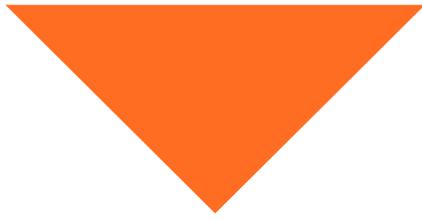


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## 2013 Draft Access Undertaking

### Return on Capital Response – Summary Paper





## I Introduction

Aurizon Network's 2013 Access Undertaking (2013 DAU), also referred to as UT4, proposes the terms upon which access to the Central Queensland Coal Network (CQCN) will be made available to third parties. In developing UT4, Aurizon Network seeks to better promote the long-term competitiveness of the Queensland coal industry, continue to ensure efficient and timely investment in the CQCN, and provide a framework to work in partnership with supply chain participants.

The submission detailed Aurizon Network's Maximum Allowable Revenue (MAR), the total revenue Aurizon Network would be able to earn each year for providing access to the CQCN. The Return on Capital – derived as a product of the regulatory asset base (RAB) and the Weighted Average Cost of Capital, or WACC – forms a key part of both the regulated building blocks methodology and the UT4 submission, particularly due to its importance in ensuring the efficient and timely investment in the CQCN.

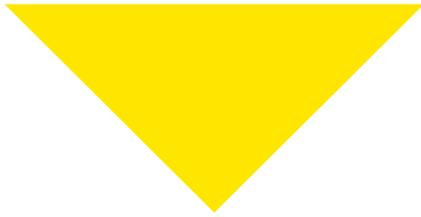
As outlined within this submission and the attached papers, Aurizon Network stands by its 2013 DAU and is of the view that:

- It retains a higher relative risk than that associated with energy and water utility businesses;
- The reasonableness of the UT4 WACC needs to be considered against recent regulatory decisions; and
- The UT4 WACC efficiently reflects the commercial and regulatory risks borne by Aurizon Network.

This paper summarises Aurizon Network's response to a range of matters since the submission of UT4 in April 2013, particularly addressing stakeholder submissions and matters raised during the Queensland Competition Authority's (QCA's) UT4 regulatory consultation process.

The paper is structured as follows:

- Section 2 outlines the role of Aurizon Network within the CQCN and the importance of the Return on Capital requirement;
- Section 3 summarises the attached papers from SFG Consulting and Aurizon Network;
- Section 4 discusses the cost of debt; and
- Section 5 concludes.



## II Aurizon Network, its role within the CQCN and Return on Capital

### 1) Aurizon Network and its role within the CQCN

Aurizon Network is a subsidiary of Aurizon Holdings Pty Ltd, that owns and operates the rail network within Central Queensland, commonly referred to as the Central Queensland Coal Network (CQCN). As being a separate functional business unit and legal entity within the Aurizon group structure, Aurizon Network provides services other than access including below rail maintenance and rail infrastructure management services.

The CQCN is comprised of four major coal systems, totalling approximately 2,670 kilometres of heavy haul rail infrastructure. Constituting the largest coal network in Australia and one of the country's most complex rail freight networks, the CQCN runs more than 100 trains each day, equating to approximately 76,000 coal carrying train services each year.

Aurizon Network's 2013 Draft Access Undertaking (2013 DAU) was lodged with the QCA in April 2013, and is a critically important document for both Aurizon Network and the CQCN, as it guides negotiations with its customers, sets out how services must be provided and regulates the revenues that Aurizon Network can earn from providing access. Also, with Aurizon Network being a subsidiary of the Aurizon Group, the 2013 DAU impacts upon the capital structure of the Aurizon Group and how it can be structured, how it must operate, and how it creates value for its shareholders and its customers.

As a regulated service, Aurizon Network considers the UT4 revenue proposal reflects the efficient costs of developing, maintaining and operating a highly productive and reliable world class rail network that has safety as its core value. It is essential for Aurizon Network to deliver commercially adequate returns to incentivise its investors and to support funding for expansion as well as continuing to attract private capital to fund future investments in the network, especially at a time of continued financial market instability and capital rationing.

Aiming to ensure both prudence and efficiency, these costs have been rigorously benchmarked and are otherwise controlled through the Aurizon Group's corporate governance practices. As such, Aurizon Network is of the view that the UT4 revenue proposal is consistent with the Pricing Principles in the *Queensland Competition Authority Act 1997* (the QCA Act), most notably Section 168A(a), which entitles it to charge a price for access 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".*

There are two important aspects (components) of Section 168A(a). The first is that revenue should at least be sufficient to cover the efficient costs of providing the service, including a return on capital, and the second aspect is the scope of the provision where the rate of return must be "...commensurate with the regulatory and commercial risks..." involved.

Historically, the focus of the review of the return on capital to apply to the CQCN has been on estimating each of the parameters in the Weighted Average Cost of Capital (WACC). This has provided for an expected return on debt that is seen to be based on the prevailing benchmark cost of comparable borrowings in the market. In addition, it has also provided for an expected return on equity that is derived using the Capital Asset Pricing Model (CAPM), where the cost of equity only provides compensation for systematic or non-diversifiable risks.

As the WACC is comprised of an expected return on debt based on the prevailing benchmark cost of comparable borrowings in the market, and the expected return on equity compensates equity holders for systematic risks, the question is whether this is (at least) commensurate with the commercial and regulatory risks borne by Aurizon Network and if not, how should these risks be appropriately compensated.

## **2) Return on Capital and Weighted Average Cost of Capital (WACC)**

A critical part of Aurizon Network's revenue proposal is the Return on Capital, based upon a post-tax nominal (vanilla) WACC. The WACC is essentially the minimum return a company would need to earn on its existing asset base that would need to satisfy its shareholders. As a weighted average concept, it is usually comprised of a number of sources, categorised as either debt or equity.

Within the regulatory framework, WACC forms a key part of the building blocks model utilised by regulators in proving costs that are at least enough in meeting the efficient costs of providing access to a service. For instance, WACC applies to Aurizon Network's capital indicator and the return on the debt and equity proportion's of the regulated asset base (RAB). The WACC therefore forms one of the most significant building blocks that constitutes Aurizon Network's Maximum Allowable Revenue (MAR).

Due to the importance of this component, Aurizon Network developed the proposed UT4 WACC having regard to relevant regulatory precedent, prevailing financial market conditions, finance and econometric theory as well as commercial practice. Yet regardless of the prevailing conditions in the financial markets at the time of submission and throughout the UT4 consultation process, Aurizon Network considers it appropriate to specify the values for more uncertain parameters as a range, resulting in a range for the WACC. With this, a decision would then be made as to where the point estimate for WACC is selected from within that range, a method that is consistent with the approach adopted by the Independent Pricing and Regulatory Tribunal (IPART).

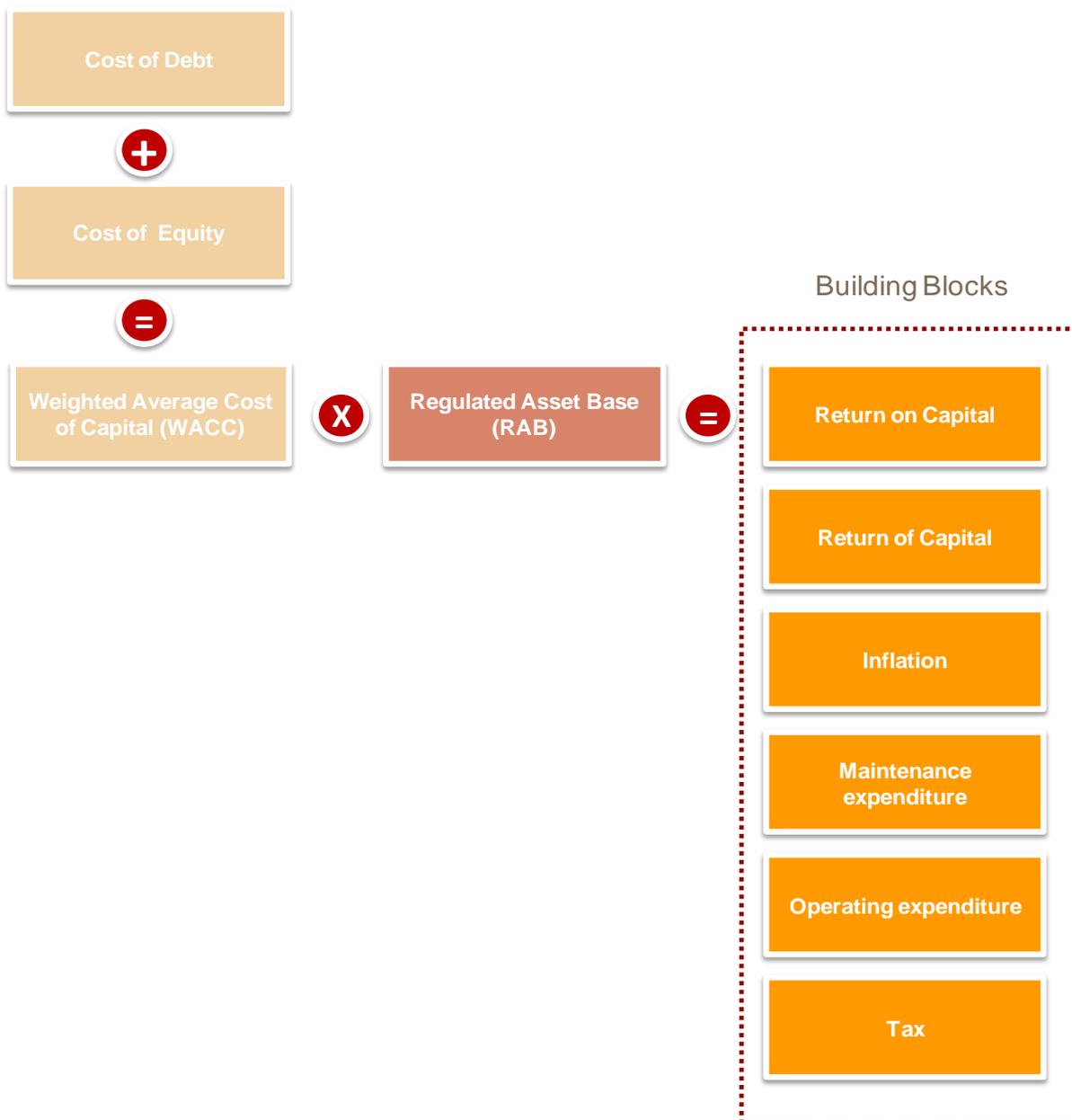
To substantiate the WACC, the UT4 revenue proposal provided extensive detail around the components of Aurizon Network's UT4 Return on Capital and the underlying WACC, where discussion:

- Outlined the current legislative issues within Queensland and those related to the CQCN;
- Highlighted Aurizon Network's commercial and regulatory risks;
- Examined the financial market environment;

- Analysed the components of the proposed UT4 WACC, the UT3 issues and/or outcomes for these components, and what Aurizon Network believes will be the issues for UT4; and
- Assessed the reasonableness of the proposed estimates.

Ultimately, returns on an investment must reflect the risks investors are asked to bear, and the attached Aurizon Network paper, *A comparator analysis of Aurizon Network’s commercial and regulatory risks*, clearly outlines the risk that Aurizon Network faces in operation of the CQC. Nonetheless, constituting a large part of the response to the 2013 DAU, the QRC WACC Submission proposed a WACC of 5.65%, compared to Aurizon Network’s upper bound WACC of 8.18%.

**Figure 1 – WACC, Return on Capital and the regulated building blocks**

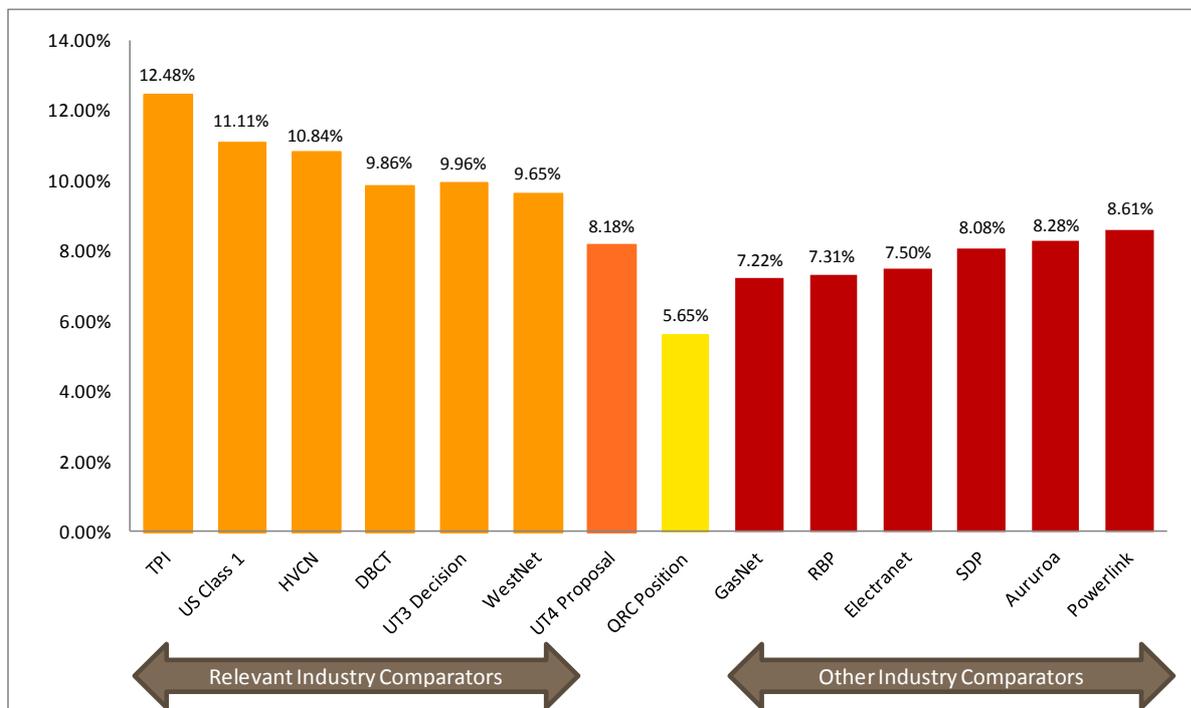


Whilst discussed in significant detail within the attached papers, Aurizon Network considers it important to address the reasonableness of such a proposal by asking two basic, yet fundamental issues:

<b>Q1</b>	Can the QCA reasonably expect Aurizon Network investors to invest at substantially lower returns than other similar investments in the Queensland coal supply chain?
<b>Q2</b>	If the QCA does reasonably expect Aurizon Network investors to invest at substantially lower returns, what recent regulatory and relevant empirical evidence substantiates such a view?

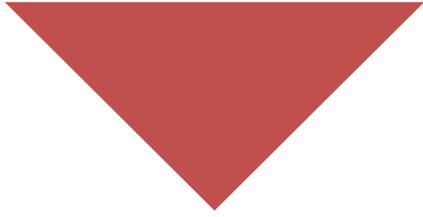
In response to the second question and as presented within the QCA WACC Forum held in December 2013, the reasonableness of Aurizon Network’s UT4 WACC proposal can be framed most appropriately when compared against a spectrum of relevant industry comparators. As illustrated in Figure 2, the QRC WACC Submission of 5.65% could be considered an extreme outlier when compared to other determinations.

**Figure 2 – Recent Regulatory Decisions (Weighted Average Cost of Capital)**



Importantly, as the UT4 WACC will be fixed for four years, implications of an unreasonable fixing need to be carefully considered. For instance, if the regulated WACC is below the expected returns that lenders and shareholders require given the risk profile of Aurizon Network as a below-rail network business, investment in maintenance and capital expenditure could be adversely affected.

From October 2013, the QCA began receiving a range responses reflecting the importance of Aurizon Network’s UT4 submission. In conjunction, the QCA also began its consultation process into the 2013 DAU, publishing a number of specific papers on Aurizon Network’s proposed UT4 cost of capital requirements, as well as holding a WACC Forum later during December 2013. The remainder of this paper summarises the Aurizon Network’s response to the issues raised in the previous papers and forums.



### III Cost of Capital – Summary of papers

In order to progress (and support the regulatory timeline) towards achieving a QCA draft pricing decision by 30 June 2014, Aurizon Network has attached various papers in response to both stakeholders submissions, as well papers commissioned as part of the QCA consultation process, including:

1. Three papers prepared by SFG Consulting, titled:
  - a) *An appropriate regulatory estimate of the market risk premium (January 2014)*;
  - b) *An appropriate regulatory estimate of gamma (January 2014)*;
  - c) *Systematic risk of Aurizon Network: Response to reports and submissions to the Queensland Competition Authority (January 2014)*; and
2. A paper prepared by Aurizon Network titled:
  - a) *A comparator analysis of Aurizon Network's commercial and regulatory risks (January 2014)*.

The following sections provide a summary of the content within those papers.

#### **a) An appropriate regulatory estimate of the market risk premium**

##### 1. Overview

The risk-free rate and market risk premium are critical components of the Capital Asset Pricing Model (CAPM) and in turn, derivation of the Aurizon Network's UT4 WACC. The market risk premium (MRP), reflects the rate of return earned on a well-diversified portfolio of assets above the risk-free rate, whilst the risk-free rate ( $R_f$ ) reflects the rate of return an investor could reasonably expect to earn if funds were invested into a riskless investment, for example a Australian Government 10 year bond.

Retained by Aurizon Network to provide views on both the MRP and risk-free rate, SFG Consulting prepared a paper in response to the following reports and submissions:

- a. Lally (2013a), *Response to submissions on the risk-free rate and the MRP*, a report commissioned by the QCA;
- b. McKenzie and Partington (2013), *Review of Aurizon Network's draft access undertaking*; a report commissioned by the Queensland Resources Council; and
- c. Queensland Resources Council (2013), *WACC submission*, submission to the QCA.

## 2. Risk-free rate and the market risk premium

The SFG paper undertakes a question and answer format in seeking to identify an appropriate and reasonable risk-free rate. In doing so, the paper seeks QCA consideration of two questions:

<b>Q1</b>	Should a spot rate or some historical average be used?
<b>Q2</b>	Should the term of the risk-free rate be set to 5 years (or the length of the regulatory control period in question) or 10 years?

In consideration of these questions and analysis provided by SFG Consulting, Aurizon Network considers that:

### Q1 – Should a spot rate or some historical average be used?

- Is of the consensus view that a spot risk-free rate should be utilised and in turn, should also be paired with the spot estimate of the MRP. Such a view is replicated by Lally (2013a), the QRC WACC submission and within the 2013 DAU.

### Q2 – Should the term of the risk-free rate be set to 5 years (or the length of the regulatory control period in question) or 10 years?

- As is market practice, the rate should be based upon the 10-year government bond yield. This is supported by current and substantial regulatory evidence, with equivalent stances undertaken by the Independent Pricing and Regulatory Tribunal (IPART), the Australian Energy Regulatory (AER) and the Australian Competition Tribunal (ACT). Additionally, in its paper *Aurizon Network: Review of benchmark credit rating and cost of debt*, Incenta Economic Consulting advised the QCA that a term of 10 years is appropriate when estimating the cost of debt;
- The adoption of a 10-year risk-free rate for the cost of equity would be consistent with the 10-year risk free rate that the QCA's consultants have recommended for the cost of debt; and
- Regulators have identified that for longer term equity, the NPV=0 principle would seem to require the utilisation of risk-free rates of longer duration.

In regards to the market risk premium (MRP), SFG Consulting undertook a similar approach seeking QCA consideration to six, essential questions:

<b>Q1</b>	Is the Authority comfortable with an approach that implies that the GFC and ensuing European debt crisis resulted in equity capital being cheaper than at any other time in post-war history?
<b>Q2</b>	Is it time for a revision of the QCA approach to estimating the MRP?
<b>Q3</b>	Should the QCA have regard to the Wright approach?
<b>Q4</b>	Should the QCA have regard to evidence from independent expert valuation reports?
<b>Q5</b>	Should the QCA use the best available data?

In consideration of these questions and analysis provided by SFG Consulting, Aurizon Network considers that:

Q1 – Is the Authority comfortable with an approach that implies that the GFC and ensuing European debt crisis resulted in equity capital being cheaper than at any other time in post-war history?

- Questions the appropriateness of establishing the MRP, especially if the current approach proposes nonsensical equity return outcomes throughout tumultuous periods such as the Global Financial Crisis and the European Debt Crisis.

Q2 – Is it time for a revision of the QCA approach to estimating the MRP?

- Recommends the QCA's current approach in estimating the MRP should be augmented.

Q3 – Should the QCA have regard to the Wright approach?

- Agrees that the QCA's current approach in estimating the MRP for use in the Sharpe-Lintner CAPM – the rounding combination of the Ibbotson, Siegel and Cornell methods in conjunction with survey responses – should be augmented with the Wright approach as proposed by Lally (2013a); and
- Notes that the augmented method inclusive of the Wright approach is consistent with recent regulatory stances such as those witnessed by the AER's recent draft Guideline and extensively within the UK regulatory environment .

Q4 – Should the QCA have regard to evidence from independent expert valuation reports?

- Recommends that the QCA have regard to evidence from independent expert valuation reports.

Q5 – Should the QCA use the best available data?

- Urges the QCA to continue to follow best practice regulation, especially by means of utilising the most up-to-date and correct data sets available within the approaches of Ibbotson, Siegel, Cornell and Wright, as well as the Fernandez survey data and independent expert valuation reports.

Q6 – What MRP value does the Lally (2013) approach produce?

- If making only a singular proposed change of the total six proposed changes to the Lally (2013a) results, the revised Lally (2013a) results would produce a MRP of 7.0%, established during the QCA WACC Forum by Dr Lally when confirming that "...the most recent estimates were the best, as in survey data from 2013 being superior to that for 2012."<sup>1</sup>

### 3. Summary

The Aurizon Network proposed UT4 risk-free rate should be based upon a spot risk-free rate; paired with the spot estimate of the MRP; and based upon the 10-year government bond yield. In addition, the proposed UT4 MRP estimate of 7% continues to remain entirely reasonable. The only way to not derive a

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<sup>1</sup> QCA, 2013, *WACC Forum Minutes*, 13<sup>th</sup> December 2013, available at [www.qca.org.au](http://www.qca.org.au)

7% MRP would be to ignore all of the six changes proposed by SFG Consulting, including not updating the QCA/Lally approach with both corrected and updated datasets.

For further discussion regarding the reasonableness of Aurizon Network's proposed UT4 MRP and risk-free rate, please refer to the attached SFG Consulting paper, *An appropriate regulatory estimate of the market risk premium*.

## **b) An appropriate regulatory estimate of gamma**

### **1. Overview**

Forming another component of the WACC, gamma ( $\gamma$ ) reflects the value of imputation credits that can be used by shareholders. It is calculated as a product of two elements, the distribution rate (F) and the value of distributed credits (theta or  $\Theta$ ).

The distribution rate (F) is the ratio of two components, (a) the total amount of franking credits distributed to shareholders in a given year, to (b) the total amount of franking credits created in a given year. Theta ( $\Theta$ ) estimates the value of a dollar of franking credits that has been distributed, or in other words, the extent to which a distributed imputation credit is reflected in the market price of a firm's shares. As example:

*"...if theta is 0.35, the share price of an organisation would be higher than it would otherwise be by 35% of the face value of the imputation credits that are expected to be distributed."*<sup>2</sup>

However, due to Australian Taxation Law and the taxation benefits associated with franking credits – the value a resident shareholder places upon franking credits – is clearly different to that placed upon franking credits by non-residential shareholders. Specifically, resident shareholders are able to utilise the franking credits so as to reduce tax liabilities whereas non-resident shareholders cannot.

As retained by Aurizon Network to provide views on gamma ( $\gamma$ ), SFG Consulting prepared a paper in response to following reports and submissions:

- a. Lally (2012), *The estimated utilisation rate for imputation credits*, report commissioned by the QCA;
- b. Lally (2013b), *Estimating Gamma*, a report commissioned by the QCA;
- c. McKenzie and Partington (2013), *Review of Aurizon Network's draft access undertaking*; a report commissioned by the Queensland Resources Council; and
- d. Queensland Resources Council (2013), *WACC submission*, submission to the QCA

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<sup>2</sup> SFG 2014, *An appropriate regulatory estimate of gamma – FINAL Report for Aurizon Ltd*, 23<sup>rd</sup> December 2013, pg. 34, available at: [www.qca.org.au](http://www.qca.org.au)

## 2. Gamma

Similar to the approach used in the previous paper, SFG Consulting undertook a logic-based approach in addressing key elements of a complex issue. In so doing, the paper sought QCA consideration of six questions:

<b>Q1</b>	Should gamma be estimated as the product of F and theta ( $\Theta$ )?
<b>Q2</b>	What value should be adopted for the distribution rate, F?
<b>Q3</b>	Should theta ( $\Theta$ ) be estimated on the basis on empirical evidence or theoretical assumption?
<b>Q4</b>	Can redemption (or “utilisation”) rates be used to estimate theta ( $\Theta$ )?
<b>Q5</b>	What data period should be used to estimate the value of theta ( $\Theta$ )?
<b>Q6</b>	What are the current empirical estimates of theta ( $\Theta$ )?

In consideration of these questions and analysis provided by SFG Consulting, Aurizon Network is of the view that:

### Q1 – Should gamma be estimated as the product of F and $\Theta$ ?

- As per standard regulatory practice, gamma should be estimated as the product of the distribution rate (F) and the value of distributed franking credits (theta,  $\Theta$ ).

### Q2 – What value should be adopted for the distribution rate, F?

- The distribution rate (F) should be set at a value of 0.7, in line with the best, currently available empirical evidence, supported by both the AER, the ACT and particularly the QRC in its own UT4 WACC submission.<sup>3</sup>

### Q3 – Should theta ( $\Theta$ ) be estimated on the basis on empirical evidence or theoretical assumption?

- The alternative approach of estimating gamma ( $\gamma$ ) as proposed by Lally (2013), should be rejected as no case has been made for rejecting the currently accepted approach;
- The value of theta ( $\Theta$ ) should be based upon empirical evidence rather than theoretical reasoning as:
  - a. The QCA has previously rejected Lally’s theoretical approach stating that such acceptance would be inconsistent with the QCA regulatory model, the Sharpe-Lintner CAPM;
  - b. No other regulator adopts a theta ( $\Theta$ ) value based upon the Lally theoretical approach;
  - c. It is standard regulatory practice to estimate all WACC parameters on the basis of empirical evidence; and
  - d. If theta ( $\Theta$ ) is to be estimated not as is, but in the absence of any foreign investment, then all WACC parameters should be estimated on the same basis.

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<sup>3</sup> McKenzie and Partington, 2013, *Report to Queensland Resources Council – Review of Aurizon Network’s Draft Access Undertaking*, 5<sup>th</sup> October 2013, available at: [www.qca.org.au](http://www.qca.org.au)

#### Q4 – Can redemption (or “utilisation”) rates be used to estimate theta (Θ)?

- The redemption rate – the ratio of redeemed credits to distributed franking credits – cannot be used to estimate theta (Θ) as:
  - a. The redemption rate only signifies a franking credit had some positive value, providing no indication of the quantum of that value;
  - b. The ACT has ruled that redemptions rates cannot be used to estimate theta;
  - c. Concerns with data sourced from the Australian Taxation Office infer that reliability and accuracy are prominent and relevant issues that need to be recognised;
  - d. Lally (2013b) indicates that utilisation of redemption rates involves an internal inconsistency as well as implying that the cost of equity rises as markets become more integrated;
  - e. McKenzie and Partington (2013) note that standard practice is to measure the market value of theta;
  - f. Both the National Electricity and National Gas Rules specifically define gamma (γ) as the value of imputation credits; and
  - g. Market practice is to make no adjustment in relation to imputation credits to cash flows or discount rates; and
- Due to clear empirical evidence, the QCA should not assume that:
  - a. All distributed credits are redeemed; and
  - b. The full face value of every imputation credit that is redeemed is reflected in the stock price.

#### Q5 – What data period should be used to estimate the value of theta (Θ)?

- Consistent with standard regulatory approaches, post-2000 data should be used to estimate the value of theta (Θ).

#### Q6 – What are the empirical estimates of theta (Θ)?

- AER empirical evidence estimate a theta (Θ) value between 0 to 0.5, with the SFG theta (Θ) value of 0.35 considered conservative.

### 3. Summary

In summary, by following a logic-based approach in addressing key elements of gamma (γ), Aurizon Network considers that:

- Gamma (γ) is a product of the distribution rate (F) and the value of distributed franking credits (theta, Θ), i.e.,  $(\gamma) = F \times \Theta$ ;
- There is no basis for the QCA to maintain its current estimate of 0.8 for its distribution rate (F) as 0.7 is now widely accepted and consistent with stakeholder submissions;
- AER empirical evidence estimates theta (Θ) between 0 to 0.5, with the SFG theta (Θ) value of 0.35 considered conservative; and
- Consequently, the final estimate of gamma (γ) is:

$$(\gamma) = F \times \Theta = 0.7 \times 0.35 = 0.25$$

For further discussion regarding the reasonableness of Aurizon Network's proposed UT4 gamma, please refer to the attached SFG Consulting paper, *An appropriate regulatory estimate of gamma*.

## c) Systematic risk of Aurizon Network: Response to reports and submissions to the Queensland Competition Authority

### 1. Overview

An indication of a firm's systematic risk when compared to the market, the equity beta forms a critical element in deriving the cost of equity and the WACC. Further to its earlier work contained within the 2013 DAU, SFG Consulting has prepared a paper in response to the following reports and submissions regarding estimation of the asset and equity beta:

- a. Castalia Strategic Advisors (2013), *Aurizon Access Undertaking: Risk Allocation Analysis*, report commissioned by the Queensland Resources Council;
- b. Incenta Economic Consulting (2013), *Review of Regulatory Capital Structure and Asset/Equity Beta for Aurizon Network*, a report commissioned by the QCA; and
- c. McKenzie and Partington (2013), *Review of Aurizon Network's draft access undertaking*; a report commissioned by the Queensland Resources Council.

### 2. Equity beta

It is important to highlight that where there is a lack of 'pure play' comparators for an entity, firm beta estimation remains a particularly challenging process. Hence in the absence of such comparators and to undertake accurate beta estimation, a logical and robust methodology requires an assessment of entities that retain similar characteristics to the firm in question.

Engaged as part of the UT4 consultation process, Incenta accepted a request by the QCA to review various elements of Aurizon Network's proposed UT4 Return on Capital requirement, including the asset beta, capital structure and equity beta. In relation to the asset beta, Incenta asserted:

*"...that a benchmark asset beta of 0.35 to 0.49 is appropriate to apply to Aurizon Network, with:*

- The bottom of this range (0.35) being defined by independent expert Grant Samuel's assessment of the asset beta of the Dalrymple Bay Coal Terminal (DBCT), which is a regulated asset in the same coal chain as, and in our view similar systematic risk characteristics to, Aurizon Network;*
- The middle of this range (0.42) being the estimated asset beta of a large international group of regulated energy and water businesses; and*
- The top of this range (0.49) being the estimated asset beta for tollroads, which share some similar characteristics to Aurizon Network but, in our view, are subject to significantly more volume (revenue risk)."<sup>4</sup>*

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<sup>4</sup> Incenta, 2013, pg. 4

Yet in arriving at its conclusions, Incenta undertake a distinctly separate, sequential two-step approach in considering whether firms are relevant comparators for Aurizon Network. Firstly, Incenta sought to identify if a firm was regulated in a manner that closely resembles the framework within which Aurizon Network currently operates, particularly focussing upon both the form of regulation and the contractual arrangements. Secondly, if firms did satisfy the criteria in Step 1, Incenta then undertook further filtering by focussing upon industry and business models, for instance, the level of operational financial leverage or gearing that a firm employs.

In other words, Incenta's sequential approach asserted that it did not matter if a firm was in the same industry or retained the same operational financial leverage, especially if the firm was not regulated in a similar fashion to that of Aurizon Network. As a result, any such firm was essentially excluded from further consideration. SFG Consulting succinctly summarises this issue and states:

*"This is an extension of the sequential manner in which industries are considered to be either relevant or irrelevant for consideration. Airports are considered irrelevant because of light-handed regulation, and Tollroads are only used to construct an upper bound because regulation is not close enough to the framework applied to Aurizon Network. The gearing of these industries suggests that they should have high stability of operational profits, but they are still not assigned weight in reaching a conclusion on beta because they did not overcome the first hurdle of regulatory comparability."*

However in undertaking this unusual approach, Aurizon Network considers it questionable as to what firms were considered relevant and what firms were not. For instance, Incenta has relied extensively on the energy and water businesses to estimate a mid-point value of 0.42 for the asset beta, ignoring other businesses within airport, rail and coal industry sectors, altogether because they did not pass the first stage in the filtering approach.

In any case, Incenta attempted to frame its mid-point estimate by briefly referring to an independent report prepared by Grant Samuel, where the report previously estimated an asset beta of 0.35 for the Dalrymple Bay Coal Terminal (DBCT). In turn, Incenta used 0.35 as its bottom-of-the-range value.<sup>5</sup> However of curiosity to Aurizon Network is that the Grant Samuel report also contained a beta estimate for WestNet Rail of 1.0 to 1.1 when combined with a gearing level of 20% to 25%, based upon analysis of listed rail operations in North America.<sup>6</sup> When reading the description of the WestNet operations, a number of similar characteristics are clearly similar to those of Aurizon Network, yet Incenta believed:

*"...other rail assets regulated by the Economic Regulation Authority (ERA) are not relevant to Aurizon Network, as they refer to assets that have significantly different systematic risks."*<sup>7</sup>

Incenta make no further referral to WestNet nor allow WestNet any further consideration or weighting within its analysis. Hence, the criteria Incenta employed in estimation of the firm beta seems to obviously place an unjustifiable emphasis upon the nature of the regulated asset, whilst at the expense of other relevant characteristics from completely reasonable and comparable firms.

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<sup>5</sup> The Aurizon Network paper, *A comparator analysis of Aurizon Network's commercial and regulatory risks*, discusses the tollroad industry group in greater detail.

<sup>6</sup> Grant Samuel & Associates Pty Ltd, 2010, *Prime Infrastructure: Financial services guide and independent expert's report in relation to the proposal from Brookfield Infrastructure Partners*, 24<sup>th</sup> September 2010

<sup>7</sup> Incenta, 2013, pg. 67

The SFG Consulting paper also assesses the reports commissioned by the Queensland Resources Council, where in considering the methodology and supporting arguments of the Castalia paper, SFG highlight two important limitations. Firstly, the Castalia paper assesses Aurizon Network's revenue and expenditure risks purely on the basis of regulatory and contractual terms, where if a business retains elements that reduce revenue volatility, then that business's overall risk is also lower than another. Secondly, with no quantitative assessment performed upon historical returns or asset value estimates, the Castalia paper combines a set of possible risk exposures with a qualitative based, relative risk assessment. Overall, the Castalia paper contains no quantitative measurement of revenue or expenditure variations upon beta estimates, nor are its relative risk assessment premises supported by empirical evidence. The Castalia paper is discussed in greater detail by the Aurizon Network paper, *A comparator analysis of Aurizon Network's commercial and regulatory risks*.

In relation to the second paper, SFG comment that Mackenzie and Partington highlight the challenge in finding comparable firms for Aurizon Network, further noting that US Class 1 Railroads are different. However in stating that previous regulators have relied upon energy and water networks – also an imperfect comparator – Mackenzie and Partington fail to reach any conclusion on whether they agree with this reliance, or how much weight should be assigned to listed rail or transport businesses.

### 3. Summary

The consideration of a range of information in estimate of firm beta is entirely appropriate for decision-making purposes, particularly where there is an absence of 'pure play' comparators. However, the reliance upon one criteria, i.e., the form of regulation, as the sole basis to provide a recommendation is questionable.

Further, the sequential approach employed by Incenta is of concern to Aurizon Network, as if adopted by the QCA, could quite possibly set a precedent that allows any beta estimate to be engineered for any future regulatory decision.

For further discussion regarding the reasonableness of Aurizon Network's proposed UT4 gamma, please refer to the attached SFG Consulting paper, *Systematic risk of Aurizon Network: Response to reports and submissions to the Queensland Competition Authority*.

#### **d) A comparator analysis of Aurizon Network's commercial and regulatory risks**

##### 1. Overview

Due to the unique nature of the CQCN, the sourcing of relevant comparators has continued to prove an inherently difficult task. Consequently, the process of identifying point estimates for the determination of an appropriate cost of equity becomes an issue of criticality. As a result, three main elements are required within a discretion-based process that:

1. Has regard to all relevant information;
2. Is logical with respect to that relevant information; and

3. Exhibits a high degree of confidence that will not underestimate the true cost of equity (even if it was observable).

Aurizon Network's 2013 DAU proposal followed this approach in estimation of its cost of equity parameters. Specifically, by identifying that some respects of the provision of coal carrying train services within the CQCN exhibit similar – not identical – risk characteristics as a US Class 1 Railroad, and via undertaking robust statistically based analysis, issues affecting Aurizon Network can be more accurately defined.

The Aurizon Network paper, *A comparator analysis of Aurizon Network's commercial and regulatory risks*, builds on the 2013 DAU proposal and provides further comments upon Aurizon Networks asset beta, as well as the commercial and regulatory risks to which the organisation is exposed. In conjunction with the SFG Consulting paper, *Systematic risk of Aurizon Network*, this paper also responds to comments within the following reports and submissions:

- a. Castalia Strategic Advisors (2013), *Aurizon Access Undertaking: Risk Allocation Analysis*, report commissioned by the Queensland Resources Council; and
- b. Incenta Economic Consulting (2013), *Review of Regulatory Capital Structure and Asset/Equity Beta for Aurizon Network*, a report commissioned by the QCA.

## 2. Asset beta

Asset beta forms a critical part in determination of a firm's cost of equity, where by removing the effect of financial risk or debt, the asset beta indicates how volatile a firm is regardless of its capital structure.

However, whilst the cost of debt can be substantiated via comparisons to directly observable market parameters, the components of the cost of equity are substantially more difficult to quantify, particularly due to the short supply of 'pure play' comparators that would allow for statistically robust, empirical estimation.

In recognition of these issues, detailed analysis was undertaken by SFG Consulting and supplied as part of the 2013 DAU. Based upon a robust statistical approach that included data from Australian listed energy companies, Australian listed industrial transportation firms (including Aurizon Holdings Limited), and US Class 1 Railroads, the approach applied three main techniques in estimation of an asset beta including:

1. An Ordinary Least Squares (OLS) regression, utilising different starting points of four weekly returns;
2. The incorporation of firm characteristics into the beta estimates (firm size and book to market equity ratios); and
3. Fitting regression-based beta estimates according to firm characteristics (that is, the dependent variable is the regression-based estimate and the independent variables are firm size, book-to-market ratios and debt-equity ratios).

Based upon the OLS regression technique and depending upon the weights assigned to the sample of Australian-listed energy network firms, Australian-listed Industrial Transportation firms and US-listed railroads, an asset beta between 0.54 – 0.57 was estimated.

It is important to highlight that the above estimated asset beta – same as that proposed in the UT4 submission – is substantially below the actual asset betas assigned to the US Class 1 Railroads. Pointedly, at no point throughout the UT4 submission has Aurizon Network sought an asset beta the same as US Class 1 Railroads. This is further proven when reference is made to the United States Surface Transportation Board (U.S. STB), where based upon the U.S. STB's equity beta of 1.153, an asset beta of 0.95 has been estimated. Hence to imply that Aurizon Network has indicated it is a US Class 1 Railroad is materially inaccurate. This is because such an implication would have yielded a levered equity beta of 1.8, substantially higher than that sought by Aurizon Network within its UT4 submission.

As indicated in the 2013 DAU, Aurizon Network continues to be of the view that in some respects, US Class 1 Railroads possess similar risk characteristics to the CQCN. Specifically:

*“...analysis shows that Aurizon Network’s below-rail business is similar to the US Class 1 railways on a number of systematic risk dimensions. The key difference is that the US Class 1s are more diversified and are also not subject to regulation, although the threat of intrusive regulation would impose some constraints on behaviours. This supports inclusion of these firms in a comparator beta sample, noting that Aurizon Network is not looking to restrict this sample to these firms.”<sup>8</sup>*

Consequently, due to these similar risk characteristics it is not unreasonable to include US Class 1 Railroads within the calculation of Aurizon Network’s asset beta. However when focusing upon the Castalia Strategic Advisors (Castalia) paper, *Aurizon Access Undertaking: Risk Allocation Analysis – Report to Queensland Resources Council*, Castalia has excluded US Class 1 Railroads from its comparative analysis. Specifically:

*“There have been attempts to use evidence from international markets to estimate Australian equity betas. For example Aurizon cites an analysis of the betas from listed US railroad companies as part of its claim for a higher beta. Such international evidence should be treated with caution as:*

- The comparators chosen are almost always not directly comparable – observed betas for US rail companies relate to vertically integrated businesses with both above rail and below rail activities and thus have a materially different risk profile to a below rail business; and*
- Beta can only be derived by reference to the specific market so betas are only comparable between different markets if the markets have similar characteristics – that is the average risk profile of the markets are as comparable as the specific risk profile of the business. A quick comparison of the top 20 stocks in the US and Australia shows that this condition doesn’t hold. International betas can only be compared if they were calculated against a counterfactual of a hypothetical weighted average world equity market.”<sup>9</sup>*

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<sup>8</sup> Aurizon Network, 2013, *2013 Draft Access Undertaking – Volume 3: Maximum Allowable Revenue and Reference Tariffs*, 30<sup>th</sup> April 2013, pg. 143, available at [www.qca.org.au](http://www.qca.org.au)

<sup>9</sup> Castalia Strategic Advisors, 2013, *Aurizon Access Undertaking: Risk Allocation Analysis – Report to Queensland Resources Council*, pg. 12, available at [www.qca.org.au](http://www.qca.org.au)

It is of note that the Castalia paper does not elaborate further upon these differences, notwithstanding this Aurizon Network acknowledges there are differences between US Class 1 Railroads and the CQCN. However despite the existence of these differences, US Class 1 Railroads do and continue to provide a relevant benchmark and point of reference for equity investors in rail infrastructure.

In focusing upon the Incenta Economic Consulting (Incenta) paper, *Review of Regulatory Capital Structure and Asset/Equity Beta for Aurizon Network – Report to the Queensland Competition Authority*, Incenta has included tollroad infrastructure businesses within its asset beta range estimates. Specifically:

*“The 0.49 asset beta estimate for tollroads defines the upper bound of the range. The tolls for tollroads are typically prescribed but not subject to period review (often set as the outcome of an initial tendering process), and as such are more subject to cyclical economic activity than Aurizon Network, and are subject to greater asset stranding risk.”<sup>10</sup>*

Yet the inclusion of tollroads as a suitable comparator industry is questionable. For instance, Incenta asserts that tollroads are not subject to regulation, or, if they are subject to regulation, it is only light-handed in nature. However in truth, the majority of tollroads across Europe operate under a form of price cap. For instance, Atlantia’s annual change in access prices is capped at 70% of CPI for the year plus an x-factor that is compensation for a negotiated investment plan based upon an unlevered IRR. Incenta also assert that tollroads are exposed to greater cyclical economic activity than Aurizon Network, yet little volatility is seen in traffic volumes across the last 7 years, including that covered by the European Debt Crisis. Even when placing aside the wide dispersal of asset beta’s across the tollroad industry, it is for these reasons that Aurizon Network does not agree with Incenta in the inclusion of tollroads in the asset beta range analysis, particularly when used as a cap on the asset beta for the CQCN.

A number of stakeholder submissions to the 2013 DAU also made point about the ‘de-risking’ of Aurizon Network’s role within the CQCN, including but not limited to the take-or-pay mechanism, capacity reservation charges, annual volume resets and revenue cap adjustment amounts. As a consequence of such changes, reductions to the firm’s asset beta should also be undertaken. However, there is no justification for adjusting the asset beta for changes in risk allocation as:

- Any changes in risk allocation which have been made relate to asymmetric risks;
- There has been no empirical valuation by stakeholders of the materiality of any change in risk allocation;
- No empirical evidence has been presented to demonstrate that systematic risk changes as a consequence of the nature of the risk allocation; and
- Previous regulatory determinations by the QCA have not compensated Aurizon Network for changes in risk allocation.

### 3. Aurizon Network’s commercial and regulatory risks

In regards to the commercial and regulatory risks faced by Aurizon Network, Aurizon Network has undertaken a comprehensive appraisal of the papers prepared by Incenta and Castalia. In completion of that review, a range of issues and material errors have been identified. For example, in regards to:

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<sup>10</sup> Incenta Economic Consulting, 2013a, *Review of Regulatory Capital Structure and Asset/Equity Beta for Aurizon Network – Report to the Queensland Competition Authority*, pg. 16, available at [www.qca.org.au](http://www.qca.org.au)

- Revenue risks across the short-term (monthly), medium-term (annual) and long-term (regulatory reset) periods, the Castalia paper indicates that take-or-pay arrangements substantially mitigate the cash flow timing differences from volume fluctuations.<sup>11</sup> However significant monthly cash flow timing impacts are associated with volume fluctuations and as a result, the working capital and financing risks associated with cash flow timings are substantially more material than those associated with the direct industry comparators and other regulated utilities;
- Inflation risks associated with the RAB roll-forward, operating and maintenance cost escalation, as well the electricity supply cost pass-through. Case in point, the Castalia paper states that Aurizon can vary its reference tariffs to compensate for differences between forecast and actual energy costs.<sup>12</sup> Yet such a position is misleading and not relevant to the beta comparison with other regulated utilities as the supply of energy within the CQCN is an undeclared service and therefore not relevant to the WACC on the regulated service;
- Asset stranding risks. In asserting that Aurizon Network is not subject to such asset stranding risk, Incenta rely upon coal export forecasts produced by the US Energy Information Administration (EIA).<sup>13</sup> Yet there are two material oversights within the utilisation of the EIA data as (1) the forecasts reflect only thermal coal production and exports for energy generation purposes, therefore excluding the metallurgical proportion of the current export market within the CQCN; and (2) coal demand is not disaggregated into relevant coal basins, presuming that all coal produced in central Queensland will be exported via the existing CQCN rail infrastructure;
- Expenditure risks. For example, the Castalia paper indicates that Aurizon Network bears little expenditure risk, where any such risk is mitigated by the QCA and the ability to obtain pre-approval of the procurement methodology.<sup>14</sup> However the statement essentially overstates the protections associated with pre-approval of the procurement strategy, particularly when such protections are only for major projects that are limited to the procurement model and not the management of the project; and
- Regulatory risks, where due to the uniqueness of the CQCN, mean that regulatory error is particularly relevant. The Castalia paper notes the partial mitigation that judicial review serves in relation to regulatory error, however the recognition of judicial review confuses the concept of due process with regulatory error.<sup>15</sup>

Aurizon Network considers that the key systematic risks regulated business are confronted with revolve around factors that (1) substantially alter the cash-flow beta through EBIT variability; (2) discount beta via inflation and the associated impacts upon real returns; and (3) the medium to long term demand risks due to economic impacts.

Based upon these risks, Aurizon Network considers it bears considerably greater risks than regulated energy and water utilities.

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<sup>11</sup> Castalia, 2013, pg. 14

<sup>12</sup> Castalia, 2013, pg. 15

<sup>13</sup> Incenta, 2013a, pg. 31

<sup>14</sup> Castalia, 2013, pg. 15

<sup>15</sup> Castalia, 2013, pg. 16

## 4. Summary

Aurizon Network recognises that estimation of the cost of equity will often involve a degree of subjectivity, that requires the assessment of available data and information so as to obtain a point estimate that is reasonable when assessed against its comparators. In that light, the reasonableness of Aurizon Network's equity margin and gearing ratio proposal can easily be framed against recent and entirely relevant regulatory decisions.

In assessing both direct and indirect comparators across export and rail transportation services, Figure 3 below illustrates that both Aurizon Network's equity margin and gearing ratio sets well within the middle of the comparators.

**Figure 3 – Recent Regulatory Decisions (Equity Margin vs Gearing)**



Of further note is the proposed equity margin by the Queensland Resources Council (QRC). In its WACC submission upon the 2013 DAU, the QRC proposed an equity margin of 2.65%. Aurizon Network considers this unreasonable as:

- It is only marginally higher than the cost of debt proposed by the QRC;
- Is based on a very limited set of comparators unrelated to export supply chains or transportation services;
- It does not address the material and readily apparent disparity between the equity margin of 2.65% and 'industry agreed' equity margins in supply chain infrastructure access arrangements; and
- The QRC WACC submission provides no evidence of equity return expectations inherent in the pricing of privately owned and unlisted supply chain infrastructure providers, many of which have substantially lower risk profiles than that of Aurizon Network.

For further discussion regarding the reasonableness of Aurizon Network's proposed UT4 asset beta, the commercial and regulatory risks associated with the provision of coal carrying services and an augmented comparative risk analysis within the Castalia report, please refer to the attached Aurizon Network paper, *A Comparator Analysis of Aurizon Network's Commercial and Regulatory Risks*.

## IV Cost of Debt

As part of the UT4 consultation process, the QCA commissioned two papers in relation to the various elements required in establishing the cost of debt, including:

- PricewaterhouseCoopers, 2013, *A Cost of Debt Estimation Methodology for Businesses Regulated by the Queensland Competition Authority*; and
- Incenta, 2013, *Aurizon Network: Review of Benchmark Credit Rating and Cost of Debt*.

In relation to the benchmark credit rating – an element used to derive the cost of debt for a firm in deriving the return on the regulated asset base – Incenta recommended a benchmark credit rating of BBB+. Aurizon Network notes that this rating aligns to the Standard and Poor's credit rating at the targeted capital structure of 55%. Whilst Aurizon Network agrees with Incenta's recommendation, Aurizon Network would also like to note that the comparisons with other regulated utility providers in terms of credit metrics required for maintaining a BBB+ rating are not relevant, as rating agencies require tighter metrics due to its specific risk profile.

Both PWC and Incenta also provided advice on the benchmark debt term. PWC recommend a benchmark debt term of 10 years, stating:

*"...we recommend that the benchmark term of debt (T) be set at 10 years, as evidence indicates an average term that is close to 10 years at the present time."*<sup>16</sup>

Incenta, supported this recommendation and asserted that:

*"...PWC...concluded that a benchmark debt term of 10 years continues to be appropriate for Australian regulated businesses. As we consider these to exhibit many close characteristics to Aurizon Network, we therefore consider that a benchmark debt term of 10 years is also appropriate for Aurizon Network."*<sup>17</sup>

Yet Aurizon Network notes that Incenta's analysis and conclusions on the benchmark cost of debt are constrained to application in the approach recommended by Dr Lally, previously used by the QCA in regulatory determinations (excluding the Dalrymple Bay Coal Terminal) since its pricing determination on UT3 in June 2010. Aurizon Network draws attention to this application as the UT4 proposal cost of debt estimates were based on a fixed yield for a 10 year term. However, Incenta do not consider the merits of UT4 proposal as they simply note that:

*"...Aurizon Network's cost of debt estimates are for a 10 year term fixed yield, and are based on the 10 year risk free rate, which is not consistent with the Authority's preferred approach (i.e. the Lally methodology)."*<sup>18</sup>

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<sup>16</sup> PWC, 2013, pg. ii

<sup>17</sup> Incenta Economic Consulting, 2013b, *Aurizon Network: Review of benchmark credit rating and cost of debt*, pg. 7, November 2013, available at [www.qca.org.au](http://www.qca.org.au)

<sup>18</sup> Incenta, 2013, pg. 10

Aurizon Network considers it important to highlight that in assessing a draft access undertaking, the QCA is required to consider the merits of that proposal under s.138 of the QCA Act. In this respect, Aurizon Network notes that its proposal to employ a 10 year term fixed yield is consistent with:

- The approach submitted by DBCT; and
- Recent determinations by the Independent Pricing and Regulatory Tribunal (IPART) and the Australian Energy Regulator (AER).

Specifically, in approving the cost of debt methodology submitted by DBCT under a voluntary access undertaking, the QCA did not consider that a 10 year fixed term yield was inconsistent with the QCA Act for a regulatory period of 5 years. Additionally, in relation to rate of return guidelines produced by the AER, Aurizon Network notes that the objectives of the electricity and gas legislation are broadly commensurate with the objects clause in relation to promoting efficient investment and operation the regulated service.

Legislation	Objects Clause
Queensland Competition Authority Act 1997, s69E	The object of this part is to promote the economically efficient operation of, use of and investment in, significant infrastructure by which services are provided, with the effect of promoting effective competition in upstream and downstream markets.
National Electricity (South Australia) Act 1996	The objectives of the NEL are: to promote efficient investment in, and efficient operation and use of, electricity services for the long term interests of consumers of electricity with respect to – <ol style="list-style-type: none"> <li>1. price, quality, safety, reliability, and security of supply of electricity; and</li> <li>2. the reliability, safety and security of the national electricity system</li> </ol>

Accordingly in the absence of manifest error by the AER or IPART, Aurizon Network does not consider that its proposal to determine the benchmark cost of debt with reference to a 10 year fixed term yield is inconsistent with the s.138 of QCA Act.

Aurizon Network notes that in considering the merits of using the Bloomberg fair value yield curve, the AER acknowledged that the application of the trailing average approach would have the effect of negating any error in Bloomberg estimates (assuming such variations are symmetrical and unbiased). In this respect, Aurizon Network notes that Incenta do not conclude whether the extrapolated or paired bonds approach provides a superior estimate.

Aurizon Network also considers that the most appropriate approach is dependent upon the cost of debt methodology employed. To the extent that Aurizon Network's 10 year fixed term yield is consistent with s.138, then the lower estimate should be utilised. Should the QCA deem Aurizon Network's proposal to

be inconsistent with s.138 and the Lally method is employed, then Aurizon Network recommends that the QCA should adopt the higher estimate.

Irrespective of which estimate is employed, Aurizon Network notes that the QCA should also have regard to the comparable WACC and return on equity outcomes with those that would prevail under the AER and IPART approaches. Estimates of the 10 year fixed term yield have been derived from Incenta's analysis and applied to the yield on 10 year Commonwealth government securities over the averaging period as shown in the following table:

	<b>Econometric Methodology</b>	<b>Extrapolated Methodology</b>
Risk Free Rate (10yr CGS)	3.98%	3.98%
10 Year Debt Risk Premium	2.72%	2.51%
Debt Raising Costs	0.10%	0.10%
<b>Cost of Debt</b>	<b>6.78%</b>	<b>6.59%</b>

The implication of the differences in the cost of debt approaches on the overall WACC and return on equity are evident in the following table.

<b>Metric</b>	<b>QCA Experts</b>	<b>AER (Raw)</b>	<b>AER (Adjusted)</b>	<b>IPART (Short)</b>	<b>IPART (Long)</b>
Rf	3.36%	3.98%	3.98%	3.98%	5.10%
MRP	6.00%	6.50%	6.50%	7.90%	6.00%
Beta	0.73	0.65	0.77	0.73	0.73
<b>Cost of Equity</b>	<b>7.74%</b>	<b>8.21%</b>	<b>9.01%</b>	<b>9.75%</b>	<b>9.48%</b>
Gearing	55%	55%	55%	55%	55%
Cost of Debt	6.14%	6.80%	6.14%		
<b>WACC</b>	<b>6.86%</b>	<b>7.43%</b>	<b>7.43%</b>		

The raw AER cost of equity is adjusted to determine the beta estimate required to obtain the same WACC outcome associated with application of the AER methodology. While IPART has indicated it will determine a 10 year cost of debt, it has deferred consideration of the appropriate methodology until a relevant determination. For comparative purposes Aurizon Network has selected the lower bound for the beta estimate IPART considers appropriate for transportation services.

The table is instructive in that it shows the recommendations by the QCA's consultations would yield materially lower return on equity and overall WACC outcomes than would be obtained under the AER rate of return guidelines and the lowest beta bound for transport services under IPART.

Given our findings that Aurizon Network has a greater risk profile than regulated water and electricity utilities, then it would not be expected that the cost of equity could be less than 9.5% under the Lally methodology.

Aurizon Network notes that the debt raising costs are broadly consistent with recent capital raisings. However, the allowance for interest rate swap costs are at the low end of market activity. Our experiences suggest that changes to bank regulation has and will continue to increase these costs. Accordingly, Aurizon Network considers this would provide further weight to employing the econometric methodology should the use of a 10 year fixed term yield be found to be inconsistent with the QCA Act.

Finally, Aurizon Network undertook its UT4 WACC averaging period across the 20 business days beginning Friday 4<sup>th</sup> October 2013, to Thursday 31<sup>st</sup> October 2013 (inclusive). Whilst a longer averaging period remained the preference for Aurizon Network, the 20 day averaging period:

- Was completed after Aurizon Holding's debt refinancing and restructuring;
- Was consistent with recent regulatory decisions regarding duration;
- Avoided times associated with typical low liquidity; and
- Allowed an efficient implementation of the hedging plan, particularly given the quantum of the debt involved.

Although the QCA has not finalised its view regarding the averaging period, the QCA indicated it was favourably disposed to an averaging period that occurred at this time. Yet in contrast to the regulatory framework of the National Electricity Rules, there are no provisions in the QCA Act that require the QCA to agree to the period. However, the QCA is required to assess such matters in relation to Section 138(2) of the QCA Act, particularly that pertaining to the legitimate business interests of Aurizon Network.

## V Conclusion and Customer Engagement

Aurizon Network's 2013 DAU aims to promote both customer-focused outcomes and efficient investment in infrastructure across the CQCEN, where the Return on Capital requirement – underpinned by the WACC – is a fundamental element in achieving these objectives.

Comprised of the both cost of debt and the cost of equity, the WACC must be established in light of the Pricing Principles contained within the QCA Act, particularly Section 168A(a) which states:

*“...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”.*

In achieving an outcome that is consistent with Section 168A(a) and the intentions of the 2013 DAU, the UT4 submission extensively outlined Aurizon Network's WACC requirements; the rationale, basis and reasonableness of such requirements; and why the determination of a reasonable WACC is crucial for the ongoing and efficient operation of the CQCEN that continues to effectively operate within a market that evolves despite market volatility.

In that light, Aurizon Network reaffirms its WACC requirements and continues to seek a WACC outcome as proposed within the UT4 submission. When considered pragmatically and compared against recent regulatory decisions, the reasonableness of Aurizon Network's WACC is clearly apparent.

Aurizon Network would also like to acknowledge the contribution stakeholders have made throughout the UT4 process thus far. Recognising that the undertaking process is intensive exercise, the process is absolutely necessary for the continued and efficient operation of the CQCEN. Aurizon Network therefore remains committed in working with the QCA and stakeholders towards a goal of a draft pricing decision by the 30<sup>th</sup> June 2014.