Queensland Competition Authority

Draft Decision on Maximum Allowable Revenue

Aurizon Network's 2014 Draft Access Undertaking

30 September 2014

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Background to Draft Decision: 2014 DAU MAR

About the QCA

We, the Queensland Competition Authority (QCA), are an independent statutory authority established in 1997 to promote competition as the basis for enhancing efficiency and growth in the Queensland economy.

Our role is to ensure that monopoly businesses operating in Queensland, particularly in the provision of key infrastructure, do not abuse their market power through unfair pricing or restrictive access arrangements.

Our role has expanded to allow us to be directed to investigate, and report on, any matter relating to competition, industry, productivity or best practice regulation, and review and report on existing legislation. Our role is to improve the prosperity of Queenslanders by promoting competitive markets, productivity and better regulation.

Central Queensland Coal Network (CQCN) - third party access access regime overview

Access regulation supports competition by enabling third parties to access essential infrastructure which cannot be economically duplicated.

The CQCN is declared for third party access in accordance with Part 5 of the QCA Act.

As a result, Aurizon Network (as access provider) and access seekers are subject to various rights and obligations under the access regime.

Under the access regime, Aurizon Network and an access seeker who wants to secure access to the network must negotiate in good faith to reach agreement on the terms and conditions for access.

If agreement cannot be reached, either party may refer the dispute to us for resolution under the QCA Act. Aurizon Network's access undertaking establishes the principles that guide negotiations for access to the CQCN. This increases certainty and minimises the potential for access disputes to arise. Parties can agree to other terms and conditions on a case by case basis – but if negotiations fail, we resolve disputes in accordance with the access undertaking.

Aurizon Network's existing undertaking (UT3) is set to expire in 2015.

Aurizon Network's 2014 Draft Access Undertaking (2014 DAU) proposes the new terms and conditions upon which access to the CQCN is made available to third parties.

We are assessing the 2014 DAU in accordance with the legislated requirements set out in the QCA Act.

About Aurizon Network and the CQCN

Aurizon Network is a wholly owned subsidiary of Aurizon Holdings Limited.

Aurizon Network owns and operates the below-rail network (the CQCN) and is responsible for negotiating access with parties seeking to use this rail network.

Aurizon Network generates revenue in the form of access charges to the network. Access to the network (including the revenue Aurizon Network is entitled to earn) is regulated in accordance with the QCA Act.

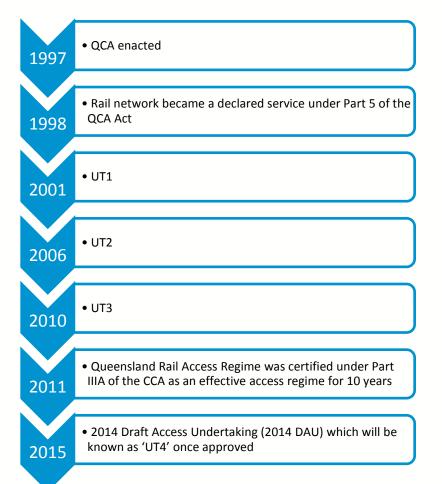


Aurizon Network is part of the broader coal supply chain in central Queensland, carrying coal from mines either for export or for domestic use

The CQCN is the largest coal rail network in Australia. The CQCN is made up of five coal systems: Newlands, Goonyella, Blackwater, Moura and Goonyella to Abbot Point (GAP).

Aurizon Network has held 99 year leases of the CQCN assets since July 2010. The term of the leases may be extended for rolling periods of 99 years following 20 years notice.

CQCN regulatory history



Rail access regime commenced in 1997.

The CQCN was declared under Part 5 of the QCA Act for third-party access.

Queensland Competition Authority administers the access regime.

In 2010, ownership of CQCN separated from remainder of Queensland narrow gauge network.

In 2011, the Queensland Rail Access Regime was certified under the *Competition and Consumer Act 2010* (Cth) (CCA) as an effective access regime for 10 years.

This stops the CQCN from becoming declared under the National Access Regime.

Objectives of an access undertaking

An access undertaking sets out the general terms and conditions for negotiating access.

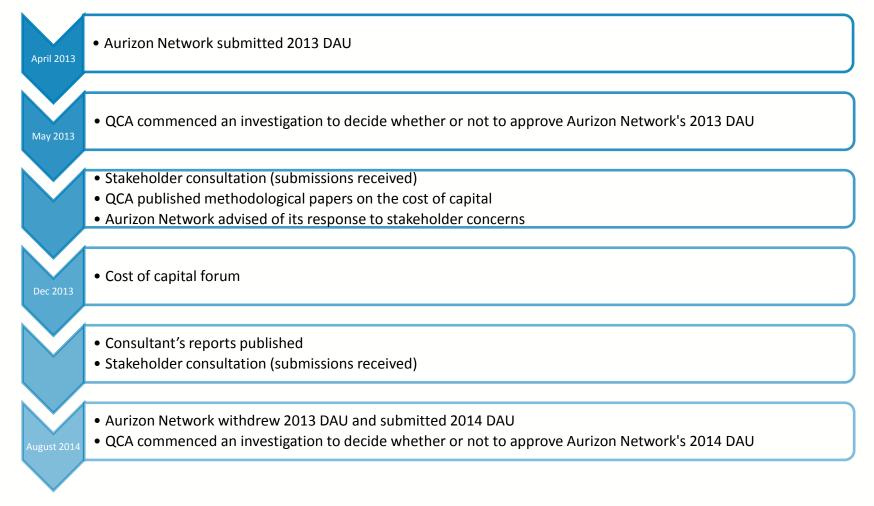
Aurizon Network's access undertaking includes:

- the framework for access negotiations
- ring-fencing arrangements
- utilisation of network capacity
- pricing principles (reference tariffs) and the mechanism for varying those tariffs
- reporting.

An access undertaking increases certainty and minimises the potential for access disputes to arise.

Parties can agree to other terms and conditions on a case by case basis – but if negotiations fail, we resolve any disputes in accordance with the access undertaking. An access undertaking establishes the principles that will guide negotiations for access.

2014 DAU(UT4) process to date



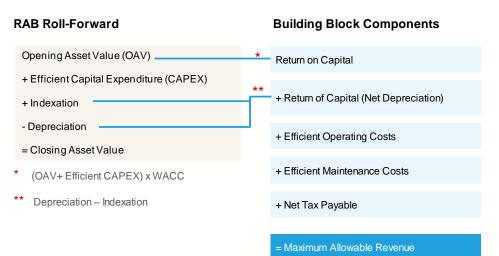


MAR – Building Block Approach

The MAR is the total revenue Aurizon Network is permitted to earn each year, determined in accordance with the 'regulatory asset base' (RAB) and 'building block methodology' (BBM).

The MAR is then used as a basis for calculating reference tariffs for the CQCN.

We consider that the MAR in our draft decision is consistent with section 168A(a) of the QCA Act as it leads to prices for access to the declared service that generate expected revenue for the service that is at least enough to meet the efficient costs of providing access to the service and includes a return on investment commensurate with the regulatory and commercial risks involved.



Approach to assessing Aurizon Network's MAR

Our approach to assessing Aurizon Network's submitted maximum allowable revenue (MAR) is set out below:

1) Assessment of Aurizon Network's submitted regulatory asset base (RAB) roll forward model 2) Assessment of Aurizon Network's submitted assumptions, inputs and adjustments

3) Assessment of Aurizon Network's submitted post tax revenue model 4) Assessment of Aurizon Network's submitted reference tariffs and system allowable revenues

2014 DAU MAR Draft Decision (Sep 2014)

2014 DAU Draft Decision (Dec 2014)

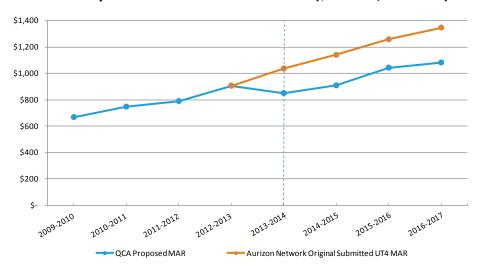
QCA Draft Decision: 2014 DAU MAR

Our Draft Decision is a proposed MAR of \$3.88¹ billion for the 2014 DAU period (2013–14 to 2016–17).

Our proposed MAR is 19 per cent lower than the \$4.78 billion MAR originally proposed by Aurizon Network, but 14 per cent higher, in real terms, than the approved MAR for UT3.

Our Draft Decision is based on consideration of Aurizon Network's 2014 DAU MAR submission and supporting documentation; extensive stakeholder consultation and has been informed by a range of independent expert reports.

We consider it is appropriate to release a Draft Decision on the MAR now so that interested parties can direct their submissions at the methodology adopted and the analysis undertaken.



MAR comparison over UT3 and 2014 DAU (\$ million, nominal)

Queensland Competition Authority

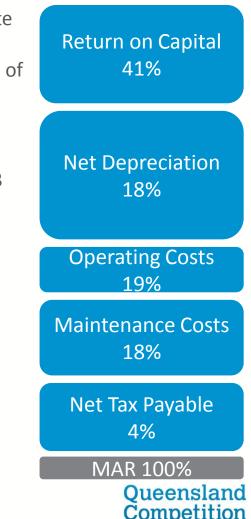
¹ Proposed MAR is unsmoothed and includes UT3 CAPEX carryover adjustments.

QCA Draft Decision 2014 DAU MAR Summary

| Building Block (\$ million, nominal) | FY14 | FY15 | FY16 | FY17 | Total | Proporti on of MAR (%) |
|--------------------------------------|-------|-------|-------|-------|-------|---------------------------------|
| Operating costs | 176 | 185 | 198 | 203 | 761 | 19% |
| Maintenance costs | 174 | 178 | 188 | 197 | 738 | 18% |
| Return of capital | 271 | 300 | 352 | 376 | 1,299 | 100/ |
| less Inflation | (124) | (132) | (161) | (161) | (578) | 18% |
| Return on capital | 355 | 379 | 462 | 461 | 1,657 | 41% |
| Тах | 56 | 60 | 75 | 80 | 270 | 40/ |
| less Imputation credit value | (26) | (28) | (35) | (38) | (127) | 4% |
| Total (unsmoothed) MAR | 882 | 942 | 1,078 | 1,118 | 4,020 | 100% |
| UT3 CAPEX carryover adjustments | (32) | (33) | (35) | (36) | (135) | |
| Total proposed MAR | 850 | 909 | 1,043 | 1,082 | 3,884 | |

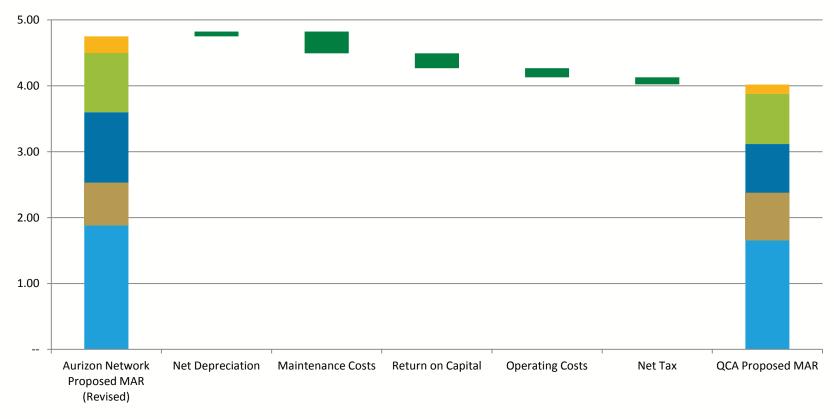
Breakdown of QCA's Proposed MAR in UT4

- A lower return on capital based on WACC of 7.17%; risk free rate of 3.21% (four-year bond rate for 20 day averaging period to 31/10/14); market risk premium increase to 6.50%; equity beta of 0.8 (same as UT3); imputation credit value increase to 0.47
- An increase in net depreciation determined using:
 - Remaining useful asset lives for UT1 and UT2 assets
 - Lower of remaining economic asset lives or 20 years for UT3 and UT4 assets
- A reduction in operating cost allowance to align with our estimate of efficient services for the central Queensland coal network
- A reduction in maintenance cost allowance to align with our estimate of efficient services for the central Queensland coal network
- A reduction in tax allowance as a result of lower free cash and higher imputation credit value, and consequently, Aurizon Network's MAR



Authority

QCA's proposed reduction to Aurizon Network submitted MAR (\$ billion, nominal)



Return on Capital Net Depreciation Maintenance Costs Operating Costs Tax



Aurizon Network MAR: Building Block Components

Operating costs

We have proposed a number of changes to Aurizon Network's submitted operating costs based on our assessment of efficient operating costs for the CQCN.

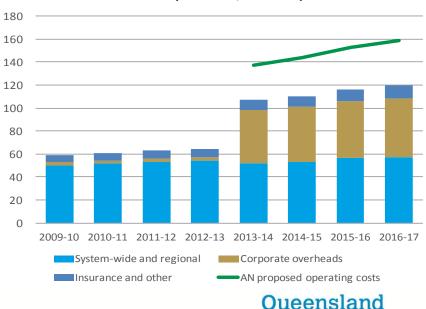
While our Draft Decision for operating costs is lower than submitted by Aurizon Network, it is substantially higher than for UT3, largely due to a proposed increase in the corporate overhead allowance.

| Operating Costs (\$m, nominal) | FY14 | FY15 | FY16 | FY17 |
|--|------|------|------|------|
| System-wide and regional costs | 52 | 53 | 57 | 57 |
| Corporate overheads ¹ | 46 | 48 | 50 | 51 |
| Insurance and other ² | 9 | 9 | 10 | 11 |
| Total operating costs (non-electric) | 107 | 110 | 116 | 120 |
| Transmission connection charge (electric assets) | 68 | 74 | 81 | 83 |
| Proposed operating costs (Total) | 176 | 185 | 198 | 203 |

Notes: (1) QCA proposed corporate overheads includes the corporate overheads relevant to maintenance costs. (2) Values include condition-based assessment costs.

We are proposing a reduction of \$139 million over four years largely due to:

- a \$85 million reduction to corporate overheads
- a \$31 million reduction to system-wide and regional costs
- a \$23 million reduction by removing environmental charges from operating expenditure allowances.



Competition

Authority

Operating costs (non-electric assets) UT3 approved and UT4 QCA Draft Decision (\$ million, nominal)

Maintenance costs (excluding ballast)

We accepted the majority of Aurizon Network's direct maintenance costs, however, our Draft Decision is the rerailing costs should be treated as asset renewals (capital expenditure).

Aurizon Network's direct maintenance costs should remain relatively consistent from UT3 to the 2014 DAU period.

For indirect costs, we proposed:

- Removing corporate overheads—operating cost allowance provides for both operating and maintenance overheads
- Removing return on working capital and inventory these costs are already provided for through assumptions in Aurizon Network's post-tax revenue model
- Adjusting return on assets—we have not approved Aurizon Network's proposal to change from a historical cost to a gross replacement value

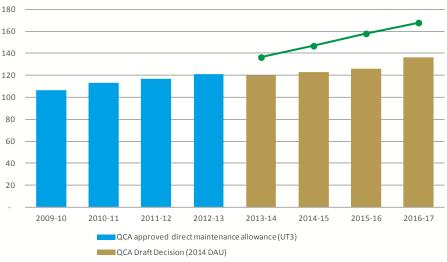
A \$12 million net reduction to account for revised volumes over the UT4 period.

A \$46 million reduction resulting from the use of our forecast escalation rates (e.g. the MCI, CPI).

| Draft Decision (\$m) | FY14 | FY15 | FY16 | FY17 |
|-----------------------------|------|------|------|------|
| Direct costs | 161 | 158 | 163 | 168 |
| Indirect costs ¹ | 4 | 7 | 6 | 5 |
| Total (\$2011-12) | 165 | 164 | 169 | 172 |
| Total (\$ nominal) | 174 | 178 | 188 | 197 |

Note: (1) Corporate overheads relevant to maintenance costs have been removed from indirect maintenance costs, and included in our proposed corporate overheads for operating costs.

Direct maintenance costs UT3 approved and UT4 QCA Draft Decision (\$ million, nominal)



Aurizon Network submitted 2014 DAU direct maintenance allowance



Ballast undercutting costs

Our Draft Decision proposes a ballast undercutting cost allowance for the 2014 DAU period of \$209.93 million, compared to the \$326.64 million originally proposed by Aurizon Network.

We also proposed to approve reversing the ballast impairment charge applied in UT3, but only for the 2014 DAU.

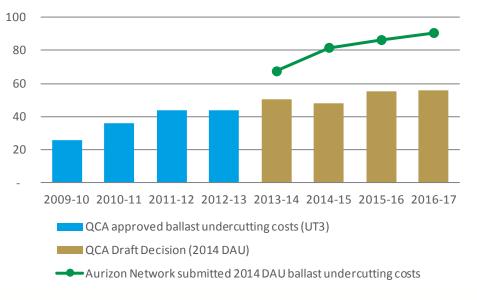
Our Draft Decision is based on the information we have at this time. It reflects that we do not have sufficient evidence to convince us that:

- Aurizon Network's proposal reflects an efficient scope of ballast undercutting for the 2014 DAU period, and
- it does not include costs which have already been recovered from customers in previous undertaking periods.

We have indicated we will reconsider our position if Aurizon Network is able to provide more evidence to support its claim that its ballast undercutting proposal for the 2014 DAU period is efficient in scope and cost.

| Draft Decision (\$ million) | FY14 | FY15 | FY16 | FY17 |
|-----------------------------|------|------|------|------|
| Total (\$ 2011-12) | 48 | 44 | 50 | 49 |
| Total (\$ nominal) | 51 | 48 | 55 | 56 |

Ballast undercutting costs UT3 approved and UT4 QCA Draft Decision (\$ million, nominal)



Return of Capital (Depreciation)

Our Draft Decision is not to accept Aurizon Network's proposal to change its depreciation arrangements to reflect its estimate of Weighted Average Mine Lives in the CQCN (average 25 years).

We agreed to a change to depreciation arrangements in UT3 to deal with concerns about asset stranding risk. We are not convinced that Aurizon Network's asset stranding risk has changed materially since then.

Instead, we propose to retain the 20-year rolling asset life for assets commissioned post 1 July 2009, with the remaining economic lives applied for assets commissioned prior to 1 July 2009.

Aurizon Network had also proposed to commence depreciating its assets in the year after commissioning for UT4. Our Draft Decision is not to accept this change to the depreciation arrangements and continue depreciating Aurizon Network's assets from the year of commissioning.

| Depreciation (\$ million) | FY14 | FY15 | FY16 | FY17 |
|---------------------------------|-------|-------|-------|-------|
| QCA Draft Decision | 271 | 300 | 352 | 376 |
| Inflation | (124) | (132) | (161) | (161) |
| Depreciation (net of inflation) | 147 | 168 | 191 | 215 |

Overall, the use of different assumptions for depreciation arrangements provides Aurizon Network with an additional \$74 million over four years.

Return on Capital - WACC

- We use the WACC to determine the regulated rate of return.
- The WACC is applied to the RAB to determine the regulated revenue.
- The WACC is set based on the expected cost of capital for an efficient benchmark firm and may not represent Aurizon Network's actual cost of capital.

UT4 Proposed WACC

- The Capital Asset Pricing Model is used to calculate the cost of equity component of the WACC. Key determinants are :
 - (a) Risk-free rate¹ we have used a four-year term to maturity, matching the regulatory period
 - (b) Market risk premium increased to reflect recent data
 - (c) Equity beta the QCA proposes an asset beta of 0.45. With 55% gearing and debt beta of 0.12, this results in an equity beta of 0.8
- Key determinants of cost of debt component are:
 - (a) Risk-free rate¹ same as for cost of equity
 - (b) Debt risk premium¹ econometric approach used to determine margin for 10-year BBB+ rated debt
- We have used 55% gearing to determine overall WACC.

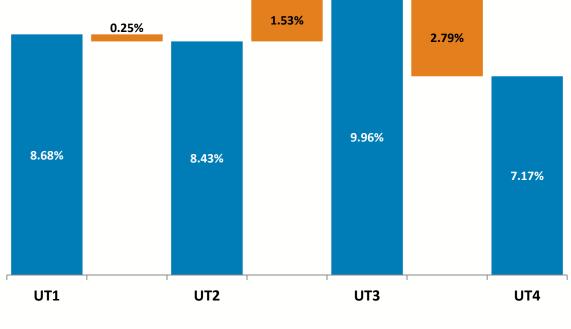
| Financial Outcomes | 2014 DAU Proposal | QCA MAR Draft Decision |
|---------------------------|----------------------|---------------------------|
| Risk-free rate | 3.15% ¹ | 3.21% ² |
| Market risk premium | 7.0% | 6.5% |
| Equity beta | 1.0 | 0.8 |
| Cost of equity (post-tax) | 10.15% | 8.41% |
| Debt risk premium | 3.28% | 2.72% |
| Debt transaction costs | 0.125% | 0.221% |
| Cost of debt (pre-tax) | 6.56% | 6.15% |
| Gearing | 55% | 55% |
| Vanilla WACC (post-tax) | 8.18% | 7.17% |

¹ Based on a 10–year term to maturity and a 20 business day average to 30 November 2012.

² Based on a four–year term to maturity and a 20 business day average to 31 October 2013.



WACC – AN proposal 8.18% versus QCA 7.17%



VANILLA WACC (POST TAX)

Tax allowance

- An allowance is provided for Aurizon Network's tax costs within the building blocks.
- A value is attributed to franking credits –'gamma'. The impact of gamma is to reduce the cost of equity by the value attributed to franking credits in the hands of shareholders.
- Gamma was valued at 0.5 in UT3, which resulted in the tax revenue building block being based on an effective tax rate of 15%.
- In UT4, we are proposing a gamma of 0.47, based on empirical evidence – this compares to Aurizon Network's proposal of 0.25.
- The tax building block is determined as 'tax payable' less the value of imputation credits, where:
 - Tax Payable = [Building Block Revenue less Tax Expenses] x 30% Corporate Tax Rate (TC)
 - Tax expense includes: Tax depreciation, operating and maintenance costs and interest (return on debt)

| Draft Decision (\$ million) | FY14 | FY15 | FY16 | FY17 |
|------------------------------|------|------|------|------|
| Tax allowance (gamma = 0.47) | 30 | 32 | 40 | 42 |

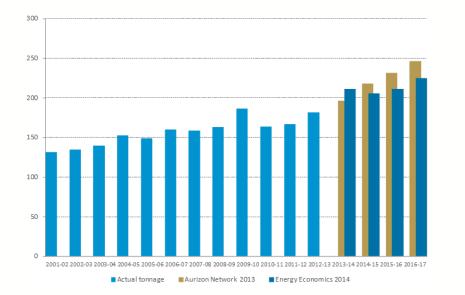
• Aurizon Network's effective tax rate is determined by the value of gamma (G), and as such, G has a direct impact on Aurizon Network's allowable revenue

Effective Tax Rate = TC x (1-G)

- The change in value of imputation credits (gamma) from 0.5 (UT3) to 0.47 (UT4) results in an increase in the effective corporate tax rate to 15.9% from 15%.
- The combined effects of the increase in the RAB and the value of the assets in the RAB that are close to or fully depreciated for (regulatory) tax purposes increases the tax allowance.

Volume forecasts for 2014 DAU tariffs

- Volumes are based on actual contracts that exist and the assumption that all contracts will be renewed at their current value.
- Volumes used for UT4 tariff calculation are adjusted to account for the variances that occur between contracted tonnes and actual tonnes.
- Forecast volumes and tariffs are updated annually and so forecasts are indicative.



| Forecasts tonnes | FY14 | FY15 | FY16 | FY17 |
|------------------|-------|-------|-------|-------|
| Blackwater | 64.3 | 58.9 | 57.6 | 59.1 |
| Goonyella | 109.4 | 105.1 | 102.8 | 108.8 |
| Moura | 12.3 | 12.4 | 12.7 | 13.2 |
| Newlands | 12.8 | 13.9 | 16.2 | 17.8 |
| GAPE | 12.3 | 13.3 | 15.2 | 15.5 |
| WIRP Stage 1 | 0.0 | 2.1 | 6.7 | 10.8 |
| Total | 211.0 | 205.6 | 211.1 | 225.1 |

Source: Energy Economics and supporting papers

| Forecast versus Contracted Volumes for the UT4 period | | | | | | |
|---|-------|-------|-------|--|--|--|
| | | | | | | |
| Forecast volumes (mtpa) | 211.0 | 203.5 | 224.3 | | | |
| Contracted volumes (mtpa) | 268.0 | 290.4 | 308.9 | | | |
| % below contract | -21% | -30% | -27% | | | |



Indicative Tariffs for the 2014 DAU

- Our Draft Decision relates to the MAR only.
- We are not making a decision on Aurizon Network's proposed reference tariffs at this time, but intend to do so in the second Draft Decision.
- We understand that information on a MAR level may not be as useful to certain stakeholders, particularly Aurizon Network's customers, as the proposed reference tariffs themselves.
- As such, we are providing information (i.e. indicative tariffs) that takes account of volume forecasts to assist these stakeholders to respond to the Draft Decision.
- The indicative tariffs are intended to provide guidance to stakeholders on what they may be paying to gain access to Aurizon Network's declared service, on a dollar per net tonne basis, for the 2014 DAU period.

| SYSTEM | FY14 | FY15 | FY16 | FY17 | | | |
|--|------|------|------|------|--|--|--|
| Non-Electric MAR (dollar per net tonne) | | | | | | | |
| Blackwater | 3.83 | 4.36 | 4.45 | 4.69 | | | |
| Goonyella | 2.45 | 2.58 | 2.76 | 2.69 | | | |
| Moura | 3.28 | 3.33 | 3.29 | 3.33 | | | |
| Newlands | 3.24 | 3.61 | 3.55 | 3.35 | | | |
| GAPE | 8.59 | 8.19 | 8.19 | 8.16 | | | |
| Average CQCN | 4.28 | 4.41 | 4.45 | 4.44 | | | |
| | | | | | | | |
| Electric MAR (dollar per electric net tonne) | | | | | | | |
| Blackwater | 1.85 | 2.15 | 1.70 | 1.36 | | | |
| Goonyella | 0.63 | 0.76 | 0.86 | 0.84 | | | |

Average CQCN

Note:

The above values are indicative only

• We will make a draft decision on tariffs in December 2014

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• FY14 tariffs reflect our MAR decision, not the FY14 transition tariffs. We note that a true-up process will be required.

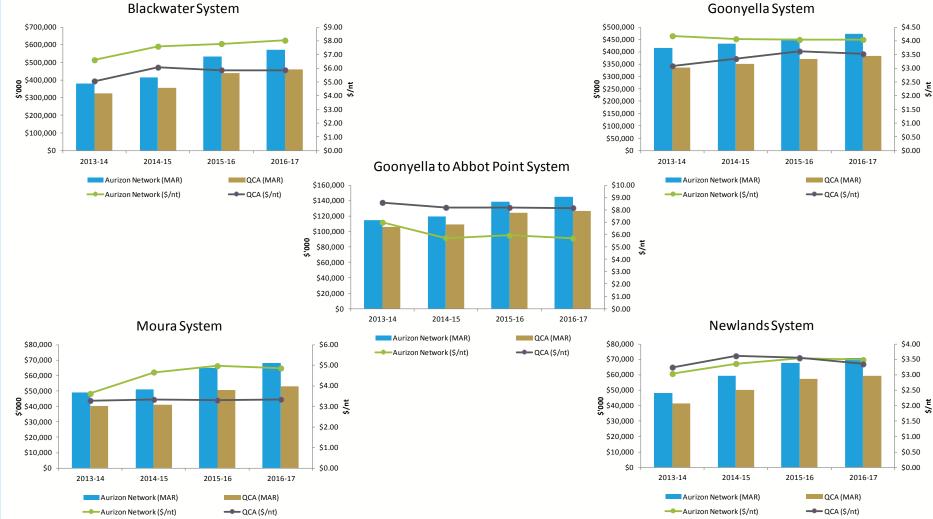
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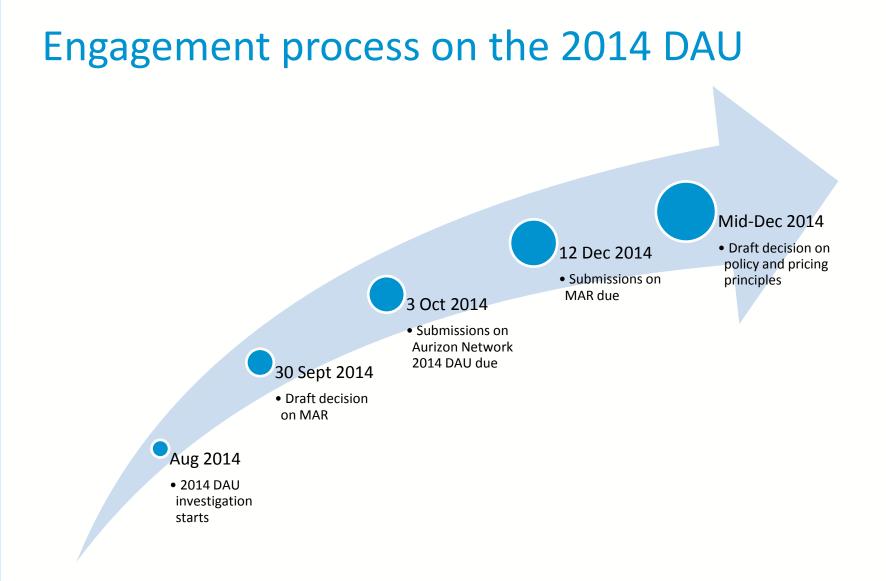
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2014 DAU: Indicative Tariffs







Questions?

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