as inventory is held for periods in excess of one month.	We propose to adopt a working capital allowance of 0.3 per cent applied to the sum of the return on capital, return of capital, less inflation, and the operating and maintenance allowance. However we do not consider a return of inventory allowance is appropriate.	We consider the inclusion of a working capital allowance has regard to the factors in section 138(2) of the QCA Act. This allowance considers Aurizon Network's legitimate business interests and is at least enough to meet its efficient costs. We do not consider it appropriate that Aurizon Network obtains a separate return of inventory allowance as it would overcompensate Aurizon Network and it would fail to create the necessary incentives to promote the object of the Part 5 of the QCA Act.
4	СРІ	Aurizon Network used a forecast CPI of 2.5 per cent from 2013–14.	We propose to use actual CPI up to and including 2014–15.	We consider the use of actual CPI is a better reflection of costs which will minimise the difference between transitional and approved revenues.
5	Operating and maintenance costs	In its revised December 2013 submission, Aurizon Network proposed operating and maintenance costs of \$1,966.1 million over the UT4 regulatory period.	Our consolidated draft decision is to approve operating and maintenance costs of \$1,605.4 million over the UT4 regulatory period.	Our rationale for our decision to refuse to approve Aurizon Network's proposed operating and maintenance costs is outlined in chapters 22–24 of our consolidated draft decision.
6	Opening asset value as at 1 July 2013	Aurizon Network's 2014 DAU proposed an opening asset value of \$4.90 billion as at 1 July 2013. This was subsequently revised to \$4.86 billion following approval of Aurizon Network's 2011–12 capital expenditure (October 2013), RAB roll-forward (December 2013) and 2012–13 capital expenditure (May 2014).	Our consolidated draft decision on Aurizon Network's capital expenditure for 2008-09 approved \$34.9 million of GAPE early works to be rolled forward until Aurizon Network commissioned the GAPE project. As a result, we consider it appropriate that the opening asset value for UT4 is increased from \$4.86 billion (in our MAR draft decision) to \$4.91 billion, as proposed by Aurizon Network.	We have confirmed that Aurizon Network's initial submission that formed the basis of our MAR draft decision excluded GAPE early works capital expenditure. We have further confirmed that rolling forward the \$34.9 million of GAPE early works capital expenditure to 2011-12 results in a value of \$44.4 million in 2011-12 and \$45.2 million in 2012-13. We have updated the UT3 roll forward on that basis.
7	Capital indicator	In its revised December 2013 submission, Aurizon	Our consolidated draft decision is to refuse to	We consider that Aurizon Network's amended

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		Network proposed a mid-year capital indicator of \$1,119.8 million over the UT4 regulatory period.	approve Aurizon Network's proposed capital indicator.	September 2015 capital indicator is consistent with our consolidated draft decision, that the IDC
		In response to our request for information (September 2015) Aurizon Network provided an updated mid-year capital indicator of \$1,136.9 million over the UT4 regulatory period.	For 2013–14, we propose to to use the 2013–14 approved capital expenditure claim. For 2014–15 to 2016–17, we accept Aurizon Network's updated capital indicator, as provided in September 2015.	is calculated using the post-tax nominal vanilla of 7.17 per cent, and includes the capitalisation of re-railing costs in 2015–16 and 2016–17. We also consider these figures to be the most up-to-date. We consider it appropriate to treat some of the
			We propose to adjust this capital indicator to reflect our consolidated draft decision on the WIRP capital indicator where we consider \$9.2 million of the WIRP capital indicator are of renewal nature, and should be reallocated to the Blackwater system capital indicator. We also propose to defer some capital expenditure associated with WIRP.	WIRP capital expenditure as asset renewals that were reasonably required in the absence of WIRP. We also consider it appropriate to defer a portion of WIRP capital expenditure for pricing purposes to reflect that some WIRP users will not rail during the UT4 period.
8	Capital carryover account	Aurizon Network proposed a capital carryover based on \$30.3 million of the GAPE cost being allocated to the Newlands system.	We refuse to approve Aurizon Network's capital carryover. We propose to adopt a capital carryover where the capital expenditure between 2009–10 and 2012–13 reflects approved capital expenditure for those years. The revised carryover account should also reflect our consolidated draft decision on pricing to reallocate \$30.3 million of capital expenditure from the Newlands system to GAPE and NAPE Deed customers.	We consider that this is consistent with our consolidated draft decision on the allocation of GAPE capital costs as outlined in Section 17.4.
9	Depreciation allowance	Aurizon Network proposed the depreciation of new assets, to commence, in the year after an asset is commissioned.	We refuse to approve Aurizon Network's proposal to commence regulatory depreciation the year after an asset is commissioned. We propose to commence regulatory depreciation on the first day of the year of commissioning.	We are of the view that this achieves an appropriate balancing of the factors set out in section 138(2) of the QCA Act because it sets a transparent methodological baseline position. Our proposal appropriately balances Aurizon Network's legitimate interests with the interests of having a transparent methodology.
10	Post-tax nominal (vanilla) WACC	For the 2014 DAU, Aurizon Network proposed a range for its WACC of 7.27%–8.18 per cent, with its preferred point estimate of 8.18 per cent being the upper bound of the range.	We refuse to approve Aurizon Network's proposed post-tax nominal (vanilla) WACC of 8.18 per cent. We propose to set a post-tax nominal (vanilla) WACC for the 2014 DAU of	We have outlined our proposed parameter estimates in Chapter 28 that result in a post-tax nominal (vanilla) WACC for Aurizon Network is 7.17 per cent.

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			7.17 per cent, incorporating:	
			(a) a cost of equity of 8.41 per cent	
			(b) a cost of debt of 6.15 per cent	
			(c) benchmark gearing of 55 per cent.	
4. Re	ference tariff assumptions			
11	Transitional matters relating to UT4	As transitional tariffs have been approved for 2013–14 to 2015–16, a 'true-up' process will be required. Aurizon Network proposed two options: • smoothing—incorporating the differences between allowable revenues and actual revenues received in 2013–14 into the remaining years of the 2014 DAU regulatory period (i.e. 2014–15, 2015–16 and 2016–17) • adjustment charges—after our final approval of the 2014 DAU.	As the difference between the 2013–14 transitional and actual revenues have now been incorporated into the 2015–16 transitional tariffs, our consolidated draft decision is to smooth the difference between the 2013–14 approved allowable and transitional revenues over the 2014–15, 2015–16 and 2016–17 years We also propose to reconcile the difference between the approved allowable and transitional revenues for 2014–15 and 2015–16 via an adjustment charge.	We consider this to be an appropriate approach having regard to the factors in section 138(2) of the QCA Act. Our proposed approach determines a mechanism to identify reconciliation payments that will be made when the UT4 access undertaking takes effect that will be determined by reference to events in previous periods. These reconciliation payments are intended to simulate the effect as if the 2014 DAU had applied instead of the 2010 AU over the relevant previous periods.
12	Treatment of January 2013 flood recovery cost	In its 2014 DAU pricing model and its WIRP pricing model, Aurizon Network proposed to include the January 2013 flood recovery cost in the revenue cap applicable to UT4 final tariffs.	As our approved transitional SARs for 2013–14 and 2014–15 already included the January 2013 flood recovery costs, we proposed these be excluded from UT4 final tariffs adjustment.	We consider this approach to be an accurate reflection of what has already occurred.
13	Calculation of incremental maintenance tariff (AT ₁)	Aurizon Network's proposed AT_1 tariff component for 2013–14 is based on the rate approved (as part of the 2010 AU) as at 1 July 2009 escalated yearly by the maintenance cost index (MCI). Aurizon Network also proposed that the AT_1 rate be escalated by forecast annual CPI of 2.5 per cent each year over the 2014 DAU period. 571	We refuse to approve Aurizon Network's proposals relating to the AT_1 reference tariff in the 2014 DAU. We propose to escalate the AT_1 tariff component according to the MCI over the 2014 DAU period (see Section 17.3).	We consider this approach is consistent with our use of the MCI to escalate maintenance costs in this consolidated draft decision.
14	Calculation of incremental capacity	Aurizon Network proposed significant increases in the AT ₂ tariff component in the Blackwater,	We refuse to approve the proposed AT ₂ tariff components. Instead, we propose to escalate	We consider there is insufficient evidence to suggest that Aurizon Network's proposed AT ₂

⁵⁷¹ Aurizon Network, 2013(i).

Item	Issue	Aurizon Network 2014 DAU proposal	QCA consolidated draft decision	Rationale for QCA proposed change
	tariff component (AT ₂)	Goonyella and Newlands systems. Aurizon Network based the AT ₂ tariff components on the cost of the next expansion for each system in order to provide more effective signals for incremental capacity costs. ⁵⁷²	the approved 2012–13 AT_2 tariff components for all coal systems by CPI over the 2014 DAU period (see section 17.3).	tariff components are set at the most efficient future expansion. As a result, we are not persuaded that the proposed AT ₂ tariff rates are consistent with the requirements of section 168A of the QCA Act.
				We consider our proposed amendments are in the interests of access seekers and holders (s. 138(2)(e) and (h) of the QCA Act) as they will contribute to a relatively stable profile of access charges which reduces uncertainty.
15	AT ₂ multiplier	Aurizon Network has included a capacity (diesel) multiplier, which estimates the incremental capacity consumption of a diesel train service in the Blackwater and Goonyella systems. 573	We refuse to approve Aurizon Network's proposed capacity 'diesel' multiplier. We propose to remove the diesel multiplier from our calculations of reference tariffs (see Section 17.3).	As no evidence was provided that operating a diesel train varied substantially from an electric train and consumes more network capacity, we were not persuaded that the proposed multiplier rates were consistent with the requirements of sections 138 and 168A of the QCA Act.
				We consider that Aurizon Network should be able to provide evidence of the differing performance levels in order to justify the retention of the capacity multiplier.
16	Setting Newlands AT ₄ to \$0	Aurizon Network proposed to reduce the AT_4 rate for the Newlands system to \$0 for all years in the 2014 DAU regulatory period. ⁵⁷⁴ Aurizon Network said it proposed this measure to offset the reduction in the distance taper resulting from the increase in the AT_2 tariff component. ⁵⁷⁵	We refuse to approve Aurizon Network's proposal to reduce the Newlands AT ₄ rate to \$0 for all years in the 2014 DAU regulatory period.	We consider this aligns with our proposal to refuse to approve Aurizon Network's proposed AT ₂ tariff components.
17	Contribution to common costs	Aurizon Network proposed to calculate the minimum contribution to common costs (CCC) for existing mines at Minerva, Lake Vermont (to RG	We propose to apply the 2010 AU calculation approach for minimum CCC (i.e. AT_2 plus 50 per cent of AT_3) (see section 17.3).	We consider this aligns with our proposal to refuse to approve Aurizon Network's proposed AT ₂ tariff components.

Aurizon Network, 2013 DAU, sub. 2: 241.
 Aurizon Network, 2013(i).
 Aurizon Network, 2013 DAU, sub. 2: 241–242; Aurizon Network, 2013 DAU, sub. 77: 81.
 Aurizon Network, 2013 DAU, sub. 2: 241–242; Aurizon Network, 2013 DAU, sub. 77: 81.

Item	Issue	Aurizon Network 2014 DAU proposal	QCA consolidated draft decision	Rationale for QCA proposed change
		Tanna), Rolleston and Middlemount using a 5 per cent per annum escalation factor from 2012–13 reference tariffs over the 2014 DAU period. 576 Aurizon Network proposed this measure to address potential adverse implications caused by its proposed AT ₂ tariff components.		
18	System discounts	Aurizon Network proposed discounted reference tariffs in place of rebate arrangements for a number of existing spur line users who have signed AFDs with Aurizon Network in previous regulatory periods. 577 Aurizon Network also proposed an arrangement for discounts to be reverted to rebates in the case of a single user spur line that subsequently becomes a multi-user spur line. 578	We refuse to approve Aurizon Network's proposed system discount in place of rebate arrangements (see section 17.3).	We are unconvinced that the proposed discount leads to an equivalent outcome to the existing rebate arrangements. Rebates provide transparency for refunding the capital charge associated with contributed assets, and consistency for single and multi-user spurs. We consider that a clear and transparent approach to refunding the capital charge will assist in achieving an appropriate balance between the interests of access seekers and holders (s. 138(2)(e) and (h) of the QCA Act) and Aurizon Network's legitimate business interests (s. 138(2)(b) and (g) of the QCA Act).
19	Revenue smoothing for pricing purposes (non-WIRP train services)	Aurizon Network proposed the application of revenue smoothing to achieve a balance between the price path over the regulatory period and the change in price at the regulatory reset. 579	We do not propose to apply revenue smoothing. However to address the mid-year commissioning of the Rolleston electric assets in 2014–15, we have smoothed the Rolleston electric revenues over 2014–15 to 2016–17 based on ramp up volumes (egtk).	We consider it unnecessary to smooth revenues across the 2014 DAU period as the variability of revenues and prices are not akin to a 'price shock'.

Aurizon Network, 2013 DAU, sub. 2: 231.
 Aurizon Network, 2013 DAU, sub. 2: 238.
 Aurizon Network, 2013 DAU, sub. 2: 236.
 Aurizon Network, 2013 DAU, sub. 3: 23.

Item	Issue	Aurizon Network 2014 DAU proposal	QCA consolidated draft decision	Rationale for QCA proposed change
20	Allocation of GAPE capital costs	 Aurizon Network proposed to allocate the following GAPE capital costs to the GAP system: 580 all costs of the Goonyella Newlands Connection, as only GAPE customers use this infrastructure all costs of the Goonyella system enhancements, as these enhancements are only required for the construction of the Goonyella Newlands Connection 81 per cent of the costs of the Newlands system enhancements (based on the proportion of contract tonnes relating to GAPE, rather than NAPE, customers). The remaining 19 per cent of the costs of the Newlands system enhancements relating to NAPE customers were allocated to the Newlands system. 	We refuse to approve Aurizon Network's proposed GAPE pricing arrangements in the 2014 DAU.We propose to allocate costs as outlined in Section 17.4.	We consider the proposed approach will assist in achieving an appropriate balance between the interests of access seekers and holders (s. 138(2)(e) and (h) of the QCA Act) and Aurizon Network's legitimate business interests (s. 138(2)(b) and (g) of the QCA Act).
21	Socialisation of NAPE costs within the Newlands system	Aurizon Network said the socialisation of NAPE costs within the Newlands system was justified as: 581 • part of this expenditure would have been required in the Newlands system in the absence of the GAPE project • existing Newlands users derive a benefit from the GAPE project.	We refuse to approve Aurizon Network's proposed socialisation of NAPE costs within the Newlands system (see section 17.4). We propose to defer allowable revenues until railing commences. We also propose to assess a NAPE reference tariff proposal if railing commences during the UT4 period. We consider that any proposal that seeks to socialise NAPE within the Newlands system will need to go through stakeholder consultation, including with existing Newlands customers.	We consider these proposed pricing arrangements appropriately balance the interests of expanding and existing users (s. 138(2)(e) and (h) of the QCA Act), and are consistent with the object of Part 5 of the QCA Act. They will also achieve an appropriate balance between those interests and Aurizon Network's legitimate business interests (s. 138(2)(b) and (g) of the QCA Act).
22	Reference tariffs for Caval Ridge to Hay Point	Aurizon Network did not propose an alternative reference tariff for Caval Ridge as part of its 2014	We propose to calculate the reference tariff for the UT4 regulatory period based on the	We note that at the time of investment, the 2010 AU pricing principles were relevant to inform the

⁵⁸⁰ Aurizon Network, 2013(a): 21. ⁵⁸¹ Aurizon Network, 2013(a): 21.

Item	Issue	Aurizon Network 2014 DAU proposal	QCA consolidated draft decision	Rationale for QCA proposed change
	Services Coal Terminal (HPSCT)	DAU submission (cl. 7, Schedule F). However, the QCA did approve Aurizon Network's application for a new 2014–15 transitional reference tariff that provided a discount to the Goonyella system reference tariff based on 2010 AU pricing principles.	reference tariff calculation approach under 2010 AU pricing principles. We propose to adopt Aurizon Network's opening RAB for Caval Ridge for the purpose of calculating private incremental cost and (any) applicable discount.	decision to invest, and were appropriate for the nature of the investment. We also note that our proposed 2014 DAU pricing principles in this consolidated draft decision have largely retained the pricing methodology within 2010 AU pricing principles for new mine-specific spur lines which do not require an expansion.
				Our proposal, as outlined in section 17.5, should not impact other Goonyella system users in any material way.
				We consider this pricing treatment to be in the interests of certainty and predictability (section 138(2)(h)) and the interests of access seekers (section 138(2)(e)).
23	Reference tariffs for Middlemount to Dalrymple Bay Coal Terminal (DBCT)	Aurizon Network did not propose an alternative reference tariff for Middlemount as part of its 2014 DAU submission (cl. 7, Schedule F). However, the QCA did approve Aurizon Network's application for 2013–14 and 2014–15 transitional reference tariffs that provided a discount to the Goonyella system reference tariff based on 2010 AU pricing principles.	We propose to continue calculating the reference tariffs for the UT4 regulatory period based on the reference tariff calculation approach under 2010 AU pricing principles.	Since the Middlemount to DBCT train service commenced operations in November 2011 prior to the start of the 2014 DAU regulatory period, we consider that the reference tariffs for this train service should be calculated based on 2010 AU pricing principles. We consider that a transparent and consistent approach to calculating reference tariffs in the CQCN will achieve an appropriate balance between the interests of access seekers and holders (s. 138(2)(e) and (h) of the QCA Act) and Aurizon Network's legitimate business interests. The proposed approach does not, for example, adversely affect Aurizon Network's ability to earn revenue that reflects its efficient costs or reasonable rate of return (s. 138(2)(b) and (g) of the QCA Act).
24	Treatment of electric investments in the Rolleston branch line	Aurizon Network proposed a single AT ₅ electric access charge for all users of electric train services in the Blackwater system that includes costs	We consider that the AT ₅ electric tariff for the Rolleston loading point will need to cover incremental costs. However, rather than using	We consider that a transparent and consistent approach to calculating reference tariffs in the CQCN was in the interests of access seekers and

Item	Issue	Aurizon Network 2014 DAU proposal	QCA consolidated draft decision	Rationale for QCA proposed change
		associated with new investment for electrification of the Rolleston branch line. 582	Aurizon Network's assumption of 85 per cent of contract volumes for electric train services on the Rolleston branch line, we consider it more appropriate to use forecast volumes consistent with this consolidated draft decision.	holders (s. 138(2)(e) and (h) of the QCA Act). This also recognised Aurizon Network's legitimate business interests as it did not adversely affect Aurizon Network's ability to earn revenue that reflected its efficient costs and appropriate rate of return (s. 138(2)(b) and (g) of the QCA Act).
			For those years in which the incremental cost of the new electric investment results in a higher tariff than the Blackwater AT ₅ electric tariff, users of this new investment will pay a system premium reflecting their higher incremental cost. Otherwise, these costs will be socialised in the Blackwater AT ₅ tariff.	
25	Allocation of North Coast line project costs between WIRP users	In its 2014 DAU proposal, Aurizon Network allocated this expenditure only to WIRP users located in Blackwater. However, in its December 2014 proposal it allocated this expenditure to all WIRP users. 583	We accept Aurizon Network's proposed capital cost allocation approach for WIRP users as incorporated in its 2014 DAU.	We consider this to be consistent with the commercial arrangements between Aurizon Network and WIRP users, reflecting agreement between Aurizon Network and each WIRP customer on the incremental capital cost attributable to the particular customer.
26	Allocation of Blackwater duplications project costs to non-WIRP users	In its 2014 DAU proposal, Aurizon Network allocated one-seventh of Blackwater duplication costs to existing customers. 584 By contrast, in its December 2014 WIRP pricing proposal, Aurizon Network proposed to allocate 50 per cent of Blackwater duplication costs to existing customers. 585	We refuse to approve either of Aurizon Network's proposed allocations of Blackwater duplication costs to existing users. Instead, we have not allocated any of the Blackwater duplications costs to existing customers.	We do not consider Aurizon Network's proposed allocations are reasonable given: neither Aurizon Network or WIRP users has provided any clear evidence to support or justify either of these allocations at the time of the investment decision, we understand that capacity modelling showed that Blackwater duplications were only required in the presence of WIRP train

Aurizon Network, 2013 DAU, sub. 3: 158–159.
 Aurizon Network, 2014(h).
 Aurizon Network, 2014 DAU, sub. 6: 3.
 Aurizon Network, 2014(g): 20.

Item	Issue	Aurizon Network 2014 DAU proposal	QCA consolidated draft decision	Rationale for QCA proposed change
				services.
27	Allocation of Wiggins Island balloon loop between WIRP users	In its 2014 DAU proposal, Aurizon Network allocated these costs between WIRP users based on contract gtk at full utilisation. 586 Aurizon Network proposed a similar approach in its December 2014 WIRP pricing proposal. 587	We refuse to approve Aurizon Network's proposed capital cost allocation. In addition to the WIRP users, we have also allocated a portion of the Wiggins Island balloon loop costs to existing Blackwater train services.	Our proposed allocation reflects the expected use of this infrastructure by existing Blackwater train services as reflected in WIRP commercial arrangements.
28	WIRP capital indicator	Aurizon Network's December 2014 WIRP pricing proposal provided an updated capital indicator for WIRP capital costs of \$945.3 million, inclusive of interest during construction (IDC).	We refuse to approve Aurizon Network's WIRP capital indicator. We consider \$9.2 million of the WIRP capital indicator are of renewal nature, and should be reallocated to the Blackwater system capital indicator.	We consider it appropriate to treat these works as asset renewals that were reasonably required in the absence of WIRP. We consider that our proposed cost allocation is consistent with the notion that users pay a price reflective of the service they receive. We considered this promotes efficient infrastructure investment (ss. 69E and 138(2)(a) of the QCA Act) and appropriately takes into account the interests of existing and expanding users (ss. 138(2)(e) and (h) of the QCA Act).
29	WIRP operating costs	In its 2014 DAU proposal, Aurizon Network allocated system operating costs to WIRP based on WIRP gtk as a proportion of total system gtk. See In its December 2014 WIRP pricing proposal, Aurizon Network proposed zero incremental operating costs for WIRP train services. See	We refuse to approve Aurizon Network's proposed allocation of operating cost to WIRP train services in the 2014 DAU. We accept Aurizon Network's December 2014 proposal which presented zero incremental operating costs for WIRP train services.	We are not convinced that Aurizon Network's 2014 DAU proposal to allocate operating and maintenance costs between new and existing customers on a gtk basis is consistent with the concept of incremental costs. We agree with Aurizon Network's proposition in its December 2014 proposal that incremental operating costs for WIRP train services should be immaterial.
30	WIRP maintenance costs	In its 2014 DAU proposal, Aurizon Network allocated system maintenance costs to WIRP	We refuse to approve Aurizon Network's proposed allocation of maintenance cost to	We have assessed Aurizon Network's approach to forming its incremental maintenance estimates

Aurizon Network, 2014 DAU, sub. 6: 4.
 Aurizon Network, 2014(g): 19.
 Aurizon Network, 2014 DAU, sub. 6: 4.
 Aurizon Network, 2014(g): 22.

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		based on WIRP gtk as a proportion of total system gtk. 590 In its December 2014 WIRP pricing proposal, Aurizon Network significantly reduced its allocation of maintenance costs to WIRP train services. 591	WIRP train services in the 2014 DAU. We accept Aurizon Network's December 2014 incremental maintenance costs for WIRP train services.	and consider that the estimates are derived on a consistent basis to the direct maintenance costs in this consolidated draft decision.
31	Escalation rate of minimum CCC for WIRP NCL train services	In its 2014 DAU proposal, Aurizon Network proposed an escalation rate of 5 per cent for the minimum CCC for WIRP NCL train services. 592 Aurizon Network also adopted this figure in its December 2014 WIRP pricing proposal. 593	We refuse to approve Aurizon Network's escalation rate of 5 per cent. Instead, we propose to escalate the minimum CCC by 2.5 per cent.	We consider a CPI escalation rate to be a more reasonable escalation factor, consistent with our escalation of many other cost components.

<sup>Aurizon Network, 2014 DAU, sub. 6: 4.
Aurizon Network, 2014(g): 22.
Aurizon Network, 2013(i).
Aurizon Network, 2014(g): 26.</sup>

APPENDIX B: REFERENCE TARIFFS & ALLOWABLE REVENUES

Table 111 Blackwater System Reference Tariffs (nominal)^{a,b}

Tariff Component	2013–14	2014–15	2015–16 ^c	2016–17
AT ₁ – incremental maintenance (\$/'000 gtk)	0.92	0.95	0.97	1.00
AT ₂ – incremental capacity (\$/rtp)	2,026.44	2,057.08	2,108.51	2,161.22
AT ₃ – allocative component (\$/'000 ntk)	4.79	6.14	6.37	6.67
AT ₄ – allocative component (\$/nt)	1.64	2.14	2.22	2.36
AT ₅ – electric infrastructure (\$/'000 egtk)	3.49	3.86	3.37	2.66

a Includes the impacts of 2011–12, 2012–13 and 2013–14 revenue cap adjustments.
 b The difference between 2013–14 approved allowable and transitional revenues has been smoothed over 2014–15, 2015–16 and 2016–17.
 c Includes January 2013 flood recovery costs.

Table 112 Blackwater System Alternative Reference Tariff Components (nominal)^{a,b}

Tariff Component ^c	2013–14	2014–15	2015–16	2016–17		
Rolleston ^d						
AT ₃ – allocative component (\$/'000 ntk)	4.79	6.20	7.14	6.67		
AT ₅ – electric infrastructure (\$/'000 egtk)	3.49	4.80	3.43	2.90		
Stanwell						
AT ₃ – allocative component (\$/'000 ntk)	3.22	4.34	4.30	4.42		

a Includes the impacts of 2011–12, 2012–13 and 2013–14 revenue cap adjustments.
 b The difference between 2013–14 approved allowable and transitional revenues has been smoothed over 2014–15, 2015–16 and 2016–17.
 c These tariff components replace the equivalent reference tariff component in Table 111.
 d Includes Rolleston train services to all destinations including WICET.

Table 113 Blackwater System Allowable Revenues (\$'000, nominal)

Tariff Component	2013–14	2014–15	2015–16	2016–17		
Allowable Revenue – AT ₂₋₄						
Allowable revenue before adjustments	229,453	258,028	308,262	341,057		
Add: Revenue cap adjustments ^a	13,689	33,068	9,644			
Add: 2013–14 MAR difference ^b		10,096	10,569	11,054		
Allowable revenue after adjustments	243,142	301,191	328,475	352,111		
	Allowable Revent	ue – AT ₅				
Allowable revenue before adjustments	77,190	96,577	100,119	83,359		
Add: Revenue cap adjustments ^a	(2,915)	15,245	(1,423)			
Add: 2013–14 MAR difference ^b		1,077	1,126	1,176		
Allowable revenue after adjustments	74,275	112,899	99,822	84,535		

a Includes the impacts of 2011–12, 2012–13 and 2013–14 revenue cap adjustments. **b** The difference between 2013–14 approved allowable and transitional revenues has been smoothed over 2014–15, 2015–16 and 2016–17.

Table 114 Goonyella System Reference Tariffs (nominal)

Tariff Component	2013–14	2014–15	2015–16	2016–17
AT ₁ – incremental maintenance (\$/'000 gtk)	0.64	0.66	0.67	0.70
AT ₂ – incremental capacity (\$/rtp)	1,283.87	1,303.28	1,335.86	1,369.26
AT ₃ – allocative component (\$/'000 ntk)	4.23	5.24	5.31	5.17
AT ₄ – allocative component (\$/nt)	0.90	1.09	1.11	1.07
AT ₅ – electric infrastructure (\$/'000 egtk)	2.27	1.85	2.01	2.16

Note: Goonyella customers (excluding Middlemount and Caval Ridge) pay this system reference tariff with no system premium. Includes the impacts of 2011–12, 2012–13 and 2013–14 revenue cap adjustments. The difference between 2013–14 approved allowable and transitional revenues has been smoothed over 2014–15, 2015–16 and 2016–17.

Table 115 Goonyella System Alternative Reference Tariff Components (nominal)

Tariff Component	2013–14	2014–15	2015–16	2016–17		
Middlemount						
AT ₃ – allocative component (\$/'000 ntk)	0.93	1.19	1.37	1.20		
AT ₄ – allocative component (\$/nt)	0.25	0.32	0.36	0.32		
AT ₅ – electric infrastructure (\$/'000 egtk)	0.68	0.26	0.15	0.29		
	Caval Ridg	e				
AT ₃ – allocative component (\$/'000 ntk)	4.23	2.86	3.72	3.54		
AT ₄ – allocative component (\$/nt)	0.90	0.60	0.77	0.73		
AT ₅ – electric infrastructure (\$/'000 egtk)	2.27	1.37	1.68	1.83		

Note: Includes the impacts of 2011–12, 2012–13 and 2013–14 revenue cap adjustments. The difference between 2013–14 approved allowable and transitional revenues has been smoothed over 2014–15, 2015–16 and 2016–17. These tariff components replace the equivalent reference tariff component in Table 114.

Table 116 Goonyella System Allowable Revenues (\$'000, nominal)

Tariff Component	2013–14	2014–15	2015–16	2016–17		
Allowable Revenue – AT ₂₋₄						
Allowable revenue before adjustments	233,078	289,406	266,096	275,731		
Add: Revenue cap adjustments ^a	(2,426)	(1,725)	8,204			
Add: 2013–14 MAR difference ^b		465	466	478		
Allowable revenue after adjustments	230,652	288,145	274,766	276,209		
	Allowable Reven	ue – AT ₅				
Allowable revenue before adjustments	68,061	73,772	80,938	79,966		
Add: Revenue cap adjustments ^a	16,309	(2,523)	(8,378)			
Add: 2013–14 MAR difference ^b		(29)	(31)	(32)		
Allowable revenue after adjustments	84,370	71,219	72,530	79,934		

a Includes the impacts of 2011–12, 2012–13 and 2013–14 revenue cap adjustments. **b** The difference between 2013–14 approved allowable and transitional revenues has been smoothed over 2014–15, 2015–16 and 2016–17.

Table 117 Moura System Reference Tariffs (nominal)^{a,b}

Tariff Component	2013–14	2014–15	2015–16 ^c	2016–17 ⁴
AT ₁ – incremental maintenance (\$/'000 gtk)	1.72	1.76	1.80	1.86
AT ₂ – incremental capacity (\$/rtp)	606.99	616.17	631.58	647.37
AT ₃ – allocative component (\$/'000 ntk)	5.87	9.37	8.10	7.61
AT ₄ – allocative component (\$/nt)	0.96	1.51	1.32	1.28

a Includes the impacts of 2011–12, 2012–13 and 2013–14 revenue cap adjustments. **b** The difference between 2013–14 approved allowable and transitional revenues has been smoothed over 2014–15, 2015–16 and 2016–17. **c** Includes one-third of January 2013 flood recovery costs. (4) Includes two-thirds of the January 2013 flood recovery costs.

Table 118 Moura System Alternative Reference Tariffs (nominal)^{a,b}

Tariff Component ^c	2013–14	2014–15	2015–16 ^d	2016–17 ^e	
WIRP_Moura ^f					
AT ₃ – allocative component (\$/'000 ntk) – 12.19 10.52					

a Includes the impacts of 2011–12, 2012–13 and 2013–14 revenue cap adjustments.
 b The difference between 2013–14 approved allowable and transitional revenues has been smoothed over 2014–15, 2015–16 and 2016–17.
 c These tariff components replace the equivalent reference tariff component in Table 117.
 d Includes one-third of January 2013 flood recovery costs.
 e Includes two-thirds of the January 2013 flood recovery costs.
 f This includes all Moura train services to WICET.

Table 119 Moura System Allowable Revenues (\$'000, nominal)

Tariff Component	2013–14	2014–15	2015–16	2016–17		
Allowable Revenue – AT ₂₋₄						
Allowable revenue before adjustments	31,222	39,114	35,888	43,190		
Add: Revenue cap adjustments ^{a,b}	(5,092)	2,489	5,580			
Add: 2013–14 MAR difference ^c		(1,934)	(2,021)	(2,112)		
Allowable revenue after adjustments	26,130	39,669	39,447	41,079		

a Includes the impacts of 2011–12, 2012–13 and 2013–14 revenue cap adjustments. **b** Includes one-third of January 2013 flood recovery costs in 2015–16 and two-thirds of the January 2013 flood recovery costs in 2016–17. **c** The difference between 2013–14 approved allowable and transitional revenues has been smoothed over 2014–15, 2015–16 and 2016–17.

Table 120 WIRP NCL System Reference Tariffs (nominal)

Tariff Component	2013–14	2014–15	2015–16	2016–17
AT1- incremental maintenance (\$/'000 gtk)			1.80	1.86
AT2 – incremental capacity (\$/rtp)			1,562.42	1,562.06

Note: The customer with the train service from Colton to WICET pays this reference tariff.

Table 121 Goonyella to Abbot Point (GAP) System Reference Tariffs (nominal)

Tariff Component	2013–14	2014–15	2015–16	2016–17
AT ₁ – incremental maintenance (\$/'000 gtk)	1.45	1.48	1.52	1.57
AT ₂ – incremental capacity (\$/rtp)	12,598.77	12,789.30	13,109.03	13,436.76
AT ₃ – allocative component (\$/'000 ntk)	1.60	1.60	0.64	0.50
AT ₄ – allocative component (\$/nt)	3.78	3.82	2.80	2.95

Note: Includes the impacts of 2011–12, 2012–13 and 2013–14 revenue cap adjustments. The difference between 2013–14 approved allowable and transitional revenues has been smoothed over 2014–15, 2015–16 and 2016–17.

Table 122 Goonyella to Abbot Point (GAP) System Allowable Revenues (\$'000, nominal)

Tariff Component	2013–14	2014–15	2015–16	2016–17
	Allowable Revenu	e – AT ₂₋₄		
Allowable revenue before adjustments	100,687	121,328	114,069	129,135
Add: Revenue cap adjustments ^a		11,591	-	
Add: 2013–14 MAR difference ^b		(8,610)	(8,998)	(9,403)
Allowable revenue after adjustments	100,687	124,308	105,071	119,732

a Includes the impacts of 2011–12, 2012–13 and 2013–14 revenue cap adjustments. **b** The difference between 2013–14 approved allowable and transitional revenues has been smoothed over 2014–15, 2015–16 and 2016–17.

Table 123 Newlands System Reference Tariffs (nominal)

Tariff Component	2013–14	2014–15	2015–16	2016–17
AT ₁ incremental maintenance (\$/'000 gtk)	1.71	1.76	1.80	1.86
AT ₂ – incremental capacity (\$/rtp)	271.39	275.50	282.39	289.45
AT ₃ – allocative component (\$/'000 ntk)	9.20	6.84	7.63	8.59
AT ₄ – allocative component (\$/nt)	1.29	0.92	1.00	1.10

Note: Includes the impacts of 2011–12, 2012–13 and 2013–14 revenue cap adjustments. The difference between 2013–14 approved allowable and transitional revenues has been smoothed over 2014–15, 2015–16 and 2016–17.

Table 124 Newlands System Allowable Revenues (\$'000, nominal)

Tariff Component	2013–14	2014–15	2015–16	2016–17
	Allowable Revenu	e – AT ₂₋₄		
Allowable revenue before adjustments	27,413	30,139	27,660	29,159
Add: Revenue cap adjustments ^a	3,424	(306)	11	
Add: 2013–14 MAR difference ^b		(2,534)	(2,648)	(2,767)
Allowable revenue after adjustments	30,837	27,299	25,023	26,392

a Includes the impacts of 2011–12, 2012–13 and 2013–14 revenue cap adjustments. **b** The difference between 2013–14 approved allowable and transitional revenues has been smoothed over 2014–15, 2015–16 and 2016–17.

APPENDIX C: ASSESSMENT OF WIRP COST ITEMS PROPOSED FOR ALLOCATION TO EXISTING USERS

Table 125 QCA assessment of individual WIRP cost items proposed for allocation to existing users (\$ million, nominal)

Element	WIRP User Group's comment	QCA analysis	Proposed cost	QCA consolidated draft decision
	Wiggins Island Balloon Loop	o (WIRP project segment 1)		
Provision for Wiggins Island Balloon Loop (WIBL) electrification	The WIRP User Group said the WIRP Stage 1 scope clearly sets out that electrification of the balloon loop is not part of the agreed scope. 594 The WIRP User Group said Aurizon Network has excluded overhead and power supply works costs from the WIRP project costs. 595 However, the WIRP User Group argued that the provision of the electrified assets had resulted in additional WIRP project civil works costs that should also have been excluded from WIRP project costs. 596	For the purpose of setting reference tariffs, we do not consider it appropriate to allocate the costs associated with WIBL electrification to existing non-WIRP users. It is unclear to us how existing non-WIRP users that were not subject to WIRP commercial arrangements benefit from the electrification of WIBL given their train services do not use this infrastructure (as indicated in Aurizon Network's submission). 597 In addition, we consider that this work was not required in the absence of WIRP.	7.94	-
		Given that WIRP users will be operating electric train services using this infrastructure, we consider that there are benefits arising from this investment for WIRP users.		
Provision for future unloading loops	The WIRP User Group said that Aurizon Network constructed local rail formation earthworks for four parallel unloading stations, although only one station was constructed as part of WIRP. 598	Based on the evidence before us, we do not consider it appropriate to allocate such costs to existing users. There is evidence that WIRP users agreed to bear the costs of this provision. ⁵⁹⁹ It is also unclear to us how existing non-WIRP users that were not subject to WIRP	4.14	_

⁵⁹⁴ WIRP Users, 2014 DAU, sub. 107: 37.

⁵⁹⁵ The WIRP project costs are as defined in the WIRP deed, which is a commercial agreement between Aurizon Network and WIRP customers.

⁵⁹⁶ WIRP Users, 2014 DAU, sub. 107: 37.

⁵⁹⁷ Aurizon Network, 2014 DAU, sub. 109: 15.

⁵⁹⁸ WIRP Users, 2014 DAU, sub. 107: 39.

⁵⁹⁹ Our view is informed by confidential information provided to us.

Element	WIRP User Group's comment	QCA analysis	Proposed cost	QCA consolidated draft decision
		commercial arrangements benefit from this given that their train services do not use this infrastructure.		
	North Coast Line Upgrades	(WIRP project segment 2)		
Upgrades to signalling equipment room (SER)	The WIRP User Group said that modifications to two SERs (at Mt Larcom and Mt Miller) were required to provide for functional requirements of the modified track cross-over arrangement and sectioning structure on the NCL. 600 The Independent Engineer's report highlights a large number of circuit faults resulting in frequent train delays at Mt Larcom prior to WIRP. The Independent Engineer also advised in writing that Mt Miller SER was in a similar situation. 601 The WIRP User Group said the equipment was in poor condition prior to the additional WIRP. Arguably, the replacement of this equipment should have already taken place as part of Aurizon Network's maintenance program. 602	Based on the evidence before us, we consider it appropriate to allocate part of the SER upgrade costs to existing Blackwater users. We accept that there is some evidence that the equipment was in poor condition prior to WIRP, hence upgrades will benefit existing users and would have been required in the absence of WIRP. 604	5.87	5.87
	The WIRP User Group proposed to allocate \$5.87m to existing users (calculated based on existing users' proportion of total system contracted tonnage). 603			
Re-railing	The WIRP User Group did not provide any information to substantiate this claim.	We do not consider it appropriate to allocate the rerailing costs in the NCL to existing users. We are not able to assess this claim due to the lack of information provided by WIRP users.	1.82	_
	Moura East (WIRP	project segment 3)		
Moura system	The WIRP User Group said the works undertaken in Moura	Based on the evidence before us, we do not consider it	15.23	_

⁶⁰⁰ WIRP Users, 2014 DAU, sub. 107: 38. 601 WIRP Users, 2014 DAU, sub. 107: 38–39. 602 WIRP Users, 2014 DAU, sub. 107: 39. 603 WIRP Users, 2014 DAU, sub. 107: 39.

Our view is also informed by confidential information redacted from the WIRP users' submission in response to our WIRP draft decision.

Element	WIRP User Group's comment	QCA analysis	Proposed cost	QCA consolidated draft decision
enhancements	East comprised mainly upgrades and system enhancements, and do not provide additional capacity. The WIRP User Group argued that the costs should be shared amongst all users given that these upgrades and system enhancements will benefit all users in the system. 605	appropriate to allocate these costs to existing Moura users. There is clear evidence that WIRP users agreed to bear the costs of these upgrades. 606 While there could be benefits to existing Moura users, neither Aurizon Network nor WIRP users have attempted to estimate the monetary value of the operational benefits.		
	Blackwater Duplications (WIRP project segment 4)		
Cross drainage enhancement, culvert strengthening/replacement	The WIRP User Group said the WIRP scope provided for the design and installation of adequate drainage culverts to the new formation. However, Aurizon Network took the opportunity to increase the existing cross drainage capacity and/or replace old under-strength culverts. 607 The WIRP User Group said that Aurizon Network had agreed that costs relating to these asset renewal works would not be allocated to WIRP project costs. Nevertheless, it said that Aurizon Network: • for segment 4A, did not allocate the direct works costs (as well as on-costs) associated with these additional works to the assets renewal budget (i.e. these costs were retained within WIRP costs) • for segment 4B, did allocate the direct works costs (but not the on-costs) to asset renewal budget. 608 The cost estimate for this item includes the direct works costs associated with this work for segment 4A and an allocation of on-costs for segments 4A and 4B.	We consider it appropriate to treat these works as asset renewal, even though arguably there were also some elements of system enhancement. However, given the magnitude of this cost claim, we have not attempted to disentangle the system enhancement component of this claim. Based on the evidence provided in the WIRP users' submission, we consider that this work includes renewals work that would have been required in the absence of WIRP. In addition, these works appear to provide a benefit to existing users. Accordingly, we consider it appropriate to allocate the associated costs (i.e. the sum of direct costs and an allocation of on-costs) to existing Blackwater users.	2.64	2.64

⁶⁰⁵ WIRP Users, 2014 DAU, sub. 107: 44. ⁶⁰⁶ Our view is informed by confidential information provided to us. ⁶⁰⁷ WIRP Users, 2014 DAU, sub. 107: 38.

⁶⁰⁸ WIRP Users, 2014 DAU, sub. 107: 38.

Element	WIRP User Group's comment	QCA analysis	Proposed cost	QCA consolidated draft decision
Rail maintenance access roads	The WIRP User Group said that after the execution of the WIRP Deed, Aurizon Network updated their access policy. The new policy requires a higher standard for rail maintenance access roads to be constructed for new tracks. 609 The WIRP User Group argued that the construction of improved rail maintenance access roads for WIRP provides benefits to existing users, and hence part of the costs should be allocated to them. 610	We do not consider it appropriate to allocate these costs to existing users. With a multi-year project such as WIRP, we consider contingencies should be anticipated for changes to standard/policies that may increase the project costs. While there could be benefits to existing users, our understanding is that the construction of the RMAR was largely triggered by WIRP train services.	3.21	_
Flood protection enhancements	The WIRP User Group said that at a number of duplicated bridge locations, additional dumped rock matting has been extended under the existing rail bridge. 611	We do not consider it appropriate to allocate these costs to existing Blackwater users. Based on information provided in the WIRP users' submission, we consider this cost would have not been incurred in the absence of WIRP train services.	2.24	_
Level crossing removals	The WIRP User Group said that two existing road level crossings located in segment 4A were problematic. As part of WIRP, Aurizon Network built a new bridge and removed these level crossings. While Aurizon Network has not included the costs of this bridge in the WIRP costs, the costs of removing the crossings have been included. 612	Based on the evidence provided in the WIRP users' submission, we consider it appropriate to allocate these costs to existing Blackwater users. We consider there is some evidence that the removal of these level crossings was not directly caused by WIRP train services. It is reasonable to expect that they would have been replaced even in the absence of WIRP.	0.70	0.70
Level crossing upgrades	The WIRP User Group said three existing road level crossings required upgrading within the WIRP 4B project. Aurizon Network increased the road surface formation width at these crossings. In addition, there were other tie-in works to other connecting public roads that should not need to be upgraded outside of	Based on the evidence provided in the WIRP users' submission, we do not consider it appropriate to allocate these costs to existing Blackwater users. While the works were beyond the minimum requirement according to the WIRP User Group, it is unclear to us what the benefits are for existing users.	2.11	_

WIRP Users, 2014 DAU, sub. 107: 40.
 WIRP Users, 2014 DAU, sub. 107: 41.
 WIRP Users, 2014 DAU, sub. 107: 42–43.
 WIRP Users, 2014 DAU, sub. 107: 43.

Element	WIRP User Group's comment	QCA analysis	Proposed cost	QCA consolidated draft decision
	the influence zone of the road re-profiling for the duplicated track. 613			
Existing corridor fencing reconstruction	In a number of locations within segments 4A and 4B it was noted that fencing was reconstructed on the non-duplicated track side of the corridor and in some locations where the existing boundary is unchanged on the duplicated side of the corridor. 614	Based on the evidence provided in the WIRP users' submission, we do not consider it appropriate to allocate these costs to existing Blackwater users. We consider there is insufficient evidence that such costs would have been incurred in the absence of WIRP train services.	0.17	_
Rail noise mitigation	The WIRP User Group said that as part of WIRP scope, provision was made for the installation of up to 3km of noise walls to the rail corridor boundaries in the populated Gracemere area. The WIRP User Group argued that 33 per cent increase in rail traffic volume would not significantly increase the noise nuisance to the adjoining public residence. Given that, the costs associated with rail noise mitigation should be classified as a whole of system enhancement. 615	No cost has been provided so we are not able to undertake an assessment of the appropriate allocation of this cost element.	N/A	_

WIRP Users, 2014 DAU, sub. 107: 43.
 WIRP Users, 2014 DAU, sub. 107: 44.
 WIRP Users, 2014 DAU, sub. 107: 44.

