

# THE TREATMENT OF INFLATION IN REGULATORY MODELS



## THE AUSTRALIAN INFRASTRUCTURE NETWORK SPECIALISTS



# Overview

- ▶ Spark Infrastructure submission
- ▶ The efficient building block costs
- ▶ Treatment of debt and equity and inflation in regulatory models

## Spark Infrastructure submission

- ▶ NSPs must have the opportunity to recover the efficient costs of providing services to ensure that service levels are maintained.
- ▶ The AER must use a method for forecasting expected inflation that delivers the best estimate to minimise the implications for customers and investors of a mis-match between forecast and actual inflation.
  - ▶ **Recommendation: Adopt the break-even method for forecasting expected inflation**
- ▶ The regulatory framework must be changed to correct the error in the operation of the PTRM and RFM to properly compensate NSPs for the AER's estimate of efficient costs.
  - ▶ **Recommendation: Include an annual adjustment to revenue of an amount equal to the difference between expected and actual inflation multiplied by 60% of RAB**
- ▶ A transition is required to ensure efficient incentives for investment are maintained in the current and future regulatory periods.
  - ▶ **Recommendation: Provide for a one-off adjustment to PTRM revenues to apply to the regulatory period following the current regulatory period for the difference between the forecast inflation and actual inflation on 60% of the RAB over the current regulatory period**

# Efficient Building Block costs

- ▶ The forecast revenue for a network service provider is based on the forecast of the efficient building block costs
  - ▶ **Operating expenditure**
  - ▶ **Return on RAB**
  - ▶ **Return of RAB**
  - ▶ **Tax**
- ▶ For each building block, the rules outline the requirements for forecasting the efficient costs and the AER has provided guidelines for how it will do so
  - ▶ **In practice, the efficient return on RAB is reflects the AER's methods for determining:**
    1. Forecast capital expenditure: repex and augex models, assessment of other capex
    2. Depreciation: regulatory depreciation = straight line depreciation less double count of inflation
    3. Return on equity: SL CAPM foundation model
    4. Return on debt: trailing average portfolio approach

## Efficient debt costs and the PTRM

- ▶ The PTRM assumes that costs are incurred in real terms (that is they rise and fall with inflation) and the annual adjustment for inflation will keep a business whole
    - ▶ **This is consistent with the AER's method for forecasting capex, depreciation and return on equity but not for debt**
  - ▶ The AER's method for forecasting efficient debt costs assumes that it is efficient for an NSP to enter in to arrangements for debt that require payments in nominal terms, that is, the cash out the door to pay debt costs does not change with the rise and fall of inflation
  - ▶ In the absence of a change to the PTRM (or RFM), the consequence is that NSPs are over or under compensated for debt depending on whether inflation is higher or lower than the inflation forecast.
    - ▶ **The consequence for investors is that real equity returns are higher or lower than the regulated forecast**
    - ▶ **The consequence for customers is that prices are higher or lower than they should be**
- ...for no other reason than the approach to estimating debt has not been properly reflected in modelling required revenue**

**This is not inflation risk associated with costs rising or falling with inflation.....but rather a modelling design risk where the modelling does not properly give effect to the method for estimating costs**

# The models

1. A simplified model to illustrate the issue
2. The AER's long term model – adjusted to properly illustrate the effects on the efficient cost of debt and equity
3. Proposed treatment
  - ▶ **Going forward**
    - ▶ Annual adjustments to accompany the annual update for the cost of debt to give effect to the efficient nominal cost of debt
  - ▶ **Current period incentive impact**
    - ▶ An adjustment to revenues in the next regulatory period to reflect the net impact over the current period
    - ▶ Signalling this adjustment will restore the incentives to undertake efficient levels of investment in the current regulatory period