



Costing Principles

Explanatory Supporting Document 2

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1. Introduction

This document is a further supporting document to the:

- Costing Principles submitted to the Regulator on 19th March 2024 (**Costing Principles**); and
- Costing Principles – Explanatory Supporting Document submitted to the Regulator on 1st May 2024 (**Explanatory Document 1**).

This document provides additional explanatory comments following Arc's initial review of the public submissions, published by the Regulator on 22nd April 2024, including where appropriate recommended amendments to the Costing Principles to address the public submissions.

This document is structured to address the public submissions; therefore section numbers do not align with the Costing Principles and Explanatory Document 1. However, for ease of reference each section of this document identifies the relevant public submission, section of Explanatory Document 1 and section of the Costing Principles.

Capitalised terms used in this document have the same meaning given to them in the Costing Principles, unless specified otherwise.

2. Provision of Supporting Information

2.1.1 Public Submissions

Throughout each of the public submissions requests were made for 'greater transparency' and 'further information' to be provided on a range of matters. The topics identified include Arc demonstrating efficiency of expenditure, economic merit of MEA construction approach, identification of land costs and cost identification to avoid double counting, amongst other matters.

2.1.2 Arc Response

In accordance with sections 47H-X of the Code, and as outlined in section 1 of Explanatory Document 1, Arc will provide supporting material demonstrating the basis of each of its submissions to the Regulator at the relevant approval stage. In accordance with 'Division 4 – Regulator review' of the Code it is the role of the Regulator to determine the sufficiency of the supporting information based on the circumstances at the time.

The amended Code provides Arc with 12 months from the Regulator's determination of its Costing Principles to prepare the Initial RAB, Depreciation Schedule and associated supporting material. If the Regulator determines it appropriate to add additional detail into the Costing Principles after submission of supporting material and determinations have been made, Arc will work with the Regulator to do so.

3. Initial RAB

3.1 DORC Methodology Order

3.1.1 Public Submissions

Aurizon – section 2.1.2

Aurizon considers that optimisation can only practically be assessed having regard to all of the assets valued and therefore the adjustment to exclude Contributed Capital should occur after this step.

3.1.2 Arc Response

As outlined in section 2.1 of Explanatory Document 1, Arc considers the methodology order in section 2.1 of the Costing Principles is the most effective and accurate method for calculating the Initial RAB. In particular, as outlined in section 2.4 of Explanatory Document 1, in making adjustments for Contributed Capital, Arc will not remove the asset itself from the RAB, rather it will make an adjustment to the asset value to ensure development of accurate costs and the avoidance of Double Counting on an ongoing basis. Therefore, the asset itself will still be included in the RAB for consideration during the optimisation step.

In any case, Arc considers the practical outcome of the methodology order proposed by Aurizon will be the same as that included in the Costing Principles.

3.2 Cuttings and Embankments

3.2.1 Public Submissions

CBH – paragraph 20(b); recommendation 1(c)

CBH noted the Costing Principles did not reference the exclusion of cuttings and embankments made prior to the commencement of the Code from the definition of Railway Infrastructure.

3.2.2 Arc Response

Arc did not consider it necessary to include this reference given it is noted in the Code, however Arc accepts CBH's submission.

Arc Recommended Change to Costing Principles:

Insert the following at the end of section 2.1:

'For the avoidance of doubt, in accordance with section 2 of Schedule 4 of the Code, cuttings and embankments made prior to the commencement of the Code will be excluded from the RAB.'

3.3 WACC Usage

3.3.1 Public Submissions

CBH – paragraphs 23 & 24; recommendations 1(f) & 1(g)

CBH recommended the term 'appropriate' be removed in 'appropriate WACC' in section 2.3 of the Costing Principles, that the definition in section 1.4 be altered to be the acronym and a correction be made to a Code reference.

Aurizon – section 2.2.4, subheading ‘Financing costs’

Aurizon recommended the ‘appropriate WACC’ be clarified as that being determined by the Regulator at the Valuation Date and that the WACC be expressed in real terms.

3.3.2 Arc Response

Arc utilised the term ‘appropriate WACC’ as a general term to encompass whichever WACC is determined to be appropriate by the Regulator, for the intended purpose, at the time. This recognises that the Code stipulates only that the WACC is to be used when calculating capital costs as per Schedule 4, and that the WACC (or equivalent) used in calculating the DORC for the Initial RAB is merely another element in that process which the Regulator will be required to approve.

This wording also recognises the practical possibility of misalignment between the timing of WACC determinations and the Valuation Date, and that the distinction between real or nominal may also be subject to similar misalignments. Further, it mirrors the language in the Code in Schedule 4, being ‘the weighted average cost of capital appropriate to the railway infrastructure’.

For these reasons:

- Arc disagrees with the recommendations to change the ‘appropriate WACC’ wording, but in any case, expects that in using whichever WACC (or equivalent) the Regulator approves for the purpose, that the suggestions from CBH and Aurizon will likely be the practical outcomes.
- Arc disagrees with Aurizon’s suggestion to add the qualifier ‘expressed in real terms’ to the term WACC in section 2.3 of the Costing Principles.
- Arc disagrees with CBH’s recommendation to put the acronym in the definitions table in section 1.4 of the Costing Principles, noting an acronyms table at the end of section 1.4 already includes WACC.
- Arc agrees with CBH’s recommendation to amend the Code reference in section 1.4 of the Costing Principles.

Arc Recommended Change to Costing Principles:

In the Weighted Average Cost of Capital definition in section 1.4, delete:

*‘Means the weighted average cost of capital determined by the Regulator pursuant to **section 3** of Schedule 4 of the Code.’*

and replace it with:

*‘Means the weighted average cost of capital determined by the Regulator pursuant to **clause 3** of Schedule 4 of the Code.’*

3.4 Contributed Capital

3.4.1 Public Submissions

CBH – recommendation 2

Aurizon – section 2.5

Both CBH and Aurizon questioned the use of the words ‘contribution value’ rather than ‘asset value’ in adjusting the RAB for Contributed Capital.

CBH also recommended inclusion of examples to illustrate the application of Contributed Capital adjustments.

3.4.2 Arc Response

Arc accepts both CBH and Aurizon’s submissions which match the intent of the Costing Principles. The phrasing used in the Costing Principles which appears to have led to these submissions was erroneous. Illustrative examples proposed by CBH were included in section 2.4 of Explanatory Document 1.

Arc Recommended Change to Costing Principles:

In the first bullet point of sections 2.4 and 3.4, delete:

*‘the entirety of an asset was funded by others, 100% of the **contribution** value will be removed from the asset replacement cost’*

and replace it with:

*‘the entirety of an asset was funded by others, 100% of the **asset** value will be removed from the asset replacement cost’*

3.5 Optimisation – Network Standard

3.5.1 Public Submissions

CBH – paragraph 17

Aurizon – section 2.4.1

Both CBH and Aurizon noted that the potential differences between the theoretical MEA Network and the actual Railway Infrastructure could lead to a disconnect between the ongoing costs associated with the theoretical MEA network and the actual expenditure Arc will incur in maintaining the Railway Infrastructure.

Further, Aurizon noted this difference may have implications for an above rail operator’s ongoing cost. Aurizon proposed two options for addressing the cost implications:

- A. an adjustment to the Initial RAB to account for the difference in remaining asset lives between the MEA network and the actual Railway Infrastructure; or
- B. an adjustment to the Initial RAB to account for the NPV of the above rail operator’s expenditure savings because of the difference between the MEA network and the actual Railway Infrastructure.

3.5.2 Arc Response

Arc accepts that an adjustment should be made to the Initial RAB to account for any potential cost variances to the Railway Owner due to the difference between the theoretical MEA network and the actual Railway Infrastructure. This matches the intent of the Costing Principles, with the adjustment intended to be made in accordance with the first option (A) proposed by Aurizon.

Arc rejects the second option (B) proposed by Aurizon for an adjustment to the Initial RAB. This second option requires Arc, as the Railway Owner, to be responsible for the opportunity costs of above rail operators. Arc considers the costs as they relate to the Costing Principles ought only to relate to those of the Railway Owner, consistent with the Code.

Commentary addressing this submission is included in the last paragraph of section 2.5 of Explanatory Document 1.

Arc Recommended Change to Costing Principles:

Insert at the end of section 2.5:

'To account for the differing maintenance costs of the actual asset configuration versus the modernised and optimised asset configuration, the net present value of the difference between the forecast operating cost of the actual Railway Infrastructure and the modernised and optimised Railway Infrastructure will be subtracted from the asset replacement cost. The discount rate used in this calculation will be the appropriate WACC.'

3.6 Depreciation – Asset Life

3.6.1 Public Submissions

CBH – paragraph 43; recommendation 5(e)

Aurizon – section 2.4.2, subheading “Assets with continuing use beyond initial life expectations”

Pacific National – section “DORC Asset Valuation”, page 2

The public submissions recommended the Costing Principles specify that where an asset has exceeded its expected useful life, it will be valued at zero in the RAB to avoid double counting, even where the asset is continuing to be used.

Aurizon further noted that the reference point should be an asset's 'initially expected useful life' and that unless an asset's life has been extended through life extending capex, it can reasonably be anticipated that the asset has been fully depreciated so should be valued at zero in the RAB, even where the asset is continuing to be used.

3.6.2 Arc Response

In determining the Initial RAB, Arc will determine the accumulated depreciation of the Railway Infrastructure as at the Valuation Date, in accordance with the Code and section 2.7 of the Costing Principles. As part of this process, Arc will determine the projected life of the Railway Infrastructure to determine the appropriate accumulated depreciation at that point in time. The projected life is a result of a number of factors, including

investment and maintenance prior to the Valuation Date, which may have led to an extension or renewal of the Economic Life of the Railway Infrastructure.

In response to Aurizon's submission specifically, Arc rejects the suggestion that an asset's value for the purposes of setting the Initial RAB relies wholly on the initially expected useful life. Arc acknowledges this is one of the factors that should be considered in assessing an asset's useful life and remaining value, being the commissioning date and Standard Effective Life of the asset as noted in section 2.7 of Explanatory Document 1. However, Arc notes that these are simply some of the factors to be considered, not the only considerations. Arc believes the method it has proposed and explained is the most reasonable means of dealing with availability of historical information and of making a reasonable judgement, consistently, about the appropriate value of the accumulated depreciation. In particular, it embodies the definition of Economic Life in the Code, 'the period over which the asset is reasonably expected to remain economically usable by 1 or more entities', because the future economic usability of the asset is what is of value to both the Railway Owner and the Access Seeker.

Commentary related to this submission is included in the last paragraph of section 2.7 of Explanatory Document 1.

4. Updated RAB

4.1 First Updated RAB

4.1.1 Public Submissions

CBH – paragraph 46(a); recommendation 6(a)

Aurizon – section 3.2

Both CBH and Aurizon provided submissions regarding the period between the Valuation Date and the first Updated RAB likely not being a full year. Specifically, submissions were raised in relation to the asset indexation and the application of a half-WACC for capital expenditure, both as part of the first Updated RAB.

4.1.2 Arc Response

Arc accepts both CBH and Aurizon's submissions that allowances will need to be made in the case the relevant period for the first Updated RAB is less than a full year. The Valuation Date is proposed to be 31 December 2024, however there remains an ability for the Regulator and Arc to agree an alternate date if circumstances require. Arc considers the proportional adjustments required for a partial relevant period to be standard adjustments which Arc will perform and submit supporting documentation for the ERA's approval at the appropriate approval stage.

Commentary related to these submissions is included in the last paragraph of section 3.2 of Explanatory Document 1.

Arc Recommended Change to Costing Principles:

Insert at the end of section 3.1:

'Where a Relevant Period for an Annual RAB Update is not equal to one full year (most likely, only the first Relevant Period), relevant proportional adjustments (for example indexation) will be made to account for the shorter or longer period, as applicable. Any such adjustments will be described in full in the supporting information submitted to the ERA.'

4.2 WACC Application to Added/Disposed of Capital

4.2.1 Public Submissions

CBH – paragraphs 53 & 71; recommendations 7 & 10

CBH recommended including a half-WACC formula in the Costing Principles. CBH further recommended that the half-WACC adjustment is added to/deducted from the return on capital allowance, rather than the RAB.

Aurizon – section 3.1

Aurizon recommended that only a half year of indexation is added to/deducted from the RAB, and the return component is added to/deducted from the return on capital allowance rather than the RAB.

4.2.2 Arc Response

Arc intends that the development of the 'return on' component of the capital cost is consistent with Schedule 4(2)(4)(a) of the Code by 'multiplying the current regulatory asset base of each relevant route section, which must be updated annually throughout the relevant period, by the weighted average cost of capital appropriate to the railway infrastructure'.

In this context, the appropriate means of recognising that any capital added to or deducted from the RAB by the end of the year will have happened on average at the middle of the year (and that there is half a year of return to be taken account of) is to adjust the RAB by this amount. As noted by CBH, this is consistent with other regimes and is considered by Arc to be standard practice.

In practice, Arc expects the half-WACC adjustment will be given effect to by combining the additions and disposals and applying the half-WACC to the net capital change figure.

Given the above, Arc rejects CBH and Aurizon's submissions that the return on capital allowance be adjusted rather than the RAB.

Arc Recommended Change to Costing Principles:

Insert at the end of sections 3.3. and 3.6:

'In practice, the application of the half WACC adjustment will be done in accordance with section 47N of the Code, by updating the RAB by the Net Capex Value by the following method:

$$\text{Net Capex Value} = \text{Net Capex} \times (1 + \text{WACC})^{\frac{1}{2}}$$

Where Net Capex is investments less any corresponding disposals during the Relevant Period (with appropriate adjustments for any Relevant Period that is not one year in length).'

4.3 Valuing Capex for New Route

4.3.1 Public Submissions

CBH – paragraph 53; recommendation 7(e)

Aurizon – section 3.1

Both CBH and Aurizon recommended an amendment to specify that Capital Expenditure which creates a new Route or Route Section be valued at the efficient cost rather than using a DORC methodology.

4.3.2 Arc's Response

Arc accepts both CBH and Aurizon's submissions, the phrasing used in the Costing Principles was erroneous.

Arc Recommended Change to Costing Principles:

In the first bullet point of sections 2.4 and 3.4, delete:

*'Where Capital Expenditure creates an additional Route or Route Section, this addition will be valued using the **DORC** methodology and otherwise in accordance with these Costing Principles.'*

and replace it with:

*'Where Capital Expenditure creates an additional Route or Route Section, this addition will be valued using the **same** methodology and otherwise in accordance with these Costing Principles.'*

4.4 Contributed Capital

Refer to section 3.4 of this document.