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Economic Regulation Authority
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Submitted online via: https://www.erawa.com.au/current-consultations

Arc Infrastructure – Proposed Costing Principles – Invitation for public submission

Introduction

On behalf of Co-operative Bulk Handling Ltd (**CBH**), thank you for the opportunity to provide feedback to the Economic Regulation Authority (**ERA**) on the Costing Principles provided by Arc Infrastructure (**Arc**).

Background

CBH is Australia's largest co-operative and is owned and controlled by around 3,500 Western Australian grain growers. We employ approximately 1,200 permanent employees and up to 2,100 casual employees during the harvest period. CBH's core purpose is to create and return value to WA growers, both current and future.

As part of fulfilling our purpose we have a bulk handling supply chain (CBH Operations) which manages the complex logistics of accumulating grain from growers, storing and loading vessels at our port infrastructure for export, a marketing division to acquire grain from growers and market that grain internationally (CBH Marketing and Trading), and a fertiliser division.

The WA grain industry is the largest agricultural sector in WA and the fourth largest export industry overall, with CBH's grain grower members producing an average of around 17 million tonnes per annum – about 40 to 50 per cent of the entire Australian grain production, contributing approximately $6 billion to the WA economy and regional communities every year.

CBH – as the bulk handler and supply chain operator for the vast majority of the WA grain industry – operates a large grain supply chain in regional WA utilising road, rail and port infrastructure to move grain from approximately 120 upcountry receival points.

Submission overview

Section 47H(1) of the Code requires Arc to prepare and submit to the ERA a statement of the principles, rules and practices that are to be applied and followed by Arc in several circumstances. Section 47H(2) of the Code places several further requirements on what Arc must include in the Costing Principles.

CBH's view is that the Costing Principles provided by Arc Infrastructure do not adequately express the principles, rules or practices required by section 47H(1) of the Code.

The inadequacies of the Costing Principles are of significant concern because:

a. Changes to the Code mean that Arc will need to follow different processes for calculating floor and ceiling prices from those it has previously applied;

b. The obligation on Arc to prepare Costing Principles is designed to ensure clear guidelines are in place to address information and market power asymmetry issues that adversely affect access seekers;

c. Ambiguity in the Costing Principles is more likely to lead to disputes between Arc and access seekers, which is likely to result in additional, inefficient costs for both parties as well as the ERA; and

d. Ambiguity in the Costing Principles increases the risk of Regulatory Asset Base (RAB) write-downs in future ex-post review processes, creating greater price uncertainty for both rail operators and access seekers.

CBH submits that the ERA, in exercising its power under section 47H(3) of the Code, should not approve Arc's Costing Principles or determine what are to constitute Costing Principles without the amendments recommended by CBH in our submission.

The establishment of appropriate Costing Principles is a critical step to setting up the processes that will be followed to achieve the intended outcomes of the Code changes – to create an effective access regime that promotes transparency, certainty, and efficiency.

The opportunity to make a submission is greatly appreciated and we encourage you to contact CBH's Manager Network Planning, Kristina Primus, on 08 9237 9590 or kristina.primus@cbh.com.au or Head of Government and Industry Relations, Rob Dickie, on 08 9216 6313 or rob.dickie@cbh.com.au if you require any further information.

Yours sincerely,

For: Co-operative Bulk Handling Limited

Nelson Aylmore
HEAD OF NETWORK PLANNING

CBH submission regarding Arc's Costing Principles dated 19 March 2024

19 April 2024

Contents

Introduction

1. The Railways (Access) Code 2000 (WA) (the **Code**) has recently been amended by the Railways (Access) Amendment Code 2023 (WA).
2. As part of the revised Code implementation process, Arc Infrastructure (**Arc)** submitted revised Costing Principles to the Regulator (**ERA**) on 19 March 2024 (**Costing Principles**).
3. The Costing Principles state that they give effect to sections 47H(1) and 47H(2) of the Code and are required to describe the applicable principles, rules and practices that are to be applied and followed by Arc as the Railway Owner in certain circumstances.
4. The Costing Principles are organised under the following headings / topics:
    - Section 1: Introduction
    - Section 2: Initial Regulatory Asset Base (**RAB**)
    - Section 3: Annual RAB update
    - Section 4: Costs
    - Section 5: Cost recordkeeping
    - Appendix 1: Route sections
    - Appendix 2: Standard effective life
    - Appendix 3: Cost allocators
5. In this submission, CBH provides general / overarching comments on the Costing Principles, and then specific comments on each of the topics in the Costing Principles. The intent is to:
    a) Clearly articulate areas where the Costing Principles require clarification or do not adequately express the principles, rules and practices required to meet the intent of the Code and highlight the impact that this has on key stakeholders (and rail users in particular).
    b) Where practical, suggest the inclusion of specific details and changes to the wording of the Costing Principles to address the shortcomings articulated and include evidence / justification as to why these are required.
    c) Where it's not practical to suggest specific changes, articulate who is best placed to initially formulate an appropriate solution to address the shortcoming (i.e. ERA or Arc), noting that the ERA as the regulator will ultimately determine the appropriate solution to address the apparent shortcoming.

General comments on Costing Principles

6. Section 47H(1) of the Code requires Arc to prepare and submit to the ERA a statement of the principles, rules and practices that are to be applied and followed by Arc:
    a) When determining the Depreciated Optimised Replacement Cost (**DORC**) of applicable railway infrastructure;
    b) When updating the RAB of applicable railway infrastructure;
    c) When determining the costs relevant to the floor and ceiling price tests in clauses 7 and 8 of Schedule 4; and
    d) In keeping and presenting Arc's accounts and financial records relating to the determination of those costs.
7. Section 47H(2) of the Code places a number of further requirements on what Arc must include in the Costing Principles. This requires specifying how the network is divided, describing methods for calculating depreciation, specifying if and how assets will be grouped for costing purposes, prohibiting the double counting of assets, and prohibiting the inclusion of contributed capital of third parties.

8. CBH's view is that the Costing Principles do not adequately express the principles, rules or practices required by section 47H(1) of the Code. As a consequence, the Costing Principles do not allow the ERA, users and other stakeholders to determine with reasonable certainty how Arc will:
    a) determine the DORC;
    b) update the RAB;
    c) determine the costs relevant to the floor and ceiling price tests; and
    d) keep and present Arc's accounts and financial records relating to the determination of those costs.
9. The inadequacies of the Costing Principles are of significant concern because:
    a) Changes to the Code mean that Arc will need to follow different processes for calculating floor and ceiling prices from those it has previously applied (including the costs for each year of the forecast period for which access is sought);
    b) The obligation on Arc to prepare Costing Principles is designed to ensure clear guidelines are in place to address information and market power asymmetry issues that adversely affect access seekers;[1]
    c) Ambiguity in the Costing Principles is more likely to lead to disputes between Arc and access seekers, which is likely to result in additional, inefficient costs for both parties as well as the ERA; and
    d) Ambiguity in the Costing Principles increases the risk of RAB write-downs in future ex-post review processes, creating greater price uncertainty for both rail operators and access seekers.
10. Further to the above points, considerable thought should be given to how information relating to the application of the Costing Principles will be shared with the ERA and access seekers. CBH submits that this should be done as early as possible in the lead up to Arc publishing it's DORC valuation. This will reduce information asymmetry and allow both the ERA and access seekers sufficient time to review and analyse information. It will also facilitate early identification and rectification of potential issues, reducing the risk of a drawn-out determination process and additional, inefficient costs for the ERA and access seekers.
11. CBH submits that the ERA, in exercising its power under section 47H(3) of the Code, should not approve Arc's Costing Principles or determine what are to constitute Costing Principles without the amendments recommended by CBH in these submissions.
12. The establishment of appropriate Costing Principles is a critical step to setting up the processes that will be followed to achieve the intended outcomes of the Code changes – to create an effective access regime that promotes transparency, certainty, and efficiency.

Section 1: Introduction

13. The introduction covers the role of Arc, the purpose of the Costing Principles, the scope of the Costing Principles, definitions used in the Costing Principles, and rules of interpretation of the Costing Principles.
14. CBH notes that recommendations articulated below may require consequential changes to certain definitions in section 1.4 of the Costing Principles. These are called out and explained, where relevant, in the below commentary on key sections of the Costing Principles.

Section 2: Initial RAB

15. Section 2 of the Costing Principles outlines the processes that will be followed by Arc to set the initial RAB using the DORC methodology. Sections 2.1 and 2.2 provide a high-level summary of the initial RAB setting process and valuation date.

[1] WA Government, Certification of the Western Australian Rail Access Regime, Submission to the National Competition Council, 2020, p.19.

16. While CBH recognises that the DORC methodology is a significant improvement on the historical gross replacement value (**GRV**) approach to determining the RAB, the approach still has its shortcomings.

17. CBH submits that the key issue that needs to be considered by the ERA in the setting of the initial RAB is how to mitigate against the risk of a fundamental disconnect between the theoretical DORC network valuation (with theoretical higher standard infrastructure) and the lower standard infrastructure that is actually accessible to users resulting in a disproportionate weighting toward higher prices. This issue is likely to disproportionally adversely impact users, such as CBH, who operate on lower spec / lower productivity narrow gauge lines – which for example are lower pay-load (16 or 19 tone axel load), are built with a mix of rail gauges (including 30kg/m and 31kg/m) and sleeper types (steel / timber / concrete). This results in operating restrictions that impose additional costs on CBH's rail operations. These additional costs include operating costs to schedule around restrictions and additional capital costs to buy bespoke rollingstock assets that can be operated on the Arc network. CBH's specific recommendations below seek to mitigate against the risk of a fundamental disconnect.

Replacement cost (section 2.3)

18. Section 2.3 of the Costing Principles describes the key elements that will be considered by Arc when determining the modern equivalent asset (**MEA**) replacement cost.

19. CBH submits that this section provides insufficient guidance on how Arc will develop the key elements of these cost estimates. Notably, the Costing Principles provide less guidance than what was included in the 2020 Costing Principles. For instance, the 2020 Costing Principles provide that Arc will make a costing model available to the ERA, which contains unit rates based on an independent engineering consultant's report. The 2020 Costing Principles also provides that Arc will identify and provide certain unit rate information and assumptions. Equivalent provisions do not exist in the 2024 Costing Principles.

20. To provide a reasonable amount of guidance in relation to how key elements of the replacement cost will be determined, CBH submits that the Costing Principles should specifically include:

    a) A requirement for the MEA scope to be defined on the basis that it meets the closest comparable service standard to the existing asset. This will assist in mitigating against the risk outlined in paragraph 17 and is consistent with what has been included in MEA definitions in other DORC valuations.[2] Assumptions (including but not limited to the tonne axle loads and speeds) used to determine the MEA for each route section should also be documented and made available for review by the ERA and users.

    b) Reference to the exclusion of cuttings and embankments made prior to the commencement of the Code as per Clause 2 of Schedule 4 of the Code from the definition of Railway Infrastructure and the RAB. This is consistent with the approach adopted in NSW in setting the initial RAB for rail infrastructure in the Hunter Valley rail network.[3]

    c) A description of the methodology that Arc will use to estimate each category of asset replacement cost. If the methodology is similar to the unit rate-based approach documented in the 2020 Costing Principles, Arc should explain in the Costing Principles how unit rates will be determined. Where a different methodology is adopted, Arc should provide details in the Costing Principles on how this will be applied and the approach for determining relevant assumptions.

21. Section 2.3 of the Costing Principles also includes no reference to how Arc will ensure that replacement cost estimates are 'the lowest current cost to replace the railway infrastructure' as required by the Code.[4] This does not provide ERA or access seekers with confidence that adequate supporting evidence will be provided to demonstrate the efficiency of costs and fulfill the requirements of the Code.

22. To provide confidence that replacement cost estimates will reflect 'the lowest current cost to replace the railway infrastructure', CBH submits that the Costing Principles should include a description of the

[2] See for example: GHD Advisory, Developing a Regulatory Asset Base value for the Australian Track Corporation Interstate Network, using the Depreciated Optimised Replacement Cost Method. Draft Public Report, 2021, p.18.
[3] IPART, Aspects of the NSW Rail Access Regime, 1999, p.24.
[4] WA Government, Railways (Access) Code 2000, 2023, Part 1, section 3.

evidence that will be provided to demonstrate the efficiency of cost estimates. Examples of evidence provided in other regulatory regimes include:

- Recent and historic tenders and construction contracts
- In-house cost/financial databases
- Public domain information such as unit cost benchmarking for material and construction costs
- A comparison of how the percentage uplift on outturn costs for design development, planning and approval costs, and project and construction management costs, compare to industry standard.

23. The Costing Principles provide a brief description of how funding and opportunity costs will be estimated and applied to the asset replacement construction period.[5] This description is insufficient as it:

    a) Creates ambiguity as to what Arc means when it uses the word "appropriate" before referring to WACC (weighted average cost of capital). Clear guidance in relation to this is important as the WACC is a key factor impacting aggregate funding and opportunity costs, which generally make up a significant proportion of the RAB.

    b) Provides insufficient information on how Arc will set the project development duration. A lack of guidance around how these timeframes should be developed is problematic as the railway owner may be incentivised to push for longer project development timeframes as the longer the project duration, the larger the funding costs. This would adversely affect access seekers.

    c) Provides no information on how Arc will determine the profile of construction costs over the proposed project development duration. This is problematic as the assumed profile of expenditure may have a large impact on the funding costs, noting that capital costs incurred earlier in the construction stage will earn a return for a longer period and lead to a higher RAB.

24. To address the above concerns, CBH submits:

    a) In the definition of "Weighed Average Cost of Capital" in section 1.4 of the Costing Principles, replace "Weighed Average Cost of Capital" in the first column with the acronym "WACC", and replace the word "section" in the second column with the word "clause" to aid interpretation of the Costing Principles and be consistent with the language in the Code.

    b) The word "appropriate" should be deleted before the acronym WACC in section 2.3 of the Costing Principles so that it is clear that the WACC to be applied to the development cost curve is the ERA-determined WACC set at 30 June each year pursuant to clause 3 of Schedule 4 of the Code as defined in section 1.4 of the Costing Principles.

    c) Further information is required on how Arc will identify the project development duration and determine the profile of construction costs over this time. CBH considers that an efficient operator would construct the network as a single stage project, comprised of several individual projects that would occur concurrently as this would result in the shortest realistic time required to complete the network build. This is consistent with the approach adopted in ARTC's 2021 DORC valuation.[6]

[5] Arc Infrastructure, Costing Principles, 2024, p. 10.
[6] GHD Advisory, Developing a Regulatory Asset Base value for the Australian Track Corporation Interstate Network, using the Depreciated Optimised Replacement Cost Method. Draft Public Report, 2021, p.69.

Recommendation 1

Section 2.3 and any relevant definitions in Section 1.4 of the Costing Principles should be amended to:

(a) Reflect a requirement for the MEA scope to be defined on the basis that it meets the closest comparable service standard to the existing asset.

(b) Specify that the assumptions used to determine the MEA for each route section should be documented and made available to the ERA and access seekers for review.

(c) Include the following statement "In accordance with Clause 2 of Schedule 4 of the Code, cuttings and embankments made prior to the commencement of the Code are excluded from the definition of Railway Infrastructure and will be excluded from the RAB".

(d) Include a description of the methodology that Arc will use to estimate each category of asset replacement cost.

(e) Include an explanation of the evidence Arc will provide to the ERA and access seekers to demonstrate how its estimate of asset replacement costs reflect 'the lowest current cost to replace the railway infrastructure' as required by the Code.

(f) In the definition of "Weighed Average Cost of Capital" in section 1.4 of the Costing Principles, replace "Weighed Average Cost of Capital" in the first column with the acronym "WACC", and replace the word "section" in the second column with the word "clause".

(g) Delete the word "appropriate" before the acronym WACC in section 2.3 of the Costing Principles.

(h) Provide further information on how the MEA project development duration and profile of construction costs will be estimated, explicitly stating that the "project development duration should be based on construction of the Network as a single stage project, comprised of several individual projects that would occur concurrently."

Contributed capital (section 2.4)

25. Section 2.4 describes the approach to dealing with contributed capital in the initial RAB setting process.

26. In relation to contributed capital, section 47H(2)(e) of the Code states that the Costing Principles must prohibit the inclusion of the following:

    a) if the contributed capital is funded wholly by an entity other than the railway owner or an associate of the railway owner — the value of the contributed capital;

    b) if the contributed capital is funded in part by an entity other than the railway owner or an associate of the railway owner — the value of the portion of the contributed capital that is not funded by the railway owner or an associate of the railway owner.

27. On paragraph 26.a), the Costing Principles state that where an asset is funded entirely by others, then 100% of the "contribution value" will be removed from the asset replacement cost. However, it is not clear in the Costing Principles that the contribution value is the current value of the asset that was paid for by the contributed funds.

28. It is important to clarify how fully funded assets will be dealt with practically as the contributed funds may be more or less than the replacement cost of MEA. Consider, for example, a scenario where an asset was entirely government funded. The cost of the asset at the time it was built was $100m. Consider now that the replacement cost of MEA is $200m (i.e. the asset costs twice as much to build today). The Code requires that the full value of the asset (i.e., $200m) be deducted from the replacement cost, rather than the initially contributed funds of $100m. The Costing Principles should be amended to provide an example that makes this clear.

29. On paragraph 26.b), the Costing Principles state that where an asset is partially funded by another party, Arc will reduce the replacement cost in proportion to the percentage funded by others. So, for example, if an asset was 50% funded by a third party, then Arc will only include 50% of the MEA replacement cost in the RAB. CBH considers that this approach is appropriate and consistent with the Code, however a simple example should be included to support appropriate practical application.

30. CBH submits that documentation of capital contribution assumptions used in the DORC valuation should also be made available to ERA and other stakeholders such as access seekers to facilitate validation.

Recommendation 2

Section 2.4 and any relevant definitions in Section 1.4 of the Costing Principles should be amended to:

(a) Clarify that the contribution value is the current value of the asset that was paid for by the contributed funds and that when an asset has been entirely funded by others, then the asset will not be included in the DORC.

(b) Include the following simple examples to support appropriate practical application of capital contribution principles for full and partial funding respectively:

- If a third party historically contributed $100m to fully fund the construction of an asset, however the MEA replacement cost of that asset is $200m today, the full value of the asset today ($200m), will be deducted from the replacement cost.
- If an asset was 50% funded by a third party historically, then Arc will include 50% of the MEA replacement cost of that asset in the RAB. If Arc and a third party historically contributed $50m each to fund the construction of a $100m asset, however the MEA replacement cost of that asset is $200m today, half the value of the asset today ($100m), will be deducted from the replacement cost.

(c) Specify that capital contribution assumptions used in the DORC valuation will be documented and made available to the ERA and access seekers for review.

Optimisation (section 2.5)

31. Section 2.5 describes the process for optimising the MEA replacement cost to produce the Optimised Replacement Cost (**ORC**).

32. CBH submits that this section provides insufficient guidance on the optimisation process on the following basis that it:

    a) Provides no guidance on how Arc will forecast demand for the purposes of determining capacity and service requirements. Demand will depend on a range of factors, including the forecast period, terms of access arrangements, macroeconomic conditions, technological developments. An absence of clear guidance in relation to this may incentivise the railway operator to limit optimisation by over-estimating future growth, resulting in access seekers paying for future capacity requirements above what is required to service their needs.

    b) Provides no indication of the level of service that will be assumed for the optimisation. The absence of clear guidance in relation to this may increase the previously outlined risk of a fundamental disconnect between the theoretical level of service assumed for developing the RAB, and the level of service that access seekers can obtain.

    c) Provides no guidance around how asset configuration will be optimised to deliver the level of service required to meet reasonably projected demand. This may result in the inclusion of redundant assets and the risk of overcapacity, or over design.

33. To provide a reasonable amount of guidance in relation to the optimisation process, CBH submits that the Costing Principles should include:

    a) Arc's proposed methodology for forecasting demand. This should include reference to historical demand data and a clear forecast period. CBH suggests that a minimum of 10 years of historical demand data should be used, and that 'reasonably projected demand' should be explicitly defined as a 10-year forecast period. This approach is consistent with what has been adopted ARTC's 2021

DORC valuation.[7] Key assumptions and forecasts should be made available to the ERA and access seekers for validation.

b) A description around how the level of service assumed for optimisation will be determined. This should explicitly state that the assumed level of service should not be greater than the level of service that access seekers can obtain to avoid overcompensating the railway owner for a higher standard of infrastructure.

c) A description around how asset configuration will practically be optimised to deliver the level of service required to meet reasonable projected demand. This should explicitly state that redundant assets, defined as assets that are not required to deliver the service standard to meet reasonably project demand, will be removed. A requirement to consider and give effect to design optimisation opportunities should also be stated.

Recommendation 3

Section 2.5 and any relevant definitions in Section 1.4 of the Costing Principles should be amended to:

(a) Explain the methodology that Arc will apply to estimate 'reasonably projected demand' and explicitly call out:

- the requirement for a minimum of 10 years of historical demand data to be used;
- the definition of 'reasonably projected demand' as a 10-year forecast period; and
- a clear explanation of the forecasting methodology.

(b) Explain how Arc will determine the level of service assumed for optimisation and explicitly state that this cannot be greater the level of service that access seekers can obtain.

(c) Explain how asset configuration will be optimised to deliver the level of service required to meet reasonably projected demand, explicitly stating that redundant assets will be removed and that design optimisation opportunities will be considered.

Construction approach (section 2.6)

34. Section 2.6 of the Costing Principles describes the construction approach that will be assumed for the purposes of constructing the theoretical replacement asset.

35. The Costing Principles appear to create a 'hybrid' greenfield / brownfields approach. A greenfield approach generally assumes that there are no limitations on asset location or footprint and that there is no relevant supporting infrastructure already in-situ. Whereas a brownfield approach assumes the asset is in the same location as the existing asset and within the existing footprint, and that all supporting infrastructure exists. CBH has concerns that the hybrid approach proposed could allow flexibility to 'cherry-pick' assumptions to inflate replacement costs in different locations.

36. CBH submits that a brownfields approach with a clear definition should be adopted as it is more closely reflects the environment that a replacement asset would be constructed in. It is also consistent with what has been commonly adopted in other jurisdictions.[8] To provide further clarity on the construction approach, a brownfields definition that specifically calls out the exclusion of the following supporting infrastructure should be included in the Costing Principles:

- Access roads (that are not part of the rail corridor)
- Power infrastructure
- Fibre optics

[7] GHD Advisory, Developing a Regulatory Asset Base value for the Australian Track Corporation Interstate Network, using the Depreciated Optimised Replacement Cost Method. Draft Public Report, 2021, p.59.
[8] See for example: Booz Allen Hamilton, ARTC Standard Gauge Rail Network DORC, 2001. Booz Allen Hamilton, ARTC Standard Gauge Rail Network DORC, 2007. IPART, NSW Rail Access Regime.

- Water networks
- Land acquisition
- Cuttings and embankments made before commencement of the Code. [9]

Recommendation 4

Section 2.6 and any relevant definitions in Section 1.4 of the Costing Principles should be amended to:

(a) Reflect a brownfields construction approach with a clear definition that explicitly calls out the exclusion of the following supporting infrastructure:

- Access roads (that are not part of the rail corridor)
- Power infrastructure
- Fibre optics
- Water networks
- Land acquisition
- Cuttings and embankments made before commencement of the Code.

Accumulated depreciation (section 2.7)

37. Section 2.7 is intended to describe the approach to determining accumulated appreciated applied to the ORC.

38. CBH understands that the proposed approach in the Costing Principles to accumulated depreciation is to pro-rate the replacement cost based on estimates of remaining life divided by total asset life, where the estimate of remaining life is based on an assessment of the physical condition of the asset and the forecast rate of asset consumption.

39. CBH does not object to the approach taken in the Costing Principles in principle, however, notes the following considerations:

    a) Arc may be incentivised to inflate expectations of residual life by overstating the future service potential of the assets, as this would produce a higher DORC.

    b) Certain parts of Arc's network are utilised more heavily than others and differences in past and expected usage across the network will have a significant impact on the condition and service potential of assets.

40. The term 'Standard Effective Life' is not a term that is widely used or understood by industry, which may cause uncertainty as to the interpretation of the Costing Principles. CBH recommends that all instances of 'Standard Effective Life' be changed to 'Standard Design Life', as this is a term that is widely used and understood by industry.

41. CBH considers that the Costing Principles need further detail to explain how the physical condition of assets will be assessed and how the forecast rate of consumption will be determined.

42. To allow the ERA and access holders to understand and comment on the physical condition of the assets (and make informed inferences about the projected lives of the assets), section 2.7 of the Costing Principles should include a commitment to make supporting material available to the ERA and access seekers as part of the DORC valuation process, including but not limited to the following:

    - Asset commissioning date.
    - Asset condition information (e.g. condition assessments undertaken using a widely accepted sampling approach).

[9] This is consistent with Clause 2 of Schedule 4 of the Code states that 'railway infrastructure includes a cutting or embankment made for any reason after the commencement of this Code.

- Information in relation to which assets may have performed differently relative to their given design life and why.
- Any renewal work completed which has extended the life of an asset.

43. Further, CBH submits that the Costing Principles should be amended to make it clear that assets found to be in use for longer than their economic life will be given a zero residual value and therefore be excluded from the RAB. Consistent with the approach taken by the QCA with respect to Queensland Rail's West Moreton network, CBH notes that this was the intention in proposing the introduction of DORC and the calculation of accumulated depreciation as demonstrated in the following comments:
    a) "…the remaining life of the asset would be established and a depreciation profile would be applied. In cases where an asset has already reached the end of its expected life (where this was previously established) that asset could not be included in the RAB (unless new investment was made)".[10]
    b) "A DORC methodology implies that owners would no longer be able to earn a capital return on life expired assets as they have been fully depreciated (assuming no new investment)".[11]

Recommendation 5

Section 2.7 and any relevant definitions in Section 1.4 of the Costing Principles should be amended to:

(a) Change all instances of 'Standard Effective Life' to 'Standard Design Life'.

(b) Explicitly state that the DORC of an asset is the ORC multiplied by the ratio of the remaining life to the Standard Design Life (currently referred to as Standard Effective Life).

(c) Explain the approach that will be adopted to assess the physical condition of assets. This should include a description of the sampling approaches Arc will adopt, and how Arc will address differences in usage patterns across its network.

(d) Include a commitment to make supporting material available to the ERA and access seekers as part of the DORC valuation process, including but not limited to the following:
    - Asset commissioning date.
    - Asset condition information (e.g. condition assessments undertaken using a widely accepted sampling approach).
    - Information in relation to which assets may have performed differently relative to their given design life and why.
    - Any renewal work completed which has extended the life of an asset.

(e) Explicitly note that assets that have been in use for longer than their economic life will be given a zero residual value and therefore be excluded from the RAB.

Section 3: Annual RAB update

Asset indexation (section 3.2)

44. Section 3.2 of the Costing Principles describes the approach to applying asset indexation during an annual RAB update.

45. The Costing Principles state that the RAB will be indexed by the change in the Perth CPI from the June quarter of the prior relevant period to the June quarter of the relevant period. Further, the Costing Principles state asset indexation shall not be less than zero (negative).

46. CBH submits that section 3.2 of the Costing Principles should be amended as follows:
    a) The proposed indexation approach should not apply to the first RAB update. This is because the first RAB update covers the 6-month period from the valuation date of 31 December 2024 to 30

[10] WA Government, Review of the Western Australian Rail Access Regime, Final Decision Paper, 2020, p.16
[11] WA Government, Consultation paper - DORC implementation, 2020, p.3

June 2025. In contrast, the proposed asset indexation formula rolls forward the RAB based on one year of indexation. As such, the proposed approach would overcompensate Arc for inflation in the first RAB update. The Costing Principles should therefore be amended to specify that the asset indexation for the first RAB update will be based on the change in CPI from the December quarter of 2024 to the June quarter of 2025.

b) A more appropriate index should be adopted to reflect the purpose of asset indexation, which is to ensure that investors receive a real return on their investment.[12] CBH submits the eight capital cities CPI is more appropriate than the Perth index as it reflects the fact that the notional investor will consider inflation across Australia. This is consistent with what is applied by the ERA when determining Arc's WACC and the approach taken in other regulatory schemes such as electricity.[13]

c) There is no valid reason why asset indexation shouldn't be less than zero (i.e. if inflation is negative). The purpose of indexing the RAB is to provide an efficient level of compensation to investors for the risk of inflation eroding their purchasing power (i.e. to provide a real return to investors). The proposed constraint may result in indexation of the RAB being greater than the level of inflation. This means that the return on capital allowance would be greater than the efficient level, overcompensating Arc's investors for the risk of inflation. The Costing Principles should therefore be amended to remove this constraint and be consistent with what is applied by the ERA when determining Arc's WACC and the approach taken in other regulatory schemes such as electricity.

Recommendation 6

Section 3.2 and any relevant definitions in Section 1.4 of the Costing Principles should be amended:

(a) To specify that asset indexation for the first RAB update will be based on the change in CPI from the Valuation Date of 31 December 2024 to 30 June 2025.

(b) To specify that the CPI that will be used for the purposes of asset indexation is the Australia Consumer Price Index (all Groups, weighted average eight capital cities).

(c) So that the last sentence in section 3.2 reads "For the avoidance of doubt, the asset indexation value can be less than zero".

Capital expenditure (section 3.3)

47. Section 3.3 of the Costing Principles describe the approach that will be followed to add capital expenditure (made by Arc during the previous relevant period) to the RAB.

48. CBH acknowledges that the Code allows Arc to roll capital expenditure into the RAB on an as-incurred basis. However, CBH considers that the Code requires Arc to ensure that any capex incurred is efficient. In particular:

    a) Section 47V of the Code includes a requirement for the ERA to conduct an ex-post review of capex and to remove any capex from the RAB that it deems would not have "been incurred by a prudent railway owner acting efficiently in accordance with good industry practice to achieve the lowest sustainable cost of providing access".

    b) Clause 4 of Schedule 4 of the Code provides that the costs used for the purposes of developing floor and ceiling prices "are intended to be those that would be incurred by a body managing the railways network and adopting efficient practices applicable to the provision of railway infrastructure, including the practice of operating a particular route in combination with other routes for the achievement of efficiencies."

[12] That is, the purpose of indexation is not to provide a proxy for the change in replacement costs.
[13] Noting, for example, that the ERA forecasts inflation for the purposes of estimating a nominal WACC using Commonwealth Government Bonds that are market measures of Australian inflation. See ERA, Method for Determining the Weighted Average Cost of Capital for Railway Networks Consultation Paper, 2018.

49. Other RAB roll forward pricing models include requirements for rail operators to provide assurance that they will incur efficient capital expenditure. Examples of those requirements include:
    - Specifying that only prudent or efficient capital expenditure can be added to the RAB.
    - A requirement to demonstrate that the network operator has engaged with network users to support proposed capital expenditure.
    - A requirement to provide business cases to support proposed capital expenditure, as well as other information about the organisation's investment decision-making framework.
    - Benchmarking of costs against other comparable below rail infrastructure operators.
    - A requirement to demonstrate competitive tender processes have been undertaken for procuring services from third parties.
50. CBH submits that section 3.3 of the Costing Principles should be amended to include specific wording that requires capital to be efficient and prudent for that capital to qualify for inclusion in the RAB. Example requirements that could be included in the Costing Principles are set out in the previous paragraph. Greater transparency in the Costing Principles around how Arc will demonstrate the efficiency of its capital expenditure will assist ERA in its ex-post review and reduce the risk of asset write downs as part of the ex-post review process, which will provide all parties with greater certainty around future costs.
51. The Costing Principles state in section 3.3 that a half year WACC will be added to capital expenditure to compensate Arc for a half year worth of return on capital prior to that expenditure being added to the RAB. CBH understands that this adjustment is consistent with the approach applied by other regulators, including the AER for electricity networks. To ensure correct practical application, CBH suggests that the Costing Principles should include the formula that Arc will use to calculate the half-year WACC. This formula should be: $half\ year\ WACC = (1 + WACC)^{1/2} - 1$.
52. The Costing Principles state at the end of section 3.3 that where new capex creates an additional route or route section, this addition will be valued using the DORC methodology in accordance with the Costing Principles.
53. CBH submits that the application of the DORC methodology to value the additional route or route section is inappropriate and inconsistent with the purpose of the DORC which is to estimate the replacement cost of existing assets (rather than new assets). New capex should reflect the cost incurred by a prudent railway owner acting efficiently in accordance with good industry practice to achieve the lowest sustainable cost of providing access, in line with section 47V of the Code. Failing to do so may result in the potential for the rail operator to over-recover costs at the expense of access seekers.

Recommendation 7

Section 3.3 and any relevant definitions in Section 1.4 of the Costing Principles should be amended to:

(a) Change the definition of Capital Expenditure from "Means the capital expenditure incurred by the Railway Owner or an Associate of the Railway Owner in relation to the Railway Network…" to "Means the prudent and efficient capital expenditure incurred by the Railway Owner or an Associate of the Railway Owner in relation to the Railway Network…"

(b) Change the wording in Section 3.3 from "Capital Expenditure made by the Railway Owner during the previous Relevant Period will be added to the RAB for the relevant Route Section" to "Prudent and efficient Capital Expenditure made by the Railway Owner during the previous Relevant Period will be added to the RAB for the relevant Route Section."

(c) Articulate the supporting material that Arc Infrastructure will submit to the ERA and access seekers to demonstrate the efficiency of its capital expenditure.

(d) Include the following formula for calculating the half-year WACC: $half\ year\ WACC = (1 + WACC)^{1/2} - 1$.

(e) Remove reference to valuing new capex using the DORC methodology and explicitly state the value of new capex will be the cost incurred by a prudent railway owner acting efficiently in accordance with good industry practice to achieve the lowest sustainable cost of providing access.

Contributed capital (section 3.4)

54. Section 3.4 describes the approach to dealing with contributed capital in the annual RAB update process.

55. CBH's commentary regarding contributed capital in section 2.4 of the Costing Principles applies to this section.

Recommendation 8

Section 3.4 and any relevant definitions in Section 1.4 of the Costing Principles should be amended to:

(a) Reflect Recommendation 2.

Depreciation (section 3.5)

56. Section 3.5 is intended to describe the approach to determining depreciation applied to the updated RAB.

57. The Costing Principles list a number of requirements of the depreciation schedule by reference to section 47K(5) of the Code. CBH notes, that the third bullet point ('for access prices to vary over time') omits the full context provided in section 47K(5)(d) of the Code, which states "access prices will vary over time in a way that promotes efficient growth in the market for rail access". CBH submits that the full Code definition should be adopted to ensure correct interpretation.

58. CBH considers that the Code establishes straight-line depreciation to be the default depreciation schedule. This is clear from section 47K(6) of the Code, which establishes accelerated or deferred depreciation as exceptions to a depreciation schedule which provides for depreciation of an asset or assets to be 'distributed uniformly across each year of the economic life of the asset or group of assets.'

59. CBH submits that the Costing Principles should be amended to explicitly state that a straight-line approach will be the default depreciation schedule that will apply except in circumstances where it is appropriate to accelerate or decelerate depreciation in line with the provisions of section 47K(6) of the Code.

60. The Costing Principles state that depreciation may be accelerated where: (i) there is a risk of asset stranding; or (ii) the Railway Owner expects that it would not continue to manage and control the use of the Route.

61. With respect to the second point, accelerating depreciation where the Railway Owner expects it would not continue to manage and control use of the route is inconsistent with the Code. This is because it confuses the concept of depreciating Arc's cost of acquiring the asset and the economic value of the asset, which are distinct. This would result in a maximum depreciation period equivalent to the outstanding term of Arc's lease (~25 years), undermining the agreed Standard Design Lives for many of the high capital value assets.

62. Economic life is defined in the Code to mean 'the period over which the asset is reasonably expected to remain economically usable by one or more entities.' Economic use of an asset by at least one user applies, regardless of whether Arc manages and controls use of the network. Changes in control do not affect an asset's economic life.

63. CBH submits that the reference to accelerated depreciation where the Railway Owner expects that it would not continue to manage and control the use of the Route should therefore be removed.

64. The Costing Principles state that Arc may change an asset's economic life and provides three scenarios of where it may accelerate or decelerate/defer depreciation. CBH submits that only some (not all) of the scenarios listed involve a change in the asset's economic life. For instance, in the second list of bullet points, the third bullet point states that Arc may "defer depreciation where the market for access to the asset is relatively immature". CBH submits that deferring depreciation does not change the economic life of the asset if the expectation is that the asset can continue to be used for the duration of its life. Instead, the deferral of depreciation envisages a scenario where most of the use of the asset comes later in its economic life (i.e. use of the asset may be initially low but grow over time). CBH submits that this should be clarified in the Costing Principles.

65. Section 3.5 of the Costing Principles leaves it open for Arc to adjust the economic life (and depreciation profile) of an asset or group of assets at least once per relevant period (i.e. once per year).

66. CBH submits that updating the depreciation profiles of assets each year has the potential to introduce uncertainty for access seekers. Regulators in other sectors, such as energy, use caution when deciding to amend depreciation profiles. CBH submits that any change to the depreciation profile of an asset or group of assets should be contingent on Arc demonstrating that there has been a material change in circumstances that could not have been foreseen by a prudent railway operator at the time that the depreciation profile was last reassessed. This would introduce greater accountability for Arc and reduce uncertainty for access seekers and the ERA, by limiting changes to the depreciation profile to clear and significant changes in market conditions since the last assessment.

Recommendation 9

Section 3.5 and any relevant definitions in Section 1.4 of the Costing Principles should be amended:

(a) So that the third bullet point in the first set of bullet points reads: "that access prices will vary over time in a way that promotes efficient growth in the market for rail access."

(b) To clarify that the default depreciation schedule that will apply to assets is straight-line depreciation, and the default approach will apply to all assets.

(c) So that the following text is deleted from the first bullet point in the second set of bullet points: "or where the Railway Owner expects that it would not continue to manage and control the use of the Route."

(d) To insert a new paragraph after the second set of bullet points which reads: "The Railway Owner may not change an asset's Economic Life on the basis that the Railway Owner expects that it would not continue to manage and control the use of the Route."

(e) To clarify that the third bullet point in the second set of points will not result in a change in an assets economic life by translating this into a new paragraph which reads: "Depreciation may also be deferred where the market for access to the asset is relatively immature (pursuant to section 47K(6)(b) of the Code)".

(f) To clarify that any change to the depreciation profile of an asset or group of assets should be contingent on Arc demonstrating that there has been a material change in circumstances that could not have been foreseen by a prudent railway operator at the time that the depreciation profile was last reassessed.

Disposed, redundant and stranded railway infrastructure (section 3.6)

67. Section 3.6 of the Costing Principles describes the approach to dealing with disposed, redundant and stranded railway infrastructure for the purposes of updating the RAB.

68. A description of 'disposed of' assets is included in the first bullet point of section 3.6. CBH submits that this definition should also specifically mention assets that Arc no longer manages or controls, noting that such assets may not be decommissioned but remain in service to be managed and controlled by another party. This would prevent Arc from being compensated for assets that it no longer manages or controls.

69. CBH considers that the last bullet point on stranded assets is not required as when an asset is fully depreciated it will fall out of the RAB as part of the standard roll-forward process.

70. The Costing Principles state in the last paragraph in section 3.6 that 'Disposal of Railway Infrastructure will be assumed to occur, on average, mid-year, so a half WACC of the disposed Railway Infrastructure will be deducted from the RAB to compensate for the six-month period before the disposed Railway Infrastructure is removed from the RAB.'

71. CBH understands that the intent of the last paragraph in section 3.6 is to remove half a year of return on capital to avoid overcompensating Arc by assuming that assets are disposed of at the end of the year. While CBH accepts the rationale for this adjustment, Arc has not implemented it correctly. Specifically, the half WACC applied to the disposed assets (WACC x value of disposal) should be deducted from the return on capital allowance (WACC x RAB) for that year, and not the RAB itself.

Recommendation 10

Section 3.6 and any relevant definitions in Section 1.4 of the Costing Principles should be amended:

(a) So that the first bullet points reads: “disposed of, where that Railway Infrastructure has been decommissioned and removed from the Railway Network and where Arc no longer manages or controls the Railway Infrastructure”.

(b) To clarify that the half WACC applied to the disposed assets (half-year WACC x value of disposal) will be deducted from the return on capital allowance (WACC x RAB) for that year.

Section 4: Costs

72. Section 4 of the Costing Principles describes the costs that underpin floor and ceiling prices. Arc has included separate subsections for each of the cost items that will underpin its estimation of total and incremental costs.

73. The Code states that the ceiling price is based on the total cost of providing access to a route, and the floor price is based on the incremental cost of providing access to a route.

74. CBH submits that this section of the Costing Principles provides insufficient guidance on how Arc will determine key cost elements and ensure they are efficient. This does not provide access seekers with sufficient confidence that appropriate forecasting methods will be used and that costs will be validated. This is a significant issue for access seekers as they essentially have no other means to interrogate or challenge proposed costs due to information asymmetry issues.

75. Recommendations as to changes to the Costing Principles to provide reasonable guidance on how key costs will be determined and evidenced as efficient are articulated under each of the following subsections.

76. CBH considers that greater transparency of approaches to estimating costs and evidencing them as efficient will benefit all parties, including Arc, by reducing the likelihood of dispute with access seekers, and reducing the risk of the ERA determining that costs are inefficient.

Total costs (section 4.1)

77. Section 4.1 of the Costing Principles describes how total costs are determined.

78. CBH submits that this description is consistent with the Code when each of the cost components are interpreted as the Code defines them.

Operating costs (section 4.2)

79. Section 4.2 of the Costing Principles is intended to describe the approach to determining operating costs.

80. As defined by the Code, operating costs, in relation to railway infrastructure:

    a) Include:

        i. train control costs, signalling and communications costs, train scheduling costs, emergency management costs, and the cost of information reporting; and

        ii. the cost of maintenance of railway infrastructure calculated on the basis of cyclical maintenance costs being evenly spread over the maintenance cycle; and

        iii. payments made in respect of any lease or licence that the railway owner or an associate of the railway owner holds over any land, but only to the extent that the Regulator determines that those payments relate to land used for constructing, maintaining or operating the relevant railway and are not capital costs under Schedule 4 clause 2(5);

    b) but do not include costs that the Regulator has determined under section 47W(3) to be inefficient.

81. CBH submits that section 4.2 of the Costing Principles provides insufficient guidance in relation to how current and forecast operating costs will be determined and evidenced as efficient. This is problematic due to the reasons articulated in paragraph 74.

82. To provide reasonable guidance in relation to this, CBH submits the Costing Principles should include:

    a) Information on the methodology that Arc will follow to estimate and forecast each category of operating costs articulated in the Code (and expressed above) as well as documentation of the key assumptions used. Examples of approaches / mechanisms used in other regulatory regimes include:

        - A base-step-trend approach, whereby trend / escalation and step change adjustments are made to a base year of operating expenditure.
        - Requirements to publish 10-year maintenance plans and costing manuals.

    b) A description of the evidence that will be provided to demonstrate the efficiency of cost estimates. Examples of evidence provided in other regulatory regimes include:

        - Benchmarking of costs against other comparable below rail infrastructure operators.
        - For outsourced maintenance, the provision of evidence that contracts were entered into on a competitive tender basis.
        - Oversight by representative bodies of rail users of proposed operating expenditure.

Recommendation 11

Section 4.2 and any relevant definitions in Section 1.4 of the Costing Principles should be amended to:

(a) Provide further detail on the approach to estimating operating costs, including but not limited to information on the methodology that Arc will follow to estimate each category of operating costs defined in the Code, as well as the provision of documentation related to the assumptions used to the ERA and access seekers.

(b) Set out the types of supporting material and mechanisms Arc Infrastructure will provide to the ERA and access seekers to demonstrate the efficiency of its operating costs, for example, cost benchmarking.

Capital costs – Risk adjusted return and depreciation (sections 4.3 and 4.4)

83. Section 4.3 and section 4.4 of the Costing Principles describe the approach for determining the risk adjusted return and depreciation on capital that are used in the determination of total costs.

84. Section 4.4 of the Costing Principles states that Arc will determine the depreciation applicable or forecast to be applicable in each year by applying the depreciation schedule determined under section 3.5 of the Costing Principles.

85. As explained above, CBH considers that section 3.5 of the Costing Principles includes insufficient information on how Arc will determine the depreciation schedules for railway infrastructure. This should be updated in line with Recommendation 9.

Overhead costs (section 4.5)

86. Section 4.5 of the Costing Principles describes the approach for estimating overhead costs.

87. Overhead costs are defined in the Costing Principles as “all other costs attributable to the performance of access related functions incurred by the Railway Owner (or its Associate) in connection with the Railway Network and includes:

    a) office buildings;

    b) rent and utilities;

    c) payroll;

d) legal expenses;

e) housing;

f) freight centres;

g) terminal yards;

h) depots; and

i) other corporate expenditure;

but excludes Operating Costs and Capital Costs.

88. CBH submits that section 4.5 of the Costing Principles provides insufficient guidance in relation to how each category of current and forecast overhead costs will be determined and evidenced as efficient. Notably, CBH has concerns about what may be included in "other corporate expenditure" as there is no description of what this is. This may allow Arc flexibility to 'hide' costs that are not aligned with those incurred by an efficient operator, such as distributions to its Parent Company (i.e. management fees), by grouping them into a miscellaneous cost 'bucket'. This may result in inefficient costs being recovered from access seekers.

89. To provide reasonable guidance in relation to how overhead costs will be determined and evidenced as efficient, CBH submits the Costing Principles should include:

a) A description of how each category of current and forecast overhead costs will be determined and evidenced as efficient.

b) A description of what is included in "other corporate costs".

c) Additional detail around how expenditure in relation to the following the costs will be treated to ensure there is no double counting (e.g. as both a depreciation expense and an operating cost):

- Office buildings
- Housing
- Freight centres
- Terminal yards
- Depots

Recommendation 12

Section 4.5 and any relevant definitions in Section 1.4 of the Costing Principles should be amended to provide:

(a) A description of how each category of current and forecast overhead costs will be determined and evidenced as efficient.

(b) A description of what is included in "other corporate costs".

(c) Additional detail around how expenditure in relation to the following the costs will be treated to ensure there is no double counting (e.g. as both a depreciation expense and an operating cost):

- Office buildings
- Housing
- Freight centres
- Terminal yards
- Depots

Incremental costs (section 4.6)

90. Section 4.6 of the Costing Principles describes the approach for estimating incremental costs.

91. Section 4.6 of the Costing Principles reiterates the Code requirement that incremental costs are the costs that would be avoided if a rail operator were not to provide access to a user and lists several factors will be taken into account to determine incremental cost.

92. CBH considers that reasonable guidance should be provided on Arc's approach to allocating shared costs between access seekers, such as how it will determine the proportion of maintenance and repair costs that are associated with greater wear and tear on a shared line from use by a given access holder.

93. Further information should also be provided on how Arc will address circumstances where not providing access would have resulted in Arc building smaller assets or different assets.

Recommendation 13

Section 4.6 and any relevant definitions in Section 1.4 of the Costing Principles should be amended to:

(a) Provide further guidance on how Arc will allocate shared costs between access seekers, such as how it will determine the proportion of maintenance and repair costs that are associated with greater wear and tear on a shared line from use by a given access holder.

(b) Provide further information on how Arc will address circumstances where not providing access would have resulted in Arc building smaller assets or different assets.

Section 5: Cost record keeping

94. Section 5 of the Costing Principles describes the principles rules and practices in relation to the keeping and presentation of accounts.

95. Section 5 of the Costing Principles provides no rules or practices relating to keeping and presentation of accounts.

96. CBH submits the Costing Principles should include additional information in relation to this. For example, the information that should be kept and presented should include:

    a) Records of actual capex spent on each route section in each relevant time period;

    b) Records of actual opex spent on each route section in each relevant time period;

    c) Records of overhead costs in each relevant time period; and

    d) The roll forward of the asset base, including indexation applied and depreciation deducted by asset class (or groups of assets).

Recommendation 14

Section 5 and any relevant definitions in Section 1.4 of the Costing Principles should be amended to include:

(a) Additional information in relation to the keeping and presentation of accounts.

Appendix 1: Route sections

97. Appendix 1 of the Costing Principles describes the route sections that the network will be divided into for the purposes of determining DORC and floor and ceiling prices.

98. Arc has not explained the basis on which it has defined its proposed route sections in Appendix 1, and the implications of the proposed approach are unclear. For example, there are many route sections which are just the name of a town — it is not clear whether this means a separate / discrete RAB and cost base will be calculated for just the rail infrastructure within the town.

99. It is also not clear from what is included in Appendix 1 how the ERA and access holders will be able to judge whether assets have been grouped in a way that will result in access holders paying for assets they do not use.

100. CBH notes the following comments in relation to usage of some route sections described in Table 1 below.

Table 1: Recommended Standard Effective Lives (Standard Design Lives)

Code route number	Code route gauge	Code Route Name	Route section	CBH commentary
8	SG	All tracks servicing the facilities of Co-operative Bulk Handling Limited on the standard gauge network except private sidings that are excluded by paragraph (h) of the definition of railway infrastructure in section 3.	Carrabin, Grass Valley, Hines Hill,	Inactive CBH rail sites
23	NG	The track between Avon and Albany	York to Narrogin,	CBH tonnes moved between Brookton and York. Brookton to Narrogin generally used for loco and wagon swaps between Albany and Kwinana Port Zones. Potential to further segment this section.
			Narrogin to Wagin	Generally used for loco and wagon swaps between Albany and Kwinana Port Zones.
24	NG	The track between York and Quairading.	York to Quairading	Track is inactive
25	NG	The track between Narrogin and West Merredin.	Narrogin to West Merredin	Track is inactive
26	NG	The track between Yilliminning and Kulin.	Yilliminning to Kulin	Track is inactive
38	NG	The track between Millendon Junction and Geraldton.	Watheroo to Marchagee	Generally used for loco and wagon swaps between Geraldton and Kwinana Port Zones
40	NG	The track between Narngulu and Maya.	Perenjori to Maya	Track is inactive
42	NG	All tracks servicing the facilities of Co operative Bulk Handling Limited on the narrow gauge network except private sidings that are excluded by paragraph (h) of the definition of railway infrastructure in section 3.	Ballaying, Bindi Bindi, Bowgada, Buniche, Bujil, Coomberdale, Dowerin (town site), Ejanding, Gabbin, Katanning, Kirwin, Kondut, Kuender, Kulja, Manmanning, Moulyinning, Tambelup, Tarin Rock, Three Springs, Welbungin, Wongan Hills,	Inactive CBH rail sites

Code route number	Code route gauge	Code Route Name	Route section	CBH commentary
			Woodanilling, Yerecoin, Yornaning	
			Beverly, Jennacubbine, Karlgarin, Kukerin	Inactive CBH rail site. May be used for loco and wagon storage
			Bolgart	Trains split and park here to head north on Miling Line

101. CBH submits the Costing Principles need to provide further information about how granular line items documented in Appendix 1 of the Costing Principles will be grouped in practice for the purpose of undertaking a DORC evaluation for each route section. This should include a practical example to ensure correct interpretation. Reasonable detail in the Costing Principles to demonstrate that the proposed approach will not result in access seekers paying for assets they do not use should also be included.

Recommendation 15

Appendix 1 of the Costing Principles should be amended to:

(a) Provide further information about how granular line items documented in the table will be grouped in practice for the purpose of undertaking a DORC evaluation for each route section.

(b) Include a practical example of how a line segment will be grouped to ensure correct interpretation.

(c) Include reasonable detail to demonstrate that the proposed approach will not result in access seekers paying for assets they do not use.

Appendix 2: Standard effective life

102. Appendix 2 of the Costing Principles sets out the expected effective life for certain asset classes that will be used in the DORC valuations.

103. CBH has the following concerns in relation to Appendix 2:

a) There is insufficient reasoning as to why the level of granularity of asset groupings has been chosen and why it is appropriate. For instance, culverts could be further divided into concrete pipe culverts, metal pipe culverts and concrete box culverts. CBH notes that the level of detail included in the Costing Principles is less than what was included in the 2020 Costing Principles.

b) Arc has proposed a perpetual 'Standard Effective Life' for each asset group within the asset class 'earthworks', which is inconsistent with standard regulatory practice and the 100-year life specified in Arc's 2020 Costing Principles.

c) For some asset groups, Arc has proposed a 'Standard Effective Life' that is shorter than the industry standard design life. It is not clear why this is the case as no supporting explanation of the proposed Standard Effective Lives is provided.

d) Note 3 in Appendix 2 seems to offer almost complete flexibility over whether the Standard Effective Lives / Standard Design Lives will actually be applied by Arc in estimating accumulated depreciation. CBH notes that it is reasonable for Standard Effective Lives / Standard Design Lives to vary by use and track loading and location. However, it is not reasonable for Standard Effective Lives / Standard Design Lives to vary by 'condition', as allowed by note 3. This is because the condition of the asset is taken into account when determining its projected life (section 2.7 of the Costing Principles). It is not clear why Arc proposes to also vary Standard Effective Lives / Standard Design Lives by condition.

104. Table 2 below sets out CBH's views on the proposed Standard Effective Lives, where CBH disagrees materially with Arc's proposals. The table below also notes the asset groups for which it should be possible to adopt more granular asset group definitions.

Table 2: Recommended Standard Effective Lives (Standard Design Lives)

Asset class	Asset Group	Arc Proposal	Recommendation and commentary
Earthworks	Formation	Perpetual	100 | Refer to Standards of other operators such as TfNSW, Metro Trains Melbourne, Queensland Rail.
	Cuttings	Perpetual	100 | Refer to Standards of other operators such as TfNSW, Metro Trains Melbourne, Queensland Rail.
	Embankments	Perpetual	100 | Refer to Standards of other operators such as TfNSW, Metro Trains Melbourne, Queensland Rail.
	Retaining walls	Not specified	100 | Refer to Standards of other operators such as Metro Trains Melbourne, Queensland Rail and Main Roads WA.
Under Track Structures	Culverts	50	50 – 100 | Culverts should be divided into sub-categories with different lives (e.g. Major Culverts should be 100 years to match RISSB standard Railway Structures AS 7636:2022). Culverts could also be broken down by material (concrete pipe or box, or metal).
Station and Platforms	Platforms	50	60+ | Refer to Standards of other operators such as TfNSW.
Signalling Systems	All	20	25 – 35 | Refer to Standards of other operators such as TfNSW, Queensland Rail; Interlockings should be split between relay and processor based.
Communications Systems	All	15	15+ | Further information required to justify this design life proposed by Arc Infrastructure. This is an asset class that could also be broken down more granularly (e.g. poles, fibre, conduits, IT).
Train Control Systems	All	15	15+ | Further information required to justify this design life proposed by Arc Infrastructure. This is an asset class that could also be broken down more granularly (e.g. hardware, software, field equipment).
Associated Track Structures	Access Roads	10	20 | Refer to Standards of other operators such as TfNSW, Queensland Rail.
	Roads and shunt pathways	10	20 | Refer to Standards of other operators such as TfNSW, Queensland Rail.

105. CBH submits Appendix 2 of the Costing Principles should be amended to:

a) Change the term 'Standard Effective Life' to 'Standard Design Life' as per Recommendation 5.

b) Include a justification as to why the asset grouping level has been adopted and is considered appropriate.

c) Change asset lives in line with CBH recommendations in Table 1 to align with industry standards. With respect to the asset classes within 'earthworks', CBH submits that the standard design lives should be set in line with the industry standard (100 years) to reflect the fact that earthworks do deteriorate over time and therefore should depreciate. As a consequential change, note 2 in Appendix 2 should be removed as the replacement cost of any cutting or embankment made after

the Code commenced in 2000 should be proportionally reduced by depreciation, in the same way as all the other assets in the DORC estimate.

d) Where relevant, differentiate asset groups by narrow gauge and standard gauge.

e) Reference asset lives to industry standards, such as those from RISSB, and include explanations of any derivations from industry standards.

f) Remove the word ‘condition’ from note 3.

g) Amend note 3 to reflect a commitment to provide an explanation and supporting material that explains why a deviation from the agreed Standard Effective Lives / Standard Design Lives is justified.

Recommendation 16

Appendix 2, and any relevant definitions in Section 1.4 of the Costing Principles should be amended to:

(a) Change references to ‘Standard Effective Life’ to ‘Standard Design Life’ as per Recommendation 5.

(b) Include a justification as to why the asset grouping level has been adopted and is considered appropriate.

(c) Reflect specific changes to the assets lives presented in Table 2 of this submission.

(d) Ensure asset lives are differentiated by narrow gauge and standard gauge.

(e) Reference asset lives to industry standards.

(f) Include explanations of deviations from industry standards.

(g) Remove Note 2.

(h) Remove the word ‘condition’ from note 3.

(i) Change note 3 to read “The Standard Design Lives above reflect industry standards and are indicative for the Asset Class and Asset Group. In situations where a derivation from the industry standard is adopted in practice, an explanation and supporting material will be provided”.