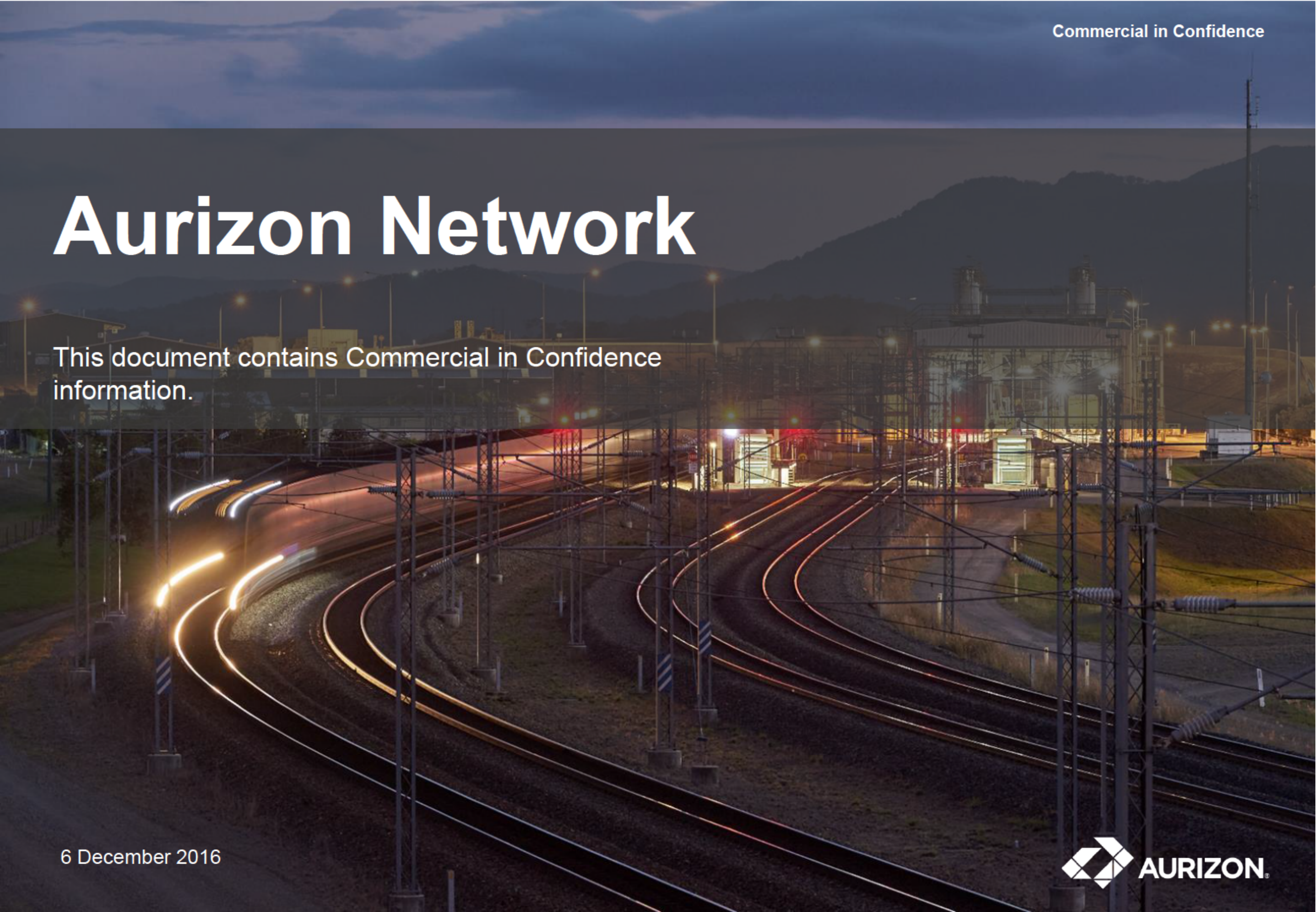
# Aurizon Network

This document contains Commercial in Confidence information.



6 December 2016

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# Consistent with the QCA Act we are seeking "a return on investment commensurate with the regulatory and commercial risks involved"

**NOT A REGULATED UTILITY**

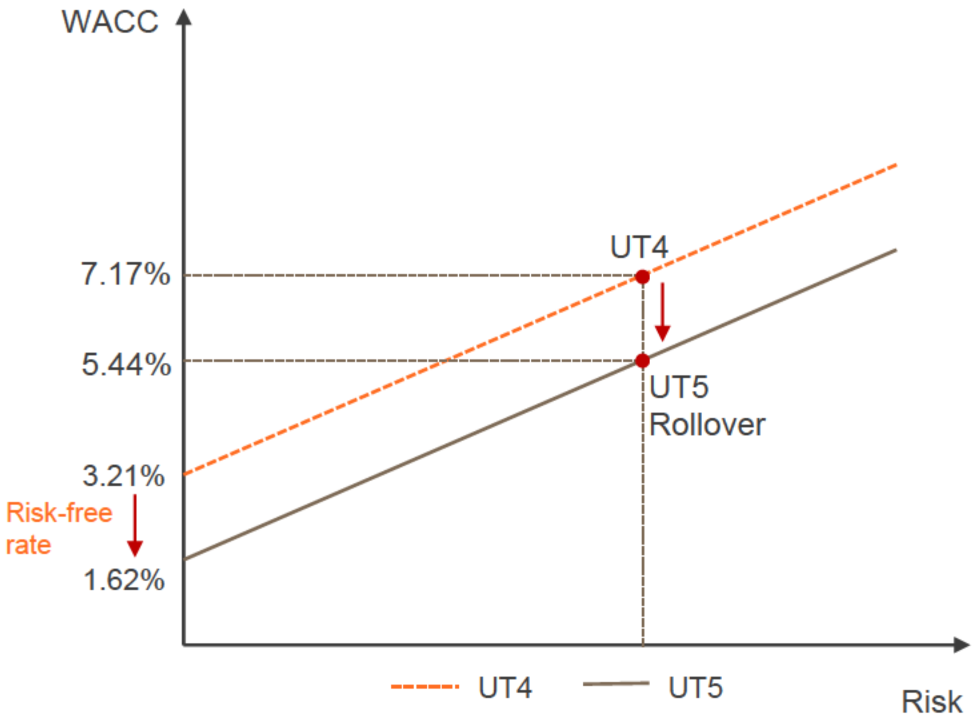
- Relatively small number of customers, exposed to a single asset class (coal)
- Volatile operating environment, including increased counterparty risk and longer term structural issues with regard to future demand of thermal coal
- Fragmentation of the Regulated Asset Base (RAB) by system increasing the risk of asset stranding
- Revenue deferrals which result in expansion capital being excluded from the RAB e.g. approximately $260m of Wiggins Island Rail Project (WIRP) related capex

**REAL WORLD EMPIRICAL EVIDENCE**

- Aurizon Network is perceived by the rating agencies as having a higher business risk and thus requires a higher credit metrics (e.g., FFO/Debt) to maintain the same BBB+ credit rating

| FFO/Debt Ratio | Aurizon Network | Utilities |
|---|---|---|
| Moody's | >18% | >7%-8% |
| S&P | >13% | >7%-8% |

# QCA's WACC methodology does not deliver a return commensurate with Aurizon Network's risk profile




- In UT4, we believe that the QCA delivered a return lower than Aurizon Network's risk profile
- However, if the UT4 WACC of 7.17% is rolled over in UT5, an even lower WACC of 5.44% is implied
  - Mathematically driven result because of the reduction in risk-free rate
- WACC @ 5.44%
  - Is inconsistent with investor expectation
  - Widens the gap between the QCA WACC and the appropriate return commensurate with Aurizon Network's true risk profile
- WACC @ 5.44% also relies on a strong assumption of excess (equity) returns held constant
- Cost of equity that declines 1-to-1 with the risk-free rate is highly implausible
- Aurizon Network believes its true risk profile (β) is greater than the QCA's UT4 decision

# We believe that a different approach by the QCA on 3 of the WACC parameters will drive a return closer to Aurizon Network's risk profile

| Regulator | MRP | Risk free rate | | Distribution Rate |
|---|---|---|---|---|
| | Siegel | Term matching | Long term | FAB data |
| QCA | ✓ | ✓ | x | x |
| NZCC | ✓ | ✓ | x | n/a |
| AER | x | x | ✓ | ✓ |
| ACCC | x | x | ✓ | ✓ |
| IPART | x | x | ✓ | ✓ |
| ERA* | x | x | ✓ | ✓ |
| ESCSA | x | x | ✓ | ✓ |
| ESC | x | x | ✓ | ✓ |
| UK Regulators (e.g., Ofgem) | x | x | ✓ | n/a |
| US Regulators (e.g., STB) | x | x | ✓ | n/a |

* The ERA does not use term matching for rail but does for energy

## MRP

- Siegel approach is one of the four methods used by the QCA to determine the MRP
- Siegel approach disregarded by all other Australian regulators and most international regulators

## Risk free rate

- The QCA aligns risk-free rate term with Aurizon Network's regulatory cycle (4-year) to satisfy the theoretical NPV=0 principle
- Risk free rate aligned to the regulatory term is unique to the QCA and NZCC
- The QCA is the only regulator that uses different risk-free rate terms in the CAPM model

## Distribution rate

- As acknowledged by the Tribunal, estimating distribution rate using FAB data is not contentious among regulators
- The QCA is an outlier among regulators to use the ASX 20 firm approach which inflates distribution rate due to the existence of foreign tax

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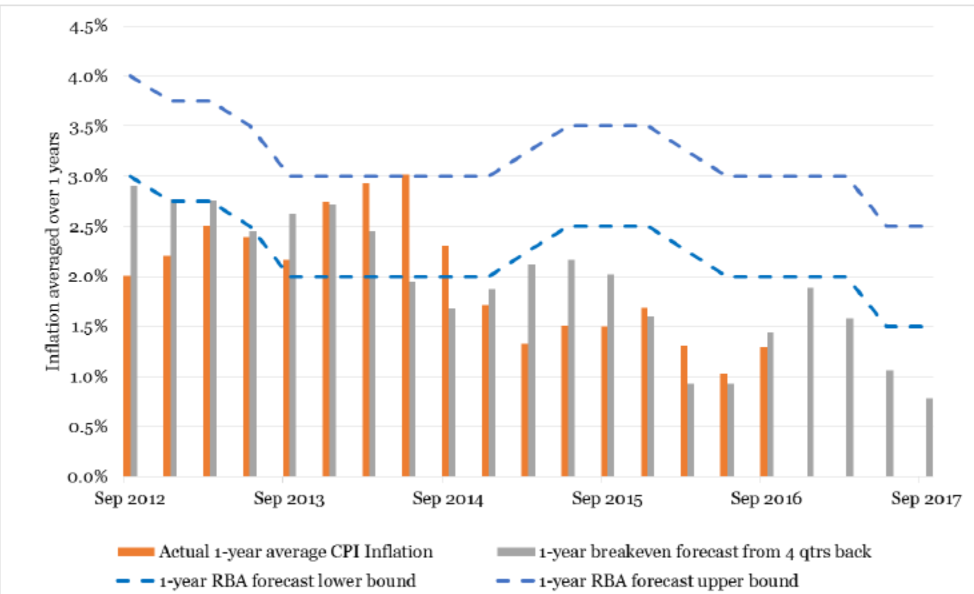
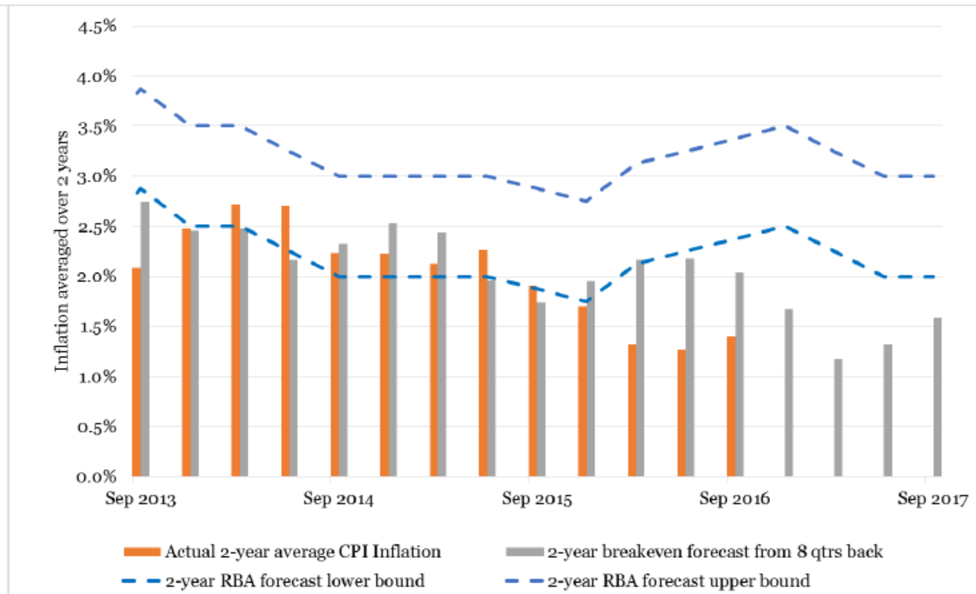
# Aurizon Network's inflation forecast methodology

- Maintaining the current QCA approach of an inflation forecast of 2.5% is inconsistent with current market expectation and will undercompensate Aurizon Network
- The QCA has recognised the issue of inflation forecast in the DBCT Final Decision and decided to adopt the geometric average of RBA short-term forecast and the mid-point of the RBA inflation target range (2.5%)
- However, Aurizon Network believes the breakeven inflation forecast (the difference between the nominal and indexed 4 year government bond) provides a better inflation forecast than the RBA short-term forecast
  - It is a market based methodology and consistent with cost of capital build-up
  - It reflects the weighted average of all possible future outcomes, while the RBA method relies on strong assumption that inflation will revert back to 2.5% after the RBA's short-term forecast horizon (2-year)
  - It has better forecasting properties than RBA short-term forecast (less biased and lower root mean square error)



# Appendix

# Aurizon Network's WACC Proposal

| | Aurizon Network | | Key Points |
|---|---|---|---|
| | UT4 FD | UT5 Proposal | |
| **Averaging Period** | 20-day to 31 Oct 2013 | Placeholder | N/A |
| **Term of Risk-free Rate** | 4-year | 10-year | • Consistent with both domestic and international regulators<br>• Consistent with commercial valuation experts expectations<br>• Unrealistic assumption of asset value certainty at the end of regulatory period |
| **Risk-free Rate** | 3.21% | 2.13% | • Except term, consistent with UT4 approach based upon 20 day averaging period of Commonwealth government securities |
| **MRP** | 6.5% | 7.0% | • MRP weights applied by QCA remain unclear<br>• The QCA has consistently applied the same MRP. AN assumes that there is negligible weight applied to those approaches that are sensitive to market movements.<br>• Understates the return on equity and implies a 1 for 1 relationship with the risk free rate |
| **Asset Beta** | 0.45 | 0.55 | • Comparator companies has been expanded to include international entities with similar characteristics and are regulated.<br>• Revenue protection mechanism only cover for the regulatory period, not the economic life of the asset<br>• Does not address risks such as RAB fragmentation (system and traction choice), volume risk through QCA revenue deferrals |
| **Equity Beta** | 0.8 | 1.0 | |
| **Gearing** | 55% | 55% | • No change |
| **Cost of Equity** | 8.41% | 9.13% | • The return demanded by the market is materially higher than the market return calculated through the mechanistic application of the QCA's CAPM Model<br>• The QCA CAPM model has underestimated the market return by 120bps<br>• Over the past 4 years (2012-2015) the differential has grown and averaged 173bps, primarily driven by the decline in the RFR to a historical low and lack of material offset from the MRP |
| **Credit Rating** | BBB+ | BBB+ | • Credit ratings agency's have reviewed credit ratings with a view to downgrade coal export related infrastructure. Rating agencies link the riskiness of the business to the industry and its customers. |

# Aurizon Network's WACC Proposal

| | Aurizon Network | | Key Points |
|---|---|---|---|
| | UT4 FD | UT5 Proposal | |
| **Total Debt Margin** | 2.94% | 2.732% | • Inclusion of the pooled regression model in line with DBCT decision<br>• Inclusion of foreign bonds issued by Australian entities which is consistent with Aurizon Network commercial approach<br>• Inclusion of currency and interest rate swap costs |
| **Cost of Debt** | 6.15% | 4.86% | • A BBB+/Baa1 credit rating is required by the business to efficiently and effectively obtain debt financing in the domestic and International Market<br>• Debt Financiers are attuned to the Coal Industry exposure<br>• Size, tenure and diversification necessitates Aurizon Network sourcing from international markets, therefore the debt allowance should provide compensation for these attributes. |
| **Gamma** | 0.47 | 0.25 | • Maintained a consistent approach by using the ATO Data (Franking Account Balance).<br>• Address the issues associated with Lally's approach which includes consideration to firms with foreign income<br>• Alignment to market conditions and not a theoretical model. |
| **Post-tax Nominal WACC** | **7.17%** | **6.78%** | |

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