



Rail

# Guideline



## Rail Industry (Tarcoola-Darwin) Guideline No 2 – Relevant pricing principles during Arbitrations

Version: RI(T-D)G 2/3

July 2019

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## Amendment record

Issue number	Commencement date	Pages
RI(T-D)G 2/1	16 February 2004	14
RI(T-D)G 2/2	23 September 2008	17
RI(T-D)G 2/3	July 2019	14

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# 1 Nature of the guideline

## 1.1 Title, authority and commencement

- 1.1.1 This **Guideline** is the Rail Industry (Tarcoola-Darwin) Guideline No 2 – Arbitrator Pricing Requirements.
- 1.1.2 Clauses 5 of the AustralAsia Railway (Third Party Access) Code 1999 (SA) and also the AustralAsia Railway (Third Party Access) Code 1999 (NT) (the Code) appoint the Commission as the regulator of the Code both for South Australia and also for the Northern Territory. Section 8 of the Essential Services Commission Act 2002 (SA) provides that the Commission may publish guidelines relating to the performance of its functions as a regulator. Further, the Code requires that the Commission must develop and publish guidelines to support sustainable competitive prices, to address instances where there is not a sustainable competitive price and to ensure that the access price must not be less than the economic cost of providing the railway infrastructure service. Additionally, pursuant to clause 45A of the Code the Commission may vary any guidelines published by the Commission.
- 1.1.3 The Guideline commenced on XX July 2019.

## 1.2 Interpretation

- 1.2.1 In this Guideline, unless the context otherwise requires:
- (a) headings are for convenience only and do not affect the interpretation of this Guideline
  - (b) words importing the singular include the plural and vice versa
  - (c) words importing a gender includes any individual, regardless of gender or sex
  - (d) an expression importing a natural person includes any company, partnership, trust, joint venture, association, corporation or other body corporate and any governmental agency
  - (e) a reference to a person includes that person's executors, administrators, successors, substitutes (including, without limitation, persons taking by novation) and permitted assigns
  - (f) a reference to any statute, statutory instrument, regulation, proclamation, order in council, ordinance or bylaw includes all statutes, statutory instruments, regulations, proclamations, orders in council, ordinances or by-laws varying, consolidating, re-enacting, extending or replacing them and a reference to a statute statutory instruments, includes all regulations, proclamations, orders in council, ordinances, by-laws, determinations issued under that statute or other subordinate legislation made under it
  - (g) a reference to a document or a provision of a document includes an amendment or supplement to, or replacement or novation of, that document or that provision of that document
  - (h) a reference to any thing includes a part of that thing;
  - (i) an event which is required under this **Code** to occur on or by a stipulated day which is not a business day may occur on or by the next business day, and

- (j) words and phrases presented in a bold font **such as this**, are defined in Schedule 1 for the purposes of interpreting this Guideline. This provides clarity and reduces the risk of ambiguity in the interpretation of the Guideline.
- 1.2.2 This Guideline seeks to provide definitions consistent with those given in the **Code**. Definitions are listed in Schedule 1 of this Guideline. Where words and phrases are not defined in this section, they shall have the meaning given to them by **the Code** or any other relevant legislative or regulatory document.

### 1.3 Scope

- 1.3.1 This **Guideline** sets out the pricing principles and methods that an arbitrator – appointed by the **Commission** – is **obliged to consider as part of the pricing principles when determining an award under clause 21 of the Code**.
- 1.3.2 This Guideline sets out the requirements for ceiling pricing, floor pricing, arbitrated pricing (both with and without sustainable competitive prices) and rate of return parameters.
- 1.3.3 This Guideline sets out the provisions that **an Arbitrator must consider** in addition to those specially nominated in the **Pricing Schedule**.
- 1.3.4 This Guideline applies to **Services** operating on the **Railway** as has been constructed between Tarcoola and Darwin to the extent prescribed from time to time.

### 1.4 Processes for revision

- 1.4.1 The **Commission** may, at its discretion, amend or vary this Guideline from time to time when it considers such action necessary in order to meet the needs of **Access Providers, Access Seekers** or the **Commission**.
- 1.4.2 The **Commission** will undertake consultation with relevant stakeholders as necessary in accordance with the **Commission's** Charter of Consultation and Regulatory Practice and clause 8 of the Code before making any variation to this **Guideline**.
- 1.4.3 For all revisions to this Guideline, a commencement date will be nominated on the Amendment Record on the inside front page. The **Commission** will generally give an **Access Provider** not less than 45 days notice.

### 1.5 Input from interested parties

- 1.5.1 The Commission welcomes comments, discussion, or suggestions for amendments to this Guideline from any interested party. Any contributions should be addressed to:

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## 2 Ceiling price

### 2.1 Return on assets

- 2.1.1 The return on assets calculated for **Ceiling Price** purposes is to be inclusive of a return on the capital invested in the **Railway** (disregarding government-contributed assets and other government financial assistance), with such assets and assistance being included in the **DORC value**<sup>1</sup> of the **Railway Infrastructure Assets**.

### 2.2 Value of the Railway as at the commencement of operations

- 2.2.1 The value of the **Railway Infrastructure Facilities** calculated for **Ceiling Price** purposes ('value of the **Railway**') as at the commencement of operations (15 January 2004) is \$1,696.9 million (in dollars of 1 July 2003).

### 2.3 Establishment of the opening value of the Railway for each of the second and subsequent years

- 2.3.1 In this sub-section, 'year' means a 12 month period commencing 1 July, except for the 12 month period including the date of commencement of operations where the year is taken to be just the period of days and months from the date of commencement of operations through to the following 30 June.
- 2.3.2 The roll forward model for the purposes of the value of the **Railway** as at the beginning of the second or a subsequent year ('the later year') must be calculated by adjusting the value ('the previous value') of the **Railway** as at the beginning of the immediately preceding year ('the previous year') as follows:
- (a) the previous value of the **Railway** must be increased by the actual amount of allowed capital expenditure on **Railway Infrastructure Facilities** for the previous year, where allowed capital expenditure is restricted to any actual additions (encompassing asset renewal, rehabilitation and replacement) to **Railway Infrastructure Facilities** consistent with the coverage of facilities as set out in section 3(1)(b) of the AustralAsia Railway (Third Party Access) Act 1999;
  - (b) the previous value of the **Railway** must be reduced by the actual amount of the annual regulatory depreciation on **Railway Infrastructure Facilities** for the previous year. 'Annual regulatory depreciation' is calculated on the value of the **Railway** as at the beginning of the previous year using depreciation schedules that reflect the economic life of the relevant assets, using a straight-line method. It involves the sum of the real value of the depreciation that is attributable to any asset or category of assets over the economic life of that asset or category of assets (such real value being calculated as at the time the value of that asset or category of assets was first included in the value of the **Railway**) being equivalent to the value at which that asset or category of assets was first included in the value of the **Railway**;
  - (c) the previous value of the **Railway** must be reduced by the actual disposal value of any asset included in that value that was disposed of during the previous year; and

<sup>1</sup> The *AustralAsia Railway (Third Party Access) Act 1999 Code-Schedule 2(7)a* requires that an approach for valuing capital assets be adopted which reflects the *Depreciated Optimised Replacement Cost (DORC)* for those assets.,

- (d) the previous value of the **Railway** must be increased by an amount necessary to maintain the real value of the **Railway** as at the beginning of the later year by adjusting that value for the actual inflation rate (based on the consumer price index)<sup>2</sup> during the previous year.

## 2.4 Ceiling rate of return

- 2.4.1 The ceiling rate of return is to be a rate of return applicable to the **DORC** value of the **Railway Infrastructure Assets**.
- 2.4.2 The ceiling rate of return is to be calculated in accordance with the applicable rate in the **Commission's** regulated rates of return guidance (see section 6 of this Guideline).

## 2.5 Avoidable costs

- 2.5.1 The **Avoidable Costs** attributable to other Access Holders' usage of the required **Railway Infrastructure Assets** are to be measured for **Ceiling Price** purposes by applying concepts consistent with **Commission's** guidance on the measurement of **Avoidable Costs** for **Floor Price** purposes.

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<sup>2</sup> Sourced from the Australian Bureau of Statistics (ABS), average of eight capital cities.

## 3 Floor price

### 3.1 Avoidable costs

- 3.1.1 **Avoidable Costs** calculated for **Floor Price** purposes are to encompass all (accrual) costs that could be avoided by the **Access Provider** if the (potential) **Above-Rail Operator** was not to use the **Line Section(s)** of the **Railway** in question.
- 3.1.2 Any components of major periodic maintenance and the annual depreciation that are time (not usage) dependent are to be excluded from **Avoidable Costs** for **Floor Price** purposes.

### 3.2 Operating costs

- 3.2.1 For **Floor Price** purposes, the operating costs that could be avoided are to be restricted to: maintenance costs expensed (including any variable (for example, usage related) major planned maintenance), and those train control and operations administration costs and business management-related costs that can be shown to vary with the usage of the **Above-Rail Operator**.

### 3.3 Capital costs

- 3.3.1 For **Floor Price** purposes, the capital costs that could be avoided are to be restricted to: the cost of replacing the required **Railway Infrastructure Assets** brought forward by the operation of the **Service**, and the costs incurred by providing specific infrastructure enhancements for the traffic in question.

### 3.4 Additional costs

- 3.4.1 All additional costs associated with meeting increased track standards required by a particular **Service** (for example, a passenger **Service**) are to be attributed to that **Service** and thereby form part of the **Floor Price** for that **Service**.

### 3.5 Timeframe

- 3.5.1 The timeframe within which operating and capital costs are to be assessed for **Floor Price** purposes as being avoidable is to be no greater than the (proposed) term of the **Access Contract**.



## 4 Arbitrated price where there is a sustainable competitive price

### 4.1 Incremental costs

- 4.1.1 In an arbitration where there is a sustainable competitive price, the Above-Rail **Incremental Cost** component of the competitive imputation access price is to be calculated in accordance with the following requirements.
- (a) Where the relevant Above-Rail assets do not exist, the acquisition costs of the requisite assets (such as **Rolling Stock**) are to be based on the leasing market for such assets of a quality that is typically found on the standard gauge in Australia for the **Service** in question (which do not have to be new assets provided they are fit for the purpose of using the **Railway** to provide **Services**), with the lease to be assessed for the length of the period for which **Access** is sought.
  - (b) The timeframe over which costs are to be considered to be avoided when calculating the Above-Rail **Incremental Cost** component of the competitive imputation access price is to be the term of the proposed **Access Contract**.

## 5 Arbitrated price where there is no sustainable competitive price

### 5.1 Prices based on the costs of providing a service

5.1.1 In an arbitration where there is no sustainable competitive price, and so where a reasonable price between the **Floor Price** and the **Ceiling Price** is to be based on the costs of providing a **Service**:

- (a) the return 'on' and 'of' capital components of such costs are to be based on the value of the capital invested in **Railway Infrastructure Facilities** by the **Access Provider** ('value of private capital invested'); and
- (b) the reasonable rate of return is to be calculated in accordance with the applicable rate in the Regulated Rates of Return section of this Guideline (section 6).

where

'the value of private capital invested' for the purposes of this section means the value of the **Railway** (as defined in section 2) less the value of government contributed assets and other government financial assistance, where 'government contributed assets and other government financial assistance' means the sum of the value of:

- ▶ the **Existing Railway**; and
- ▶ the government-funded construction of certain parts of the **New Railway**.

5.1.2 Value of private capital invested as at the commencement of operations

- (a) The value of private capital invested for the purposes of this section as at the commencement of operations (15 January 2004) is \$731.6 million (in dollars of 1 July 2003), being comprised of:
  - ▶ the value of the **Railway** as defined in Section 2 (\$1,696.9 million in dollars of 1 July 2003)
  - ▶ less the value of the **Existing Railway** (\$537.8 million in dollars of 1 July 2003); and
  - ▶ less the value of the government-funded construction of certain parts of the **New Railway** (\$427.5 million in dollars of 1 July 2003).

5.1.3 Establishment of the value of private capital invested for each of the second and subsequent years

- (a) This sub-section applies to the establishment of the value of private capital invested as at the beginning of one year on the roll forward of the value of private capital invested to that year from the immediately preceding year.
- (b) 'Year' means a 12 month period commencing 1 July, except for the 12 month period including the date of commencement of operations where the year is taken to be just the period of days and months from the date of commencement of operations through to the following 30 June.

- (c) The roll forward model for the purposes of the value of private capital invested as at the beginning of the second or a subsequent year ('the later year') must be calculated by adjusting the value ('the previous value') of the capital invested as at the beginning of the immediately preceding year ('the previous year') as follows:
- (i) the previous value of private capital invested must be increased by the actual amount of allowed capital expenditure on **Railway Infrastructure Facilities** for the previous year, where allowed capital expenditure on **Railway Infrastructure Facilities** is restricted to:
    - ▶ any actual additions (encompassing asset renewal, rehabilitation and replacement) to **Railway Infrastructure Facilities** consistent with the coverage of facilities as set out in section 3(1)(b) of the *AustralAsia Railway (Third Party Access) Act 1999*, and
    - ▶ the actual value of assets acquired or constructed that have not been otherwise recovered:
- 5.1.4 the previous value of private capital invested must be reduced by the actual amount of annual regulatory depreciation directly attributable to the assets financed by the capital invested in **Railway Infrastructure Facilities** by the access provider for the previous year. The total of such 'annual regulatory depreciation' is calculated on the value of the relevant assets as at the beginning of the previous year using a straight line method and depreciation schedules that reflect the economic life of those assets. It involves the sum of the real value of the depreciation that is attributable to any asset or category of assets over the economic life of that asset or category of assets (such real value being calculated as at the time the value of that asset or category of assets was first included in the value of the **Railway**) being equivalent to the value at which that asset or category of assets was first included in the value of the **Railway**;
- 5.1.5 the previous value of private capital invested must be reduced by the actual disposal value of any asset included in the value of the **Railway** where the asset was disposed of during the previous year; and
- 5.1.6 the previous value of private capital invested must be increased by an amount necessary to maintain the real value of private capital invested as at the beginning of the later year by adjusting that value for the actual inflation rate (based on the consumer price index) during the previous year.

## 5.2 Prices based on the prices already charged for the same or similar services

- 5.2.1 In an arbitration, where a reasonable price between the **Floor Price** and the **Ceiling Price** is to be based on the prices already charged for the same or similar **Services**, the **Arbitrator** may differentiate price on the basis of:
- (a) the particular characteristics of the relevant **Service**, including: axle load, speed, wheel diameter, **Train** length, origin and destination (including number and length of intermediate stops), departure and arrival times and days of the week;
  - (b) the commercial impact on the **Access Provider's** business, including the term of the **Access Contract**, the consumption of the **Access Provider's** resources and the credit risk associated with the business;

- (c) logistical impacts on the **Access Provider's** below-rail business, including the impact on other services and risk of failure of the **Above-Rail Operator** to perform and reduced **Capacity** and system flexibility;
- (d) capital or other contributions by the **Above-Rail Operator** to the **Access Provider's** costs; and
- (e) the cost of any additional **Capacity**.

5.2.2 In an arbitration, where a reasonable price between the **Floor Price** and the **Ceiling Price** is to be based on the prices already charged for the same or similar **Services**, the **Arbitrator** should not differentiate price between circumstances where:

- (a) the characteristics of the **Services** are alike, in terms of location, duration and quality of the train path, train configuration, characteristics of the service, longevity of access, arrival and departure times of the day and week; and
- (b) the **Above-Rail Operator** is operating within the same end market.

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## 6 Regulated rates of return

### 6.1 Calculation of the nominal rate of return

- 6.1.1 For the purposes of an arbitration under the Code, the **Arbitrator** is to calculate the relevant (post-tax) nominal rate of return applicable in a particular situation – whether the ceiling or the minimum – based on the following equation ('Nominal Rate Equation'):

$$(1 + rf + m) \times (1 + p) - 1$$

where:

rf = the (post-tax) real-terms risk-free rate of return estimated at the start of the period in question by reference to the average yield (percent) expected on 10 year indexed bonds over the 40 business days immediately prior to the start of that period;

m = the relevant (post-tax) real-terms risk premium determined by **Commission**; and

p = the expected inflation rate (calculated as a fraction) during the course of the period in question as suggested by the average differential between yields expected on indexed and nominal bonds of a similar maturity over the 40 days immediately prior to the start of the period (calculated using the Fisher equation).

- 6.1.2 When the **Arbitrator** is applying the Nominal Rate Equation:

- (a) for **Ceiling Price** setting purposes, the (post-tax) real-terms risk premium ('m') applied to *total assets* is to be 2.6 percent (which is equivalent to a risk premium applied to project funds of 13.1 percent); and
- (b) for the purposes of setting a price between the floor and ceiling limits where there is no sustainable competitive price, the (post-tax) real-terms risk premium ('m') applied to *project funds* should not fall below 7.0 percent unless the **Arbitrator** considers that the returns being achieved under non-arbitrated outcomes or under arbitrations applying competitive imputation reflect the full range of returns implied by the pre-regulation probability distribution of expected returns identified by **Commission**, in which case the **Arbitrator** could choose to use a premium value as low as 4.7 percent.

The resultant (post-tax) nominal rate of return value(s) should be rounded to one decimal place.

- 6.1.3 The **Commission** reserves the right to re-determine the values of the two forms of the real-terms risk premium (m) if the **DORC** value of the **Railway Infrastructure Assets** varies significantly from values underlying the values stated above.
- 6.1.4 The **Commission** also reserves the right to re-determine the values of the two forms of the real-terms risk premium (m) if significant developments occurring after operations commence on the **New Railway** were to cause the corporate tax rate and/or the market risk premium to vary significantly from the following values observed at the time of financial closure, namely:
- (a) corporate tax rate = 30 percent; and
  - (b) the market risk premium = 6.0 percent.

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## Schedule 1 – Definitions

In this Guideline words appearing in bold **like this** have the following meanings:

<b>Above-Rail Operator</b>	means the operator of locomotives, carriages, wagons and the like in accordance with an <b>Access Contract</b>
<b>ACCC</b>	means the Australian Competition and Consumer Commission.
<b>Access</b>	means access to the <b>Railway Infrastructure Assets</b> for the purpose of running a <b>Service</b>
<b>Access Contract</b>	means a contractual agreement between an <b>Above-Rail Operator</b> and the <b>Access Provider</b> regarding <b>Access</b> to the <b>Railway</b>
<b>Access Provider</b>	means owner or operator of the <b>Railway Infrastructure Assets</b> subject to regulation under the Code; also referred to as the <b>Below-Rail Service Provider</b>
<b>Arbitrated Price</b>	means the price that may be charged by the <b>Access Provider</b> for <b>Access</b> to <b>Railway Infrastructure Assets</b> to enable an <b>Above-Rail Operator</b> to deliver freight or passenger <b>Services</b> to its customers, as determined by an Arbitrator on an arbitration under the Code
<b>Arbitrator</b>	means a person appointed by the <b>Commission</b> to undertake an arbitration under the Code in accordance with clause 15(1)(b) of the Code
<b>ARTC</b>	means Australian Rail Track Corporation Ltd, the Commonwealth body responsible for below-rail operations on the <b>Interstate Network</b>
<b>Avoidable Cost</b>	means the reduction in a service provider's total cost if a particular service was not being provided
<b>Below-Rail Service Provider</b>	means an <b>Access Provider</b> (or any related body corporate or associate of the <b>Access Provider</b> ) that provides <b>Access</b> to <b>Railway Infrastructure Assets</b>
<b>Capacity</b>	means the capability of the <b>Railway</b> for <b>Services</b> after taking into account: (a) possessions of the <b>Railway</b> reasonably required by the <b>Access Provider</b> for maintenance, repair or enhancements; and (b) the operation of work <b>Trains</b>
<b>Ceiling Price</b>	means the maximum Arbitrated Price, as defined in section 2(2) of the <b>Pricing Schedule</b> .
<b>Code</b>	A Schedule to the AustralAsia Railway (Third Party Access) Act 1999, which applies as a law of South Australia and Northern Territory
<b>DORC</b>	means depreciated optimised replacement cost, which represents the current replacement cost of efficient assets to deliver the required service (not necessarily replacement of existing assets) less accumulated depreciation

<b>Commission</b>	means Essential Services Commission of South Australia, established under the <i>Essential Services Commission Act 2002 (SA)</i> , formerly the SA Independent Industry Regulator (SAIIR)
<b>Existing Railway</b>	means the railway line between Tarcoola and Alice Springs
<b>Floor Price</b>	means the minimum Arbitrated Price, as defined in section 3(1) of the Pricing Schedule
<b>Incremental Cost</b>	means the increase in a service provider's total cost attributable to the provision of a particular service
<b>Interstate Network</b>	means the interstate standard gauge rail network operated by <b>ARTC</b>
<b>Line Section</b>	means a segment or sector of the <b>Railway</b> distinguished for the purposes of applying access prices and charges
<b>New Railway</b>	means the section of <b>Railway</b> more recently constructed between Alice Springs and Darwin
<b>Pricing Schedule</b>	means the schedule to the Code setting out the access pricing principles to be followed by the Arbitrator when appointed to settle an access dispute
<b>Railway</b>	means the railway line between Tarcoola and Darwin, comprising the <b>Existing Railway</b> and the <b>New Railway</b>
<b>Railway Infrastructure Assets</b>	mean such facilities necessary for the operation or use of the <b>Railway</b> , including signalling and control systems as well as railway track, but not <b>Rolling Stock</b>
<b>Railway Infrastructure Facilities</b>	Means facilities necessary for the operation or use of the railway, including- <ul style="list-style-type: none"> <li>(a) the railway track</li> <li>(b) the signalling systems, train control systems and communications systems; and</li> <li>(c) such other facilities as may be prescribed.</li> </ul>
<b>Rolling Stock</b>	means a locomotive, carriage, wagon or other vehicle for use on the <b>Railway</b>
<b>Services</b>	mean Trains run by an <b>Above-Rail Operator</b> using the <b>Railway</b> , which provides freight or passenger <b>Services</b> including work Trains
<b>The Code</b>	Means the AustralAsia Railway (Third Party Access) Code(contained in the Schedule to the AustralAsia Railway (Third Party Access) Act 1999 (SA) and the AustralAsia Railway (Third Party Access) Act 1999 (NT) , which apply as laws of South Australia and Northern Territory. The Commission is the Regulator



for both the South Australian and the Northern Territory legislation.

All other words and phrases in this *Guideline* have the corresponding meaning to the same words and phrases where defined in *the Code*

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