AUSTRALIAN RAIL TRACK CORPORATION LTD

APPLICATION TO VARY THE HUNTER VALLEY COAL NETWORK ACCESS UNDERTAKING (VARIED ON 17 OCTOBER 2012) TO PROVIDE FOR THE INCORPORATION OF GAP TO TURRAWAN SEGMENTS IN THE NETWORK

ARTC SUBMISSION TO ACCC POSITION PAPER



17 JANUARY 2014

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1. Introduction

On 28 June 2013, ARTC submitted an application to vary the Hunter Valley Coal Network Access Undertaking (varied on 17 October 2012) (HVAU) in order to incorporate additional segments between Gap and Turrawan, in the upper Hunter Valley (**Proposed Variation**).

Following receipt of stakeholder submissions in response to a consultation paper released on 23 July 2013 (**Consultation Paper**), the ACCC requested further information from ARTC in relation to the application on several occasions as follows:

- A notice to ARTC on 3 September 2013 under section 44ZZBCA of the Competition and Consumer Act 2010 (Act) requesting further information in relation to the application. ARTC included in its response to the ACCC a substantial amount of information underpinning a Gap to Turrawan DORC valuation prepared by its consultants, Evans & Peck (E&P) and proposed by ARTC as part of the application in order to assist the ACCC and its consultants Marsden Jacob Associates (MJA) undertake an independent assessment of ARTC's valuation proposal. The ACCC notice and a public version of ARTC's response are available on the ACCC website.
- During the assessment, ARTC responded to further informal information requests from the ACCC made on 27 September, 7 October and 24 October. ARTC expects that this has assisted the ACCC to come to the preliminary views expressed in its Position Paper in relation to the application released on 12 December (**Position Paper**).

2. Further Stakeholder Consultation

ARTC notes that a number of items included in the information request relate to the DORC valuation for Gap to Turrawan assets provided in support of ARTC's application.

At the request of current Access Holders in the Gunnedah Basin, Whitehaven and Idemitsu, ARTC has engaged in further consultation in early September in relation to the Gap to Turrawan DORC valuation with these stakeholders. This consultation has also included a further stakeholder, Shenhua, being a prospective Access Holder in the extended Pricing Zone 3.

ARTC further advised stakeholders in relation to the detail of the approach and development of the Gap to Turrawan DORC valuation and received a series of matters for consideration from these stakeholders. A number of these matters were also raised in stakeholder submissions to the Consultation Paper, and the ACCC was informed of any additional matters. ARTC notes that many of these matters were also considered by the ACCC as part of its assessment of ARTC's proposed DORC valuation.

3. ARTC's Response to the ACCC Position Paper

ARTC notes from the Position Paper that the ACCC is of the preliminary view that the Proposed Variation is not appropriate to accept pursuant to subsection 44ZZA(7) of the Act. The ACCC has indicated that it considers the proposed incorporation of the Gap to Turrawan Segments into Pricing Zone 3 and the use of the DORC methodology for the valuation of the Gap to Turrawan Segments to be appropriate. However the ACCC has expressed some concerns with the DORC valuation proposed by ARTC.

The ACCC also indicated that it considered that it may be appropriate for ARTC to provide additional transparency to access seekers regarding the extent of capitalised losses that are likely to result from the proposed access charges.

ARTC further notes from the Position Paper that the ACCC has expressed its views in relation to four key aspects of ARTC's application separately, being:

- 1. extending the coverage of the HVAU to include Segments from Gap to Turrawan;
- 2. DORC valuation for the Gap to Turrawan Segments;
- 3. Indicative Service and Indicative Access Charges; and
- 4. drafting amendments.

In this submission, ARTC will provide a response in relation to each of the specific issues that it has identified as being raised by the ACCC in the Position Paper, grouped under the four key aspects above in Table 1 below.

It should be noted that in many of the responses ARTC has proposed to amend certain aspects of the Proposed Variation as a result of the preliminary view expressed by the ACCC in the Position Paper. ARTC respects that the views expressed by the ACCC are preliminary only, and may change following further assessment and stakeholder consultation. Given this, it should be noted that ARTC proposals to amend any aspect of the Proposed Variation are subject to subsequent discussions with the ACCC in relation to matters raised by the ACCC and the preliminary ACCC views expressed in the Position Paper being retained as the final view in any ACCC decision.

Table 1 ARTC's response to issues raised by the ACCC in the Position Paper

ACCC Issue	ARTC Response to the ACCC preliminary view					
Extending the coverage of the HVAU to include Segments from Gap to Turrawan						
The ACCC notes that it is unlikely that the Proposed Variation will be accepted for inclusion in the scope of the HVAU by the proposed 1 January 2014 commencement date. As such, ARTC will need to consider how this transition will be managed in order to ensure certainty for access seekers.	 The Proposed Variation contemplated a 1 January 2014 commencement date primarily to give effect to a simpler and more efficient transition in the application of a number of HVAU provisions that rely on a calendar year cycle including: annual compliance assessment and unders and overs accounting; RAB roll forward in Pricing Zone 3 (loss capitalisation); system-wide true up test and determination of TOP rebates; annual pricing review and finalisation. Having a commencement date at a point in time after 1 January 2014 will increase complexity in the application of these provisions by having to determine and agree part year transitional arrangements, possibly requiring further industry consultation and regulatory approval. In order to obviate the need for this additional regulatory impost, administrative burden and uncertainty in applications and outcomes, ARTC proposes to amend the Proposed Variation that will enable affected provisions to commence operation on 1 January 2014, even though the variation may not be approved, and become effective, after that date. 					

The inclusion of assets that are not required for hauling coal is not likely to be appropriate.	
 As the DORC valuation proposed by ARTC is calculated on a stand-alone coal basis, then the four assets identified by MJA that are not required for the coal haulage task – including the three sidings used solely by non-coal trains and the one privately owned and maintained asset – should be excluded from the DORC. 	ARTC proposes to remove any assets (ballast, earthworks, sleepers, rail and signalling) that would no longer be required if the three sidings used solely by non-coal trains and the one privately owned and maintained (to the extent it is privately owned and maintained) were excluded from the DORC.
• Those six passing loops and sidings that are less than 500 metres long, which appears to indicate that their use is restricted to non-	ARTC notes that the ACCC have concluded that a number of siding and loop assets that are currently used for storage of maintenance equipment in close proximity to maintenance activity so as to minimise capacity losses, and crew changing at regional

coal trains only, should also be excluded from the valuation. The	locations, should be excluded on the basis of retention of a coal passing loop that may not be required to deliver the stand alone
ACCC is also of the preliminary view that those assets (which	contracted coal timetable in a theoretical sense, but is justifiable in order to provide the HVCCC to meet the timetable in a practical
include the six passing loops noted above) 'that are used for the	sense where load point demand profiles, crewing and fleet availability must also be factored in.
storage of and access to maintenance equipment and assets and to store coal trains off the mainline in order to effect crew change' should be excluded from the valuation.	The ACCC's conclusion effectively means that if only coal used the network, the existing coal passing loops could be used to effect crew changes and store maintenance equipment in close proximity to maintenance activity, and still retain sufficient operational flexibility to deliver contracted coal paths in light of the above practical constraints.
	During the ACCC assessment of ARTC's DORC proposal, ARTC provided evidence, in response to an informal ACCC information request, that demonstrated that if one of the existing coal passing loops were removed the longest section running time between Gap and Turrawan, which governs theoretical capacity, would be such that the existing contractual requirement for coal paths could theoretically be met on a stand-alone basis. ARTC's assessment was carried out on the same basis as theoretical capacity assessment in developing the annual Hunter Valley capacity strategy. However, as is the case in relation to infrastructure investment planning carried out each year via the Hunter Valley capacity strategy, the level of infrastructure required is not based upon theoretical capacity requirements. Indeed a factor is applied in developing the capacity strategy that builds in an additional level of infrastructure to reflect the practical capacity of the network.
	Effectively, by assuming that coal loops (to the extent of one of the existing coal loops) can be used for crewing and maintenance activities, the ACCC is proposing to allow only sufficient infrastructure to deliver contractual entitlements in a theoretical sense. This is inconsistent with the broader investment planning and industry endorsement approach currently in place and provided under the HVAU.
	On this basis, ARTC has serious reservations whether, if the ACC's proposed approach were adopted, existing capacity entitlements could be met on a stand-alone basis.
	Further, it is ARTC's view that the infrastructure included in the asset valuation for each of the coal loops is insufficient to permit these loops to be used for the purposes indicated by the ACCC. Additional assets would need to be incorporated in the valuation at each coal loop. Assets other than coal loops are not used for maintenance equipment stowage and crew change simply because they are there; it is because the coal loops as endorsed by the industry were configured only for the purpose of crossing and passing coal trains and increasing capacity.
	ARTC considers that inclusion of assets which are utilised for maintenance purposes are essential for the efficient operation of the Network. Under NSW Rail Safe-working Rules and Procedures track maintenance vehicles are required to travel and operate on the Network under the auspices of a Track Occupancy Authority as they do not activate track circuits. When operating, travelling between locations or stowing; track machines prevent all other rail traffic from transiting the area. It is essential in order to minimise the capacity impacts to the network & for safety requirements that stowing locations are secure off the mainline within locations that have electronic frame releases & catch-points. The coal passing loops do not have catch points and would require either additional assets to be included in the valuation, or track machines to be continuously manned to prevent run-aways & potential collisions with mainline traffic.

nedah Provisioning Centre was the only track machine stowage location it would result in significant additional time ance events in the order of 3 hours to allow for travel time, this equates to 4 to 5 additional train paths or the 1mtpa capacity when calculated against the 2014 maintenance program. It is the ACCC's concerns in relation to excessive assets being included in the DORC valuation, ARTC has further usion of assets primarily used for maintenance purposes and has removed some assets with a view to evenly broations across the Network, which ARTC considers to be the most efficient outcome unnedah Loop to allow for crew changes on the platform is vital for safe and efficient operations. Gunnedah is the e location for Pacific National Gunnedah Basin operations, located in the biggest regional population centre in the val of this asset, and use of coal loops for crew change, would result in additional investment in assets at the coal safe location for crew change. Recent RCG approved works being undertaken at Chilcott's Creek (Werris Creek – tion) has resulted in an additional \$600,000 capital expenditure to accommodate crew change and inspection aven Coal & Idemitsu Resources Australia have also approved the upgrade of the Gunnedah Yard which includes /Goods siding, this work is due for completion in October 2014.
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ontends that the assets at Gunnedah included to facilitate crew change are appropriate for inclusion in the DORC
urther review in this regard, of the 12 included loop and siding assets (I.e. other than the coal loops), ARTC has 4 loops/sidings referred to in the first dot point to this item, and an additional 3 shorter sidings (2 at Curlewis and 1 ops/siding retained in the valuation are at 1 at each of Breeza, Gunnedah Stockyards and Baan Baa, at the equired for crew change. ARTC considers that this represents the minimum extent of these types of assets that to permit deliver of existing contractual requirement for coal paths given consideration of what is needed to also maintenance services and above rail activities to support coal on a stand-alone basis.
ined that the impact on DORC of removal of earthworks, track and relevant signalling assets for the excluded loops 51m.
appy to discuss this issue with the ACCC further if needed.
t its consultants Evans & Peck have confirmed that financing costs have not been included in proposed mark ups.

Gap to Turrawan Segments – Application to vary the ARTC Hunter Valley Access Undertaking Submission to ACCC Position Paper

Description	%	Approx Value (ORC)			
Unmeasurable items	5%	\$16M			
Preliminaries	30%	\$103M			
Design	9-20%	\$34M			
OH&P	14%	\$69M			
Delivery Agency	20%	\$108M			
Total	100% - 115%				
To demonstrate that financing costs are not included, it is noted that the only elements where the financing incorporated would be Prelims, OH&P and Delivery Agency detailed as follows:					
• Preliminaries - is the largest element of the mark-ups and intended to include site personnel with project management, site supervision, administration and support functions, site accommodation, I.T and communications, project specific insurances, security, first aid and personal protective equipment, cleaning and small tools. The largest component of preliminaries is the cost of site personnel for the tasks described above. An estimate of these costs at high level based on the just the staffing for site personnel could be as follows – say 100 staff @ \$200000/yr x 4yrs = \$80M. (based on average salary of \$160k). There would be additional costs to be added, but this demonstrates that there is no capacity remaining for the inclusion of financing costs within this element.					
• OH&P – is intended to include the corporate level overheads and profit for the design and construction organisation. Experience of market values of this is generally between 10-16%, subject to current market performance and excluding financing costs.					
Delivery Agency – the included financing containing the second seco		sed on actual ARTC dat	a, but benchmarked against other agencies which have not		
Finally, ARTC also notes that MJA have concluded that in most cases DORC values are reasonable in the context of benchmarks used by MJA (and CMT Solutions) which ARTC expects are based on mark ups that would not include any financing costs.					
As noted below, ARTC h (CMT Solutions) benchma		-	ballast, rail and sleepers (combined) and signalling to MJA		
ARTC understands these benchmarks do not include financing costs, and by aligning the DORC valuation. any doubt as to t inclusion of financing costs in proposed benchmarks should be reasonably removed.					

• In addition, it would be necessary for ARTC to devise an appropriate construction timeframe and distribution of costs over that timeframe based on efficient benchmarks.	To address this issue, ARTC has sought to identify, from publicly available information, a number of comparable rail network construction projects to use a benchmarks for construction time frame, in order to guide its consideration of what might be appropriate for the Gap to Turrawan assets. The results are shown at Attachment 1.
	Based on the available benchmarks and having regard for the scope (146km) and nature (brownfield country) of the Gap to Turrawan construction project, a reasonable construction time frame of 2.5 to 3 years is suggested. Projects with small scope range between 1.5 and 2 years, whilst projects with similar or larger scope range between 2.5 and 5 years.
	With respect to pre-construction, it is difficult to conclude a great deal from the evidence available due to the varying scope and nature of the projects. However, the evidence suggests a reasonable benchmark time frame for engineering design and procurement/contracts, which would be the two key elements of a Gap to Turrawan construction (where approvals are assumed in a brownfields context), would be 9 to 12 months, and 3 months (contracts only) to 2 years, respectively.
	Based on these benchmarks, ARTC considers that a reasonable time frame for these key pre-construction activities, which could be undertaken concurrently, would be between 6 and 12 months.
	To allow for reasonable contingencies that may arise during pre-construction and construction activities (e.g. procurement delay, contractual complexities, financing delay, extreme weather and disasters), ARTC proposes reasonable time frames based on available benchmarks for replacement of the Gap to Turrawan rail network as follows:
	Pre-construction – 1 year
	Construction – 3 years
	To further inform ARTC in relation to a reasonable time frame for replacement of the Gap to Turrawan rail network, ARTC has undertaken an indicative internal engineering assessment of a hypothetical Gap to Turrawan replacement project based on similar assumptions to that proposed by ARTC. A copy of this assessment is provided at Attachment 2. Key differences in assumptions made in this internal assessment are:
	• Limiting earthworks to structural and capping layers only. General cut and fill areas to produce an even grade have not been included.
	• Possession limitations due to existing operations may be tighter than what might be considered reasonable for a country brownfields scenario.
	These differences may result in reduced or increased time frames. Nevertheless, ARTC considers that this assessment does provide some guidance as to a reasonable time frame.
	Having regard to all of the differences in assumptions, ARTC considers that the overall project time frame, including pre-construction and construction activities, estimated at 4 years and 11 months, is likely to be an overestimate, particularly in light of the benchmark estimates provided above. Given this, ARTC does not consider the additional internal advice warrants any increase to the above

proposal of 4 years above resulting from available benchmarks.

ARTC has been unable to source any publicly available information in relation to the project spending profile in relation to the identified external projects. ARTC has reviewed its spending for the Maitland to Minimbah Third Road project endorsed by industry and has identified the spending profile below.

Year	1	2	3
Spend	20%	20%	60%

In addition, the internal assessment of a Gap to Turrawan replacement project described above, reveals the following spend profile for the 4 years 11 months project.

Year	1	2	3	4	5	
Spend	5%	26%	31%	21%	17%	

The spend profile for these two projects is quite different and likely to reflect differences between the nature and scope of the two projects. ARTC considers that the spend profile resulting from its internal assessment of a Gap to Turrawan replacement project may be more relevant. By adjusting¹ (compressing) the profile for this project to align to the proposed 4 year time frame, the following proposed spend profile results.

Year	Year 1		3	4	
Spend	12%	35%	31%	22%	

As an alternative, ARTC has also expanded² the spend profile for the Maitland to Minimbah Third Road project to align to the proposed 4 year time frame, and then averaged the resulting profile with that for the Gap to Turrawan replacement project above, to reveal the following 'average' project profile.

Year	1	2	3	4
Spend	13%	25%	28%	34%

In summary, ARTC proposes to base calculation of financing costs for the Gap to Turrawan replacement on the following parameters:

- Project Time Frame 4 years
- Project Spend Profile

² To carry out this adjustment, ARTC has applied each of the annual spends over 133% of a year (16 months) to develop an equivalent 4 year spend profile.

Gap to Turrawan Segments – Application to vary the ARTC Hunter Valley Access Undertaking Submission to ACCC Position Paper

¹ To carry out this adjustment, ARTC has applied each of the annual spends over 80% of a year (9.6 months) to develop an equivalent 4 year spend profile.

proposed basis for the Gap to Turrawan replacement would be \$56.8m. The magnitude of the mark-ups on direct costs (as a means of calculating indirect costs) is not likely to be appropriate as they appear to be high compared to relevant benchmark costs. During the ACCC's assessment, ARTC provided, where it could, available internal and external benchmarks in relation to both the proposed mark ups and direct costs used in the Gap to Turrawan valuation. • The mark-ups for the components of the DORC valuation identified by MJA as being comparatively high (i.e. ballast, sleepers, rail and signalling, costs) are too, bigh and therefore of themselves are ARTC recognises that the ACCC has concluded ARTC's DORC values and mark ups are too high in relation to certain assets being ballast, rail and sleepers (combined) and signalling, based on benchmark information provided to the ACCC by MJA and CMT solutions.							
 In all other respects, ARTC proposes that the basis of calculation of financing costs would be consistent with that used to determine financing costs in relation to other HV capital projects, as approved by the ACCC for annual compliance assessment. Using an indicative DORC estimate of around \$302m (\$604m ORC), ARTC estimates that the financing costs determined on the proposed basis for the Gap to Turrawan valuation. The mark-ups on direct costs (as a means of proposed basis for the Gap to Turrawan valuation. ARTC recognises that the ACCC has concluded ARTC's DORC values and mark ups and the costs used in the Gap to Turrawan valuation. ARTC recognises that the ACCC has concluded ARTC's DORC values and mark ups and the costs used in the Gap to Turrawan valuation. ARTC recognises that the ACCC has concluded ARTC's DORC values and mark ups and theorem of the method to the ACCC by MLA as being comparatively high (i.e. balast, sleepers, rail and sleepers (combined) and signalling, based on benchmark information provided to the ACCC by MLA and CMT solutions. As neither the MJA report nor the Position Paper provided any detail of the benchmarks and identify any reasons for differences for the specific arrawan values in the cost is proposal mark to the specific arrawan values. ARTC recognises that determining reasonable having regard to companies that definiting reasonable mark ups are being romproved to state state that and sleepers. MLA Report Soction 5.10.4 Ballast, rail and sleepers In undertaking our review we have grouped together ballast, rail and sleepers to a single overall combined cost of installing these asses, Our review works that the Evans a Soc or for signaling assets from 115% to 102% subject to subsequent discussions with the ACCC relating to matters raised in this proposed bar in the thermark prepared by CMT Solutions? MLA Report Soction 5.10.4 Ballast, rail a		Year	1	2	3	4	
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Combined cost of ballast, rail and sleepers is around 15% above a comparable benchmark prepared by CMT Solutions79. The CMT Solutions benchmark includes a mark-up with similar components but critically the client cost mark-up component is set at 15%.Position Paper. This would result in an estimated impact on the DORC of -\$5.92m.We estimate that a 15% lower replacement of cost of ballast, replacement		mark up for	signalling	assets fro	m 115% t	o 102% su	ubject to subsequent discussions with the ACCC relating to matters raised in this
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Solutions benchmark includes a mark-up with similar components but critically the client cost mark-up component is set at 15%. We estimate that a 15% lower replacement of cost of ballast, client cost of ballast, but critically the client cost mark-up component is set at 15%.		ARTC will a	leo consi	der reduc	ing the pr	nosed m	park une relating to hallast, rail and sleepners to as to align to the henchmark
but critically the client cost mark-up component is set at 15%. We estimate that a 15% lower replacement of cost of ballast,	Solutions benchmark includes a mark-up with similar components				• •	•	
	but critically the client cost mark-up component is set at 15%.	,					
sleepers and rail (pre adjustment for useful lives) reduces the ARTC notes that these changes have been calculated cumulative with the other changes adopted in this response, resulting in the	We estimate that a 15% lower replacement of cost of ballast,	MJA due to t	the increa	se in the D	DORC for s	leepers ar	rising from other proposed adjustments. See below.
	sleepers and rail (pre adjustment for useful lives) reduces the	ARTC notes	that thes	e changes	s have bee	en calculat	ted cumulative with the other changes adopted in this response. resulting in the
DORC value by \$10.0 million. However, we note that the ARTC has difference for the values calculated.	DORC value by \$10.0 million. However, we note that the ARTC has			-			

³ Marsden Jacob Associates, Review of ARTC's valuation for the Gap to Turrawan Segment of the Hunter Valley rail network, 30 November 2013, p55. Gap to Turrawan Segments – Application to vary the ARTC Hunter Valley Access Undertaking Submission to ACCC Position Paper

provided us with information that suggests that the mark-up for client costs is closer to 20%. We have not been able to verify the validity of this figure with closer examination of supporting data. If the client cost mark-up component is set at 20%, we estimate that the impact on the DORC is only \$7.4 million. Therefore, it is reasonable to assume that the DORC impact lies between \$7.4 and \$10.0 million.

We further note that the comparable cost for ballast, rail and sleepers used in the Dartbrook to Gap (adjusted for inflation80) is lower than the CMT Solutions benchmark cost. However, unlike the confidential benchmark, the Dartbrook to Gap valuation appears to be based on cost information from the mid-2000s adjusted for inflation. Additionally, the mark-ups used in our confidential benchmark are closer to the Evans & Peck mark-ups than those used in the Dartbrook to Gap valuation.

MJA Report⁴ Section 5.10.6 Signalling

'The signalling costs of just over \$900,000 per kilometre for the Gap to Turrawan appear high compared to some other valuations (e.g. Dartbrook to Gap valuation). However, signalling systems are a function of the rail segment in terms of factors such as overall rail traffic volumes, peak load traffic and number of connections of the main line to passing loops, lanes and sidings. Our review has examined that the unit cost rates for the key signalling components appear reasonable, although we believe that the mark-ups are slightly high overall. If we adjust for a lower mark-up of 102% (instead of 115%) for signalling, we estimate that this results in a lower signalling replacement cost (pre-adjustment for useful lives) of \$7.8 million and a reduction in the DORC value by \$6.3 million.'

The present value of cost savings associated with a new and modern asset should be included in the DORC valuation up-front and it is not likely to be appropriate for these costs to be reflected

To address the ACCC's issue, ARTC proposes to include the present value of cost savings associated with a modern asset (as compared to the existing asset) in the DORC valuation. It is not clear to ARTC why the costs saving of a **new** asset compared to the existing partially consumed asset are relevant, as sought by the ACCC. ARTC would have though that the cost savings should be

⁴ Op Cit, p56.

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Gap to Turrawan Segments – Application to vary the ARTC Hunter Valley Access Undertaking Submission to ACCC Position Paper

in the annual compliance assessment.	determined with respect to the existing consumed asset compared to a modern, similarly consumed asset. ARTC is happy to consult
	further with the ACCC on this issue.
• To ensure the DORC valuation is internally consistent, the assumed	
remaining useful life which underpins the calculation of depreciation	To address the ACCC's issue, ARTC now proposes to determine the present value of costs savings over the proposed remaining life
should also underpin the calculation of the present value of cost	on existing assets where a significant cost differential can be reasonably identified. ARTC considers that this will achieve the desired
savings. The ACCC is concerned that ARTC's proposed approach	internal consistency where the assumed remaining useful life underpins both the depreciation calculation and the calculation of the
would truncate the deduction of cost savings if an asset was	present value of cost savings, as sought by the ACCC.
disposed of before the end of its expected useful life, which is likely	Having said this, ARTC does have some concerns in relation to the practical application of the approach sought by the ACCC. For
to occur given planned infrastructure upgrades in Pricing Zone 3 to	example, where the initial DORC value of an asset has been discounted to allow for the present value of future cost savings over
support 30 tonne axle loads. The ACCC considers this is unlikely to	remaining life, and the asset is replaced before the end of that life for reasons such as increasing capacity (rather than life expiry),
be appropriate as it will result in internal inconsistency in the DORC	then the remaining cost savings will no longer be realised. To not allow ARTC recovery of the value of that discount at the time of
valuation. The ACCC considers that if ARTC wishes to reflect in the	replacement of the existing asset, where the discount reflects future savings that will no longer be realised seems inequitable.
DORC value any planned infrastructure upgrades which would	ARTC would be happy to discuss this further with the ACCC.
result in the replacement of some assets in the short term, this	
should be done consistently across the components of the DORC.	
For example, if ARTC is likely to replace an asset in two years, and	
therefore wishes to only calculate the value of cost savings for two	
years, the depreciation component should also reflect an expected	
remaining life of two years.	
Several remaining asset life assumptions underpinning the	
proposed DORC valuation are unlikely to be appropriate.	
E&P has assumed a remaining life of zero for two bridges built in	
1909. However, MJA considers that the remaining life of these	ARTC proposes to adjust the DORC valuation to reflect the MJA position as sought by the ACCC. ARTC has determined that the
bridges is actually likely to be at least five years.	impact on DORC is +\$1.18m.
	ARTC presumes that this reference in the Position Paper relates to the "economic life" of certain signalling assets rather than
• E&P has assumed a remaining life of up to 40 years for certain	remaining life. To address the ACC's issue, ARTC proposes to reduce the economic life of all signalling assets back to 30 years
signalling assets. However, MJA considers that the remaining life of	with the exception of certain "civil" asset types such as buildings that are used to support the signalling equipment, and included in
all signalling assets should be no more than 30 years.	the signalling asset classification. ARTC believes that these assets are likely to be more permanent than the signalling equipment
	itself which is more likely to be prone to technical obsolescence. ARTC proposes to retain an economic life of 40 years for such
	assets. ARTC estimates that the impact on the DORC is -\$6.66m.
	To address this issue, ARTC proposes to adjust the installation date for 1 in 4 steel to 1993 to result in a weighted remaining life (3 x
MJA considers that the remaining life of sections of track that have	To address this issue, Art o proposes to adjust the installation date for him 4 steel to host to result in a weighted remaining ine (o x

	-
a mix of timber and steel sleepers should be adjusted to allow for	timber installed 1990 life expired/1 x steel installed 2000, 37 year remaining life) of 10 years. ARTC has determined that the impact
the remaining life of the timber sleepers.	on the DORC is -\$0.3m. This is higher than that previously determined by ARTC due to the increased prevalence of 1 in 4 steel now
	identified in loops and sidings. Refer Table 2 below.
The modelling undersigning the meanered DODO understing	
The modelling underpinning the proposed DORC valuation	
contains a number of errors and is unlikely to be appropriate.	
• The full cost of the 47kg rail has not been included in the model.	ARTC proposes to correct this error in the model. ARTC estimates that the impact on DORC is +\$0.54m.
• There is a misspecification of one section of track as being timber	ARTC proposes to correct this error in the model. ARTC estimates that the impact on DORC is +\$8.09m.
instead of a concrete sleeper for the purposes of adjusting for	
useful life.	
Ballast costs have been double counted for one section of the rail	ARTC intends to correct this error in the model. ARTC estimates that the impact on DORC is -\$3.67m.
segment.	
Indicative Service and Indicative Access Charges	
The ACCC considers that ARTC could provide an estimate of the likely	In principle, ARTC has no substantial issues with providing the information requested by the ACCC to the relevant Access Holders as
losses to be capitalised to Access Holders during the annual process for	part of the process prescribed in Section 4.10 of the HVAU. As such ARTC proposes to make appropriate amendments to this
finalisation of Access Charges (which follows the process for finalising	section to provide for this.
contracted volumes each year in accordance with clause 4.20(a) of the	ARTC notes that the ACCC has indicated that it open to feedback as to how an appropriate level of transparency may be achieved in
HVAU). The ACCC considers that this is likely to be appropriate as it	
would improve transparency around the charges that Access Holders are	practice. As indicated earlier, the above proposal is made subject to the outcome of this further consultation.
likely to face over time, given that ARTC has discretion to set charges at	
a level that does not recover full Economic Cost in Pricing Zone 3 in the	
short term. One way that this could be achieved is through an	
amendment to clause 4.20(d) of the HVAU which sets out the	
information ARTC is to provide to Access Holders on 1 November each	
year. The ACCC is open to feedback as to how an appropriate level of	
transparency may be achieved in practice.	
Drafting amendments	1
No issues were identified.	No action required.

4. Further adjustments arising through consultation with the ACCC

During the ACCC's assessment of the proposed DORC valuation, there were some other adjustments arising from identified inconsistences not explicitly identified in the MJA report or the Position paper.

For completeness ARTC has listed at Table 2 below additional adjustments made to the DORC valuation during consultation.

Document	Issue/Inconsistency	Adjustment
Response to ACCC informal information request 27 September.	The existing asset is described as a timber sleeper and yet an optimisation factor of 100% is applied. This appears inconsistent with the way that it is done for other timber sleepers where the optimisation factor is 40%.	The optimisation factor for this asset has been adjusted to 40%. ARTC estimates that the impact on ORC is - 3.4m. There is no impact on DORC as this asset is fully depreciated.
Response to ACCC informal information request 24 October.	Do all the passing loops, sidings and passing lanes currently have concrete sleepers?	 Asset data initially sourced for this valuation in relation to Gap to Turrawan loops and sidings was incomplete and largely inconclusive. At the time it was considered reasonable to make broader assumptions in relation to the specific assets based on anecdotal advice provided at the time. These assumptions were largely predicated on an expectation of assets existing after substantial investments in loops made in recent times. ARTC has undertaken a closer assessment of the key loop/siding assets (rail & sleepers) which now reveals assets in place as follows: in relation to sleepers around 50% are concrete (predominantly installed as part of recent new loop and extension works), 25% older timber and 25% 1 in 4 steel configuration. in relation to 47kg rail assumed for all loops and sidings, closer assessment reveals that only 40% is 47kg rail, whereas 37% is 53 kg rail and 22% is 60kgHH rail. The DORC valuation has been adjusted to provide for the mix of asset types as described. The impact on DORC is reflected in the adjustment determined for the removal of certain siding and loops as determined in Table 1 above.

Table 2 Further Adjustments

5. Next Steps

In making the above proposals and adjustments to the Proposed Variation, ARTC considers that it has largely addressed the preliminary reviews expressed by the ACCC in the Position Paper. ARTC recognises that these views are only preliminary and are subject to review of further stakeholder consultation, as are ARTC's proposals as indicated at section 2 of this submission.

ARTC is therefore willing to consult further with the ACCC on its proposals and adjustments, and in light of stakeholder submissions, with a view to finalising the detail of a revision to the Proposed Variation for re-submission to the ACCC in due course.

PROJECT CONSTRUCTION TIME FRAME BENCHMARKS

Project	Scope & Nature	Estimate of Time Frame			
Maitland to Minimbah Third Track (ARTC)	 32 km alongside existing infrastructure multiple contracts 	Pre-construction [*] – 1.5 years Construction – 1.5 years			
Northern Missing Link GAPE (Aurizon) ^{**}	 69 km greenfield	Construction – 1.5 to 2 years			
Inland Route (as planned) ^{***} Inglewood to Oakey	 146 km Inglewood-Millmerran (74km greenfield) Millmerran-Brookstead (23 km rebuild) Brookstead-Yargullen (31 km greenfield) Yargullen-Oakey (18 km greenfield) To be completed in sections 	Pre-construction 3-4 years (whole of inland route) Construction – 2 years Completion – 2 years Construction 2 years Sections staggered over 5 years Refer Figures 1 and 2 below.			
The Pilbara Infrastructure ^{****} Cloudbreak mine to Port Hedland	273 km greenfield	 Pre-construction: Engineering Design – 9 months Procurement & Contracts – 2 years Construction – 2 years planned, 2.5 years actual (completed May 2008) Refer Figure 3 			

*Pre-construction includes such activities (where applicable) as engineering design, approvals, contract tendering and execution, financing, consultation.

** http://www.gca.org.au/files/R-Aurizon-GAPE-GAPESub-0413.pdf p5.

*** http://www.artc.com.au/library/IRAS Appendix J.pdf

**** http://www.fmgl.com.au/UserDir/FMGPresentations/060223 global iron ore conference.pdf

Figure 1

ACTIVITY	TEAR -0		TEAR 1
Stational dates			
Preliminary design	-		
Processing and			
Approval		 _	
Materiance design			
Territor and securit		-	
Commence alle work			
Cetadet design		-	
Land		1	
Construction			\rightarrow

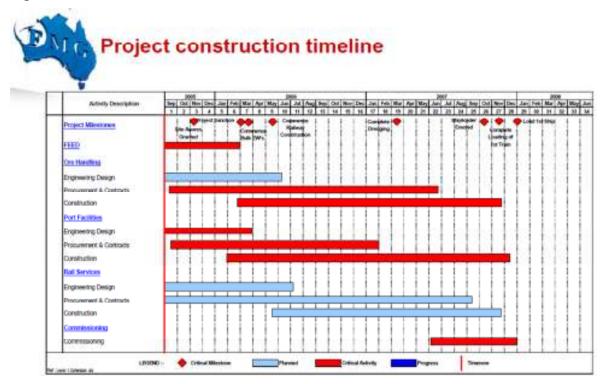
Source: ARTC Melbourne–Brisbane Inland Rail Alignment Study Final Report July 2010 Appendix J Capital Cost and Delivery Program

Figure 2

SECTION	****										
	444										
Pre-service.com extention											
Narromme - Outben		-	-								
Cutteri - Gestinger											
Owebegar - Narrator			-	-							
Narrabri West - Narrabri North	122										
Cemuna - North Star		_	_	-							
Horth Star - Velation											
Velation - Inglement				-							
Pigewood - Mameman				-	_						
Mineran Drockstead				-							
Bronkeland - Yargulan			_								
Vargulen - Celvry	122	-									
Ostray - Gowye		-	-								
Course - Heldow		-	-	-	-						
neillen Greidtheter				_	_						
Grandcheater - Kagana											
Parties to Nanomine (Upgrade)											
Namabri to Camuro (Utograde)								-	-		
Rato to Olockittingel										-	

Source: ARTC Melbourne–Brisbane Inland Rail Alignment Study Final Report July 2010 Appendix J Capital Cost and Delivery Program

Figure 3

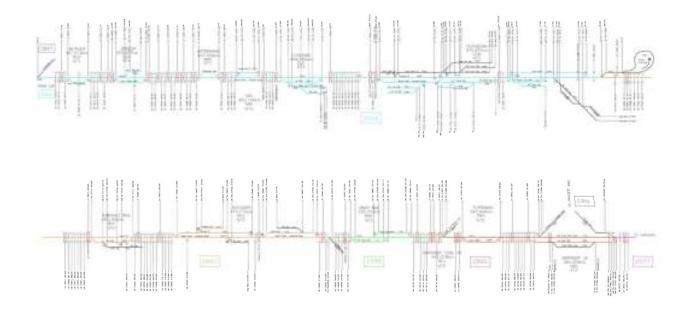


Source: http://www.fmgl.com.au/UserDir/FMGPresentations/060223 global iron ore conference.pdf

Cost Profile and Assumptions for Gap to Turrawan Build Programme

Scope

- Build based on current track layout in diagram below.
- Gap at 416.025km to Turrawan loop at 547.600, a total of 131.575km of main line replacement.
- Only coal haulage assets have been replaced excluding certain small loops and grain sidings.
- A total of 71 turnouts including catchpoints to be replaced.



- Formation works limited to structural and capping layers only. General cut and fill areas to produce an even grade have not been included.
- Underbridges and culverts are assumed to be part of the general fill.
- Level Crossing Reconditioning takes the same amount of time as plain line reconditioning.
- Supply of suitable structural and capping materials is assumed to be infinite.
- Timescales for environmental approval have been excluded as the work is based on an existing corridor and assumed to be maintenance related.

 Signalling assets not quantified, however durations and cost based on new loop percentages. Cable Route assumed at 0.5km per day. Each loop assumed 2 walk-in and 2 double locations at 5 weeks and 2 weeks build respectively.

Access

- A series of "super-possessions" of 10 days (240 hrs) duration. Work to be performed round the clock during this period. There would be safety working time issues should possessions extend this duration.
- It has been assumed that 4 "super-possessions" would be available each year, with a further 2 possessions of approx. 60 hours aligned with those south of Muswellbrook.
- Works for secondary grain/silo loops will be scheduled outside of normal possessions.
- Impact on passenger and other freight traffic has not been considered.

Construction

- Construction timescales are based on Hunter8 performance whilst performing track reconditioning on the Maitland to Minimbah project. Two 900m single track reconditionings where successfully performed in 96 hour possessions, however these did not require disturbance of any fixed signalling assets. It has been assumed that there would be efficiencies with the longer possessions but with lineside assets (eg turnouts, signalling) hindering progress so a average rate of 2000m (2km) per 240hr possession has been used. Current rates in 60 hour possessions are approx. 300m.
- More complex areas such as Gunnedah Yard and Boggabri, would require more time to complete the works.
- It is assumed that a maximum of 5 teams would be available per possession.

Duration

The above assumptions on Re-Conditioning lead to a design and contracting period of approximately 15 months before the first works and a construction time of 3 years and 8 months, the overall period is thus 4 years 11 months.

Cost

- Total cost is around \$650m which is \$4.95m per km. This value is assumed to be nonescalated. Cost loading this value to the indicative programme gives a budget as shown below. Assumed start is January 2014, with no cost in the first few months whilst initial funding is approved.
- The monthly cost profile is detailed in the graph below.

