

31 July 2025

To: Economic Regulation Authority of WA (ERA WA)

Re: Depreciated Optimised Replacement Cost (DORC) valuation of Arc Infrastructure's railway assets

Introduction

The Association of Mining and Exploration Companies (AMEC) welcomes the opportunity to contribute industry feedback on the Economic Regulation Authority's final report (2024) on the Depreciated Optimised Replacement Cost (DORC) valuation of Arc Infrastructure's railway assets.

Industry feedback has the fundamental concern is that the DORC is overvalued, and that the valuation methodology applied lacked transparency, with a potential that the resulting ceiling values will be exorbitant.

There are also broader transparency concerns raised by industry in relation to overall track access pricing, with the DORC only seeking to address a single cost component (the existing asset). By design, this does not therefore address current transparency issues experienced in relation to capital cost upgrades, maintenance and operating costs, overheads/ profit, etc. All of these elements contribute to potential users' track access pricing.

About AMEC

AMEC is a national industry association representing over 600 member companies across Australia, with over half invested in Western Australia. Our members are mineral explorers, emerging miners, producers, and a wide range of businesses working in and for the industry. Collectively, AMEC's member companies account for over \$100 billion of the mineral exploration and mining sector's capital value.

The mining and exploration industry makes a critical contribution to the Australian economy, directly employing over 315,000 people. In 2023-24, the industry generated \$415 billion in resource exports, invested \$3.95 billion (2024) in exploration expenditure to discover the mines of the future, and collectively paid over \$74 billion in royalties and taxes.

Industry Feedback

The Economic Regulation Authority's (ERA) consideration of ARC Depreciated Optimised Replacement Cost (DORC) valuation of Arc Infrastructure's railway assets is of critical concern for current and future rail access seekers.

AMEC represents multiple railway users, who rely on rail to underpin the economic competitiveness of their operation. All seek affordable and equitable access. All have operations that are price sensitive.

Feedback from Industry speaks to a wariness that the proposed Initial Regulatory Asset Base (RAB) may be overstated, and this will directly affect the ceiling prices for track access. The ERA's own mandate is to act in the long-term interest of consumers which implies ensuring that asset valuations and resulting charges are cost-reflective and not excessive.

Overstated Asset Valuation and Implications for Access Pricing

Methodology

The ERA-approved DORC valuation for Arc Infrastructure's network appears exceedingly high, on the order of \$15.26 billion for the chosen configuration.

Even a slight methodological change (for example, a different signalling optimisation) would yield a valuation over \$800 million lower. Arc's own DORC report presented two compliant options for signalling; tellingly, Arc selected the higher-valued "Alternative A" as the basis for the RAB.

This choice drives up the total asset base and thus the allowable return and depreciation recovered through access charges. Such a large valuation risks inflating access pricing beyond levels necessary to recover efficient costs.

Impact on Access Charges

An overstated asset base directly translates into higher ceiling prices (the maximum Arc can charge under the Code's ceiling test). Under a building-block model and access charges. The proposed bloated RAB directly levers these components upward.

With a DORC in excess of \$15 billion, even a moderate regulated return (WACC) results in hundreds of millions of dollars annually in capital charges to be borne by users.

For context, the Code's definition of DORC is the "lowest current cost to replace the railway infrastructure with assets that meet the actual and reasonably projected demand, less accumulated depreciation". Any valuation exceeding the efficient replacement cost of assets needed for current service levels contradicts this principle and forces users to pay for theoretical investments that do not reflect real needs.

Overvaluation Drivers

We are concerned that aspects of the ARC's methodology may systematically overstate the valuation:

Modern Equivalent Assets (MEA) Overspecification

If the replacement assets assumed in the valuation exceed the service standard of existing infrastructure, the ORC (Optimised Replacement Cost) will be higher than necessary. ERA did acknowledge that the MEA should provide the "closest comparable service standard" to the existing asset, aligning with the Code's intent.

However, it must be ensured that in practice Arc's valuation did not upgrade routes beyond current performance. This could be done through assuming higher axle loads or speeds than those actually offered. Industry feedback emphasised that the level of service in the DORC for optimisation should not exceed what access seekers currently obtain. With any

redundant assets should be removed in the optimisation. If any such overspecification remained in Arc's modelling, it will artificially buoy the DORC and correspondingly the ceiling price.

Incomplete Optimisation of Scope

Similarly, the optimisation step should eliminate unused or under-utilised assets such as sidings, duplicate lines, overbuilt structures.

The ERA's process needs to scrutinize whether Arc's "optimised" network truly excludes infrastructure not required for "actual and reasonably projected demand." A failure to remove surplus capacity means the valuation includes assets that do not serve current users, pushing up costs contrary to the cost-reflectivity principle that should be adhered to.

High Unit Cost Assumptions

The valuation mathematics hinge on what the unit rates are for track, structures, signalling, etc. If Arc's cost assumptions are conservative for example. based on limited recent projects or Perth-specific indices, the ORC can be overstated.

It has been noted by Industry that Arc's proposed indexation method which used Perth CPI was not appropriate and that a broader index of construction costs should be used.

An efficient replacement cost should reflect economies of scale and competitive tendering. Any contingency or premium above "lowest current cost" should be questioned. Without transparent disclosure of unit rate derivations, Industry fears the figures may err on the high side.

Legacy Asset Value and Depreciation.

A critical concern for Industry is how depreciation was applied, especially for some of the ageing assets in the portfolio. By definition, DORC should heavily depreciate (or even exclude) assets near or beyond their economic life. Industry has argued in similar discussions that assets which have outlived their standard design life should be valued at zero in the RAB. This is because they have no remaining service life from an economic standpoint.

If the ERA's methodology instead assumes life extensions or residual values for such ageing assets, the DORC could include assets that a prudent operator would have fully written off in numeral operations.

Notwithstanding the above, Industry is also concerned that some of these zero values may be a precursor to assigning a requirement for large capital works, which will be to the account of existing users and potential future users.

Pricing and Market Effects

The immediate consequence of an inflated RAB is higher access tariffs, within the ceiling constraint. Many of Arc's route sections, that are largely grain lines and regional feeders which service AMEC members are serve price-sensitive traffic. Potentially setting too high a ceiling price could render rail haulage uneconomic which pushes freight onto roads.

Not only is this outcome counterproductive for market efficiency, as the Rail Access Regime is meant to facilitate use of rail infrastructure, not price it out of reach, it leads to an

unintended social consequence. The Government should be facilitating less trucks on the road.

Industry has suggested that a ceiling set far above efficient costs also diminishes the effectiveness of negotiations. Doing so gives the monopoly infrastructure owner undue leverage, since the gap between the ceiling and the likely competitive price is widened. In practice, access seekers might not pay the full ceiling, but a high ceiling anchors negotiations inequitably in Arc's favour.

The ERA must give due consideration to the reality that regulatory valuations have real impacts on commerce. A seemingly innocuous miscalculation leads to distortions in choice and impose unnecessary costs on exporters and supply chains. To truly be in the "long-term interest of consumers" the asset valuation should err on the side of conservative realism, not optimism that benefits the asset owner at users' expense.

Flaws and inconsistencies in DORC Assumptions and Modelling

Several specific assumptions and modelling choices in the DORC determination process appear flawed or inconsistent, potentially undermining the accuracy of the valuation:

Mean Error Approximation

In Table 2-1, Key Assumptions for the DORC notes that the Mean Error Approximation (MEA) estimate is of AACE Class 5 accuracy. A Class 5 estimate is the lowest level of accuracy estimate, with the potential to be inaccurate to the high side of +50%. Industry noted that the MEA is the basis of the Initial RAB and any future User Access Charges, and that a MEA increased by potentially 50% likely results in Access Charges which are cost prohibitive to any future Users. Industry has questioned why a greater level of estimating accuracy could not be achieved.

Escalation and Indexation Assumptions

There is an inconsistency in how inflation or cost escalation are handled. Arc's draft had proposed using the Perth CPI for indexation of costs. However, a Perth-specific index could differ from national trends and may not reflect the cost movements of railway materials (steel, ballast, etc.) which are traded in national, and indeed, international markets.

The ERA should ensure that the indices or escalation factors applied in updating historical cost inputs are consistent with industry practice and do not inadvertently inflate the valuation. If, for example, a higher local inflation rate was used when a lower producer price index for construction would be more accurate, that inconsistency would undercut the credibility of the DORC.

Consistency also means aligning with the Code's requirement of "lowest current cost" – using an inappropriate index would violate that spirit. We recommend that standard indices (e.g. ABS Eight-Capitals CPI or specific rail cost indices) be uniformly applied to avoid any bias in the valuation.

Industry noted that it is unlikely that the DORC will ever be adjusted downwards should construction costs decrease.

Contractors

Industry has suggested a significant loading of overheads, profit, preliminaries with 55% for Specialist Contractors, then a further 44.5% for the Principal Contractor to allow for risk, preliminaries, overheads, and profit is unreasonable. The choice of contractors has led to significantly inflating replacement costs. Industry feedback suggests this is out of step with other precedents.

Financing costs

Industry has questioned why ARC's financing costs have been included, especially given the quantum of the costs. Arc's inclusion of funding costs that are the equivalent to 30%, approximately \$9bn of the value, are extreme. Industry has suggested that the ERA must give due consideration that this is an outlier when compared to historical precedents.

Demand Forecast and Capacity Optimisation

A potential inconsistency lies in how demand projections were used to optimize capacity. By Code, DORC must size the network to meet "actual and reasonably projected demand".

If Arc's demand forecasts are overly optimistic (projecting substantial growth on certain lines), the optimised replacement might include additional loops, heavier rail or larger structures that are not actually required for current usage levels.

The Level of Service and Demand Forecast document should have been rigorously tested against real market conditions.

The methodology utilised regarding demand forecasting, that historical use is an accurate prediction of future requirements, we consider to be fundamentally flawed. It would be proposed that this should be based on current arrangements, aligned to term end dates. Given the small scale of the Western Australian market a discussion or survey of future customers is not unreasonable.

Depreciation Methodology and Asset Lives

The treatment of asset lives and condition in Arc's DORC model may contain inconsistencies. The Costing Principles indicate Arc would determine each asset's economic life based on factors like age, usage and condition.

Feedback highlighted concerns that the process for assessing physical condition was not well defined. While amendments were made to the treatment of asset life and condition in the model. A notable inconsistency remains: the ERA declined to explicitly mandate that assets exceeding their standard life be excluded (value written down to zero).

This means the door was left open for Arc to assign residual value to over-age assets if it could justify that they are still functional. While in engineering terms an old asset might still function with intensive maintenance, including it at anything above scrap value in the RAB would be inconsistent with the idea that users should not pay for past service that has already been consumed.

Signalling Asset Valuation Options

As already noted, Arc's DORC report offered two signalling optimisation options (A and B) that both comply with the Code. The existence of two different valid approaches, with an \$822 million differential, underscores how sensitive the modelling is to specific assumptions

Option B presumably had a lower capital cost but perhaps higher operating costs? Whereas Option A was capital-intensive. Arc's selection of Alternative A raises questions: did ERA independently assess which option truly yields the lowest lifecycle cost for the required service? If not, there is a risk that Arc favoured the scenario that maximized its asset value, whereas a holistic optimisation (including ongoing operating expenditure) might support the lower-capex alternative.

This further underscores the need for transparency: at the risk of making a long document longer, industry should see the basis for the two options and weigh in on which aligns with cost-minimisation.

The ERA's methodology would be stronger if it had clearly stated criteria for such decisions. In absence of that, accepting Arc's preferred option could be seen as a bias toward over-investment.

So, while the ERA made several needed adjustments to Arc's proposed methodology, including responding to flaws identified by users and consultants, some areas remain problematic.

The valuation model's inner workings, such as cost estimation, indexation, demand and life assumptions must be internally consistent and firmly grounded in the Code's cost minimisation ethos. Even small lapses in consistency or accuracy at the input stage can significantly overstate the outcome. This calls for the ERA's vigilant review of Arc's calculations and assumptions to ensure the DORC is technically robust and unbiased.

Lack of Consideration for User Interests and Cost-Reflectivity

For a rail user, a core purpose of regulation is to balance the monopoly owner's interests with those of users and the broader market. AMEC received substantial feedback from Industry regarding these key points. In this DORC valuation process, there are concerns that user interests, market efficiency, and cost-reflectivity may not have been given sufficient weight:

Long-Term Consumer Interest vs. Asset Owner Interest

The ERA's mission statement emphasises protecting consumers' (and naturally by extension the rail users') long-term interests in essential infrastructure services. In practical terms, this means ensuring access prices are fair and reflect only what economists call "efficient costs".

However, the outcome of the ERA's process has been a very high initial RAB. This outcome primarily serves the asset owner's financial interest by maximising their regulated asset base. This clearly has the linear potential to harm users through higher charges.

While it is acknowledged that ERA does not directly set prices by certifying the eye-watering \$15.3 billion valuation, it could firmly anchor all future negotiations in favour of the asset owner. It has been noted with frustration that whether the resulting charges are sustainable

for users or aligned with efficient market outcomes appears to have not been given much weight.

For instance, will the ERA test how the new DORC-based ceiling compares to what users currently pay, or to the economics of competing transport (i.e. trucking)?

If the proposed valuation results in ceiling tariffs far above current competitive rates, many access seekers will derive no benefit from the regulated regime. In fact, the ceiling becomes irrelevant or, worse, a justification for a push for higher prices.

The absence of a user impact assessment in the ERA's determination is a notable gap that could still be filled. Good regulatory practice, especially in a transition to a new valuation method, would consider phasing or at least analyse the tariff impact on major user segments.

It is important that this cost-reflective valuation does not diverge wildly from the business reality that if access charges are too high, freight will not move by rail, it will be in a truck, on the road.

User Feedback and Participation

During the Costing Principles approval stage, other access users (including CBH, Pacific National, Aurizon) provided detailed submissions highlighting where Arc's proposed approach might disadvantage them or diverge from best practice. ERA's response appears to have been mixed, as it adopted some recommendations but rejected or deferred others.

Notably, some called for greater specificity and commitments in the methodology. While ERA did strengthen the principles in several areas, it also took the position that many details could be dealt with later. It must now be acknowledged this was a missed opportunity to lock in pro-transparency and pro-user measures from the start on a crucial Western Australian asset. By approving a relatively high-level Costing Principles document, ERA left much of the implementation to the asset owners' discretion.

This imbalance means that users are in the position of being forced to trust both Arc and ERA to "get it right" in the final DORC, without a formal second round of consultation on the numbers.

Consequentially, when Arc submitted the final DORC in June 2025, ERA then published Arc's reports but there is no indication of a public consultation on those values. Industry has noted a contrast with the ACCC who invited stakeholder comments on the draft valuation results on the ARTC Interstate DORC draft. By not consulting, ERA may have missed practical insights from rail users who are incentivised to spot anomalies or overestimations in what would be massive spreadsheets of asset valuations. This has contributed to persisting concerns that the approved RAB overshoots a truly fair value.

WACC

Industry also questioned what is the allowed Weighted Average Cost of Capital (WACC) applied to the RAB. While the WACC is set through a separate process, if the WACC is on the higher side of a reasonable range, the return component on a \$15 billion RAB becomes huge. Users effectively bear the risk of both valuation and WACC parameters.

In the future when determining WACC, as the ERA does periodically for rail, we ask it consider the relatively low risk of an established network with long-term contracted volumes.

Contributed Capital

Industry also noted that an assertion is made that there has been no contributed capital, which should also bear on the WACC. However, there is clear evidence of assets being funded by third party capital contributions based on various documents on the public record, such as government funding agreements on the Public Transport Authority website. The ERA must bear this in consideration.

Recommendations for Transparency, Accuracy, and Fairness

AMEC does not usually comment on the ERA's valuations. However, given the significance of this rail infrastructure to our membership we have done so. Throughout this process we have noted the following procedural recommendations that have been raised by industry and relayed below:

- The ERA should require that all key inputs and modelling steps in the DORC valuation be made transparent to stakeholders.
- An independent expert review or audit should be submitted to the DORC.
- Stakeholder Participation in the Final Valuation Approval is needed
- Explicit Incorporation of User-Interest Safeguards must be prioritised
- A clear methodology for handling and costing partially redundant infrastructure is needed
- Greater consideration of economic obsolescence or under-utilisation in special cases
- Publishing the network performance metrics pre and post consideration of a MEA Network, for example, the max axle load, max train speeds, max train length would be beneficial for transparency in price setting.

Final Remarks

AMEC appreciates the opportunity to provide comment on the DORC for ARC to the ERA. The extension in time granted to all respondents, including AMEC and Industry were welcome.

Industry has concerns regarding the potential that infrastructure will be overvalued, which will flow on to high costs for rail users. Ultimately the valuation framework must be one that all parties accept as accurate and equitable. As freight rail is key enabling infrastructure for the State of Western Australia, the ERA should consider its role in regulating a framework that incentivises

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