



**Public Submission by
Alcoa World Alumina Australia
and Worsley Alumina
on the
Review of WestNet Rail's Floor & Ceiling Costs
for Certain Rail Lines**

Prepared for:

Director Gas and Rail Access
Economic Regulation Authority
Level 6, 197 St Georges Tce
PERTH WA 6000

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- A Communications Cost Estimate – South West Mainline
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1. INTRODUCTION

Alcoa World Alumina Australia (Alcoa) and Worsley Alumina Pty Ltd (Worsley) have reviewed in detail the submission made by WestNet Rail entitled “Proposed Floor and Ceilings for Mainline, Worsley line and Terminal End Bits – August 2006” (WestNet Proposed Costs) and the supplementary WorleyParsons report “Review of Unit Prices for Clause 9 Ceiling Price Review – 01-08-06” (WorleyParsons Report) which has been used to support the price increases proposed in the WestNet Proposed Costs.

Alcoa and Worsley have engaged their own team of consultants to review the details in both the WestNet Proposed Costs and the WorleyParsons Report and asked those consultants to compare this latest submission on pricing with both the original Clause 9 proposal from WestNet in December 2002 and the Regulator’s 2003 Determination¹.

It should be noted that only very limited summary information is provided by WestNet for these price reviews and as a result all public submissions (including this Alcoa/Worsley submission) include a degree of guesswork and deduction. On this basis, we have reviewed the information in detail but have made many assumptions as part of the review process. In some instances, we have sought supplementary information from WestNet via the ERA and this has aided our analysis.

If we have misunderstood or misinterpreted information provided by the ERA as part of the public consultation process then it is a result of the lack of detail provided for these public submissions. If any errors have been made in the assumptions, then we are available to meet with the ERA to explain the basis of our assumptions or to rerun modelling to measure the effect of any changes.

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¹ Floor and Ceiling Costs to apply to WestNet Rail, Determination of the WA Independent Rail Access Regulator, 24 September 2003

2. EXECUTIVE SUMMARY

Alcoa and Worsley have jointly reviewed the ceiling costs proposed by WestNet Rail in their 2006 pricing submission with particular emphasis on the tracks used by us to transport product to and from Kwinana and Bunbury and we do not agree with many of the assumptions, price increases and additional infrastructure assets being proposed in their document. We would suggest that there are mathematical errors in calculations, inflated unit rates and discriminatory allocations which have all contributed to inflated ceiling costs which must be challenged by the ERA.

We consider the GRV for the South West Mainline, Terminal End Bits and the Brunswick to Premier lines to be inflated by \$47.1 million as shown in the following summary table.

GRV Reductions	South West Main	Worsley Line	Terminal End Bits²
Rail	-\$2.285m	-\$0.855m	-\$0.092m
Earthworks	-\$7.700m	-\$4.428m	-\$0.310m
Ballast	-\$5.250m	-\$1.519m	-\$0.220m
Sleepers	-\$3.016m	-\$1.129m	-\$0.121m
Additional Loop	-\$2.217m		
Communications	-\$4.060m		
Signalling	-\$13.940m		
Total Reduction	-\$38.468 million	-\$7.931 million	-\$0.743 million

Table 2.1 Estimated GRV Reductions – SWM, Worsley Line and Terminal End Bits

These figures, when converted to an annual capital cost, contribute to a \$3.51 million overstatement of the capital component of the ceiling price across these routes. It is assumed that a similar distortion exists across the other lines on the network.

² Excludes section of line: Bunbury Inner Harbour 487 points to Woodchips unloading facility

Capital Costs	South West Main	Worsley Line	Terminal End Bits²
WestNet	\$16,871,166	\$5,362,234	\$666,359
Alcoa/Worsley	\$13,924,450	\$4,852,248	\$617,549
Difference	-\$2,946,716	-\$509,985	-\$48,810

Table 2.2 Estimated Capital Reductions – SWM, Worsley Line and Terminal End Bits

We have also reviewed the Common Costs and found these to be overstated for both Operating Costs, Network Management Costs and Overheads and if the submitted figures were to be approved, this would suggest that no progress has been made in reducing overheads and operating costs since the Westrail business was sold to Genesee and Wyoming before being subsequently on sold to Babcock & Brown Infrastructure.

It is part of the ERA's regulatory oversight to ensure that access rates reflect efficient costs but given the proposed increase from WestNet, it is difficult to see how the submitted prices could be viewed as efficient. Increases in operating and overhead costs of 20%+ over three years do not suggest that any improvements have been made and even when efficiency improvements have been instigated (e.g. Centralised Train Control) there appears to be no savings to the end users.

The following table shows the WestNet Proposed Costs and our recommended target operating costs:

Operating Costs	South West Main	Brunswick to Premier
Operating	\$1.404m	\$0.189m
Working Capital	\$0.565m	\$0.179m
Overheads	\$3.663m	\$1.106m
Total	\$5.632m	\$1.474m
Alcoa/Worsley Target	\$5.129m	\$1.354m

Table 2.3 Target Operating Costs – SWM and Worsley Line

The resulting ceiling for the South West Mainline when the capital cost, maintenance cost, operating and overhead cost reductions are applied is \$21,354,964 which is 17% below the figure proposed by WestNet and 3% below the approved ceiling for 2005.

The recalculated ceiling for Brunswick to Premier is \$6,929,040 which is 10% below the figure proposed by WestNet and 1% below the approved ceiling for 2005.

In summary, we would submit that the Proposed Floor and Ceilings for Mainline, Worsley line and Terminal End Bits as submitted by WestNet Rail on 11 September 2006 should be rejected and the ERA should seek to independently verify all of the cost increases suggested by WestNet in their submission.

We request that the ERA consider the following recommendations which are explained in detail in the body of this submission:

Number	Recommendation
1	Based on the failure of WestNet to provide the MEA standard claimed in December 2002 over the entire SWM, the ERA needs to monitor that MEA upgrades are delivered on a timely basis or alternatively act promptly to revise the ceiling down until the committed standard is delivered.
2	To negate the automatic rises based on CPI-X over the next two years and to reflect volume pricing elsewhere in Australia, the price for 50 kg rail and 60 kg rail should be reduced to \$1375 per tonne.
3	The price used for earthworks in the APM for the SWM is assumed to be \$159.925 per metre (based on \$250 for Standard Gauge x 64% for NG). This should be changed to reflect the large volume of cut and fill possible on a greenfields site and a figure of \$117.68 per metre is suggested.
4	The price used for earthworks in the APM for Brunswick to Premier is assumed to be \$216.33 per metre (based on \$250 for Standard Gauge x 87% for NG 1.5 m height). This should be changed to reflect the large volume of cut and fill agreed for the Brunswick line in 2003 (85%) and a figure of \$159.18 per metre is suggested.

Number	Recommendation
5	The cost of ballast should reflect both the lowest price available ex quarry and the minimum transport cost and distance. For the SWM and the Brunswick to Premier line, the delivered price for ballast should be \$25.50 per tonne.
6	The price for a large quantity of concrete sleepers purchased through a competitive tender process should result in an average price of \$81 per SG sleeper and \$74 per NG sleeper.
7	Three yearly price resets for bridges, culverts etc. should be based on efficient costs and not on indexation from either December 2002 or the original 2003 Determination date.
8	The ERA should review the recalculated Communications GRV submitted by WestNet to confirm that it is the lowest current cost.
9	The ERA should review the signalling asset list and the signalling installation costs to ensure that the economies achieved by the use of the communications backbone and the combined trenching are reflected in the Signalling GRV.
10	WestNet should be required to submit a justification for additional infrastructure based on users' current and future needs and timing and the increase in ceiling costs should be phased to coincide with the availability and usability of the infrastructure.
11	The ERA should review the unit prices for calculation of the GRV on the Terminal End Bits and update these prices if the corresponding unit prices for the SWM and Brunswick to Premier lines are changed.
12	WestNet should be required to provide a more detailed breakdown of Operating Costs including separate figures for Working Capital, Operating Costs, Overheads and Network Management Costs for the lines under review and also identify costs allocated to other lines on the network not the subject of the proposed review. Key indicators, such as number of full time equivalent employees, transaction costs and IT costs should be provided to prove efficient costs are being used.

Number	Recommendation
13	The ERA should review overhead costs and allocations in detail to establish if there is any justification for a 23% increase since the 2003 Determination
14	The ERA should review the allocation methodology which results in a proposed 180% increase in overhead allocation to some Terminal End Bits
15	Both the increases in Operating Costs and Network Management Costs should be reviewed against the savings anticipated from the capex investment in centralising Train Control and also benchmarked for efficient cost.
16	The ERA should again review the maintenance costs for the MEA specification as the proposed rates are considered to be up to 38% above benchmark rates.
17	The ERA should review the price escalation used for the Terminal End Bits and verify that the correct escalation has been applied.

3. MODERN EQUIVALENT ASSET

The basis for the 2003 Determination for the South West Mainline (SWM) was a track standard based on concrete sleepers, 50 kg rail, axle loads of 21t at 115 km/h or 23t at 80 km/h on single line with passing loops and CTC signalling. WestNet sought a ceiling based on this standard even though a defined timetable for the upgrade of the existing assets had not been set. It is now four years since the MEA was defined and there are still sections of track on the SWM which remain at the old standard of 19.5t/80 km/h. Since the whole line must be at the higher standard before new rollingstock can be utilised, all users have been funding the gradual installation of concrete sleepers and new rail and turnouts without any benefit flowing to the users in the three years since the 2003 Determination.

This highlights an anomaly in the approval process for GRV where the Code states that the *“GRV is ...calculated as the lowest current cost to replace existing assets with asset that have the capacity to provide the level of service that meets the actual and reasonably projected demand and are, if appropriate, modern equivalent assets....”*³ and yet, four years later, we still have not got the entire SWM line at the agreed MEA standard.

The Regulator in his 2003 Determination wrote:

*“The Regulator will monitor the delivery of the level of service through key performance indicators and, as indicated in the Regulator’s Costing Principles Determination, will revise the MEA standard if it can be demonstrated that WNR is consistently not providing the expected standard and service”*⁴.

Recommendation 1:

Based on the failure of WestNet to provide the MEA standard claimed in December 2002 over the entire SWM, the ERA needs to monitor that MEA upgrades are delivered on a timely basis or alternatively act promptly to revise the ceiling down until the committed standard is delivered.

³ Railways (Access) Code 2000, Schedule 4 clause 2 (4) page 44

⁴ Floor and Ceiling Costs to apply to WestNet Rail, Determination of the Western Australian Independent Rail Access Regulator, 24 September 2003 Page 18 para 4

4. GROSS REPLACEMENT VALUE

Alcoa and Worsley have reviewed the proposed Gross Replacement Value (GRV) and do not agree with many of the proposed changes to the unit rates used in developing the proposed new GRV. It would appear that WestNet is using prices from the top of the current Western Australian “mining boom” cycle to inflate the cost base for the next three years. It would also appear that the WorleyParsons Report has ignored the previous arguments on unit rates and volumes provided by many users in 2003 and accepted by the Regulator in his 2003 Determination.

The ERA has suggested in previous publications that GRV and DORC valuations produce similar long term outcomes for regulatory pricing if the different patterns of maintenance cycles and major planned maintenance (asset renewal) are both correctly reflected in the modelling. We would strongly suggest that this premise is being severely tested by the proposed pricing submitted by WestNet.

If inflated costs are used for individual items for a three yearly price reset then the users of the network will be disadvantaged until the next review. This situation is further accentuated by the CPI-X indexation in the intervening years which will typically also reflect the same inflationary factors but with a lag behind the actual cost increases. As a result, the inflated prices proposed could be further inflated by higher than normal CPI outcomes over the next two years. The potential for this to happen is evidenced by the latest two CPI Quarterly rises for Perth which will flow through to the 2007 CPI-X indexation.

It is important that the ERA ensures that the provisions of the Code provide a mechanism to deliver the lowest costs and hence competitive pricing for end users whilst providing the Railway Owner with a reasonable return on its investment. The GRV should reflect efficient costs – it should not be influenced by short term market distortions.

The following sections highlight these issues in detail by reference to specific items within the GRV where we consider that an efficient cost base has not been used.

4.1. Rail

The WorleyParsons Report has provided updated costs for rail delivered to Midland by OneSteel at \$1,500 per tonne for 50 kg/m rail. The equivalent cost quoted in the GHD report in December 2002 was \$1015 per tonne. This represents a 48% increase over the 3.5

years. By comparison, the movement in domestic steel prices over the 3.5 year period was approximately 29%⁵. It should also be noted that with continuing falls in coking coal prices for 2007, the price of steel is expected to remain stable or fall marginally in 2007 in spite of the forecast increases in iron ore price.

Our consultants sought to verify pricing for rail projects within Australia and have been advised that rail prices in NSW and Victoria for recent major construction projects has averaged \$73 per metre for 53kg rail and \$82.5 per metre for 60 kg rail. Both these prices were based on steel prices of \$1,375 per tonne.

Given these factors and the dedicated CPI-X increases which will be applied over the next two years, the price used for rail in the APM would appear to be high and is therefore a contributing factor to the inflated GRV in the model.

Rail Prices (per tonne)	GHD 2002	WestNet Proposed 2006	% increase 2002 to 2006	Estimated Interstate 2006
50kg/m	\$1,015	\$1,500	48%	Not used
53kg/m	Not priced	Not offered		\$1,375
60kg/m	\$970	\$1,440	48%	\$1,375

Table 4.1.1 Comparison of Rail Price per tonne – 2003 to 2006

Recommendation 2:

To negate the automatic rises based on CPI-X over the next two years and to reflect volume pricing elsewhere in Australia, the price for 50 kg rail and 60 kg rail should be reduced to \$1375 per tonne

This would result in a reduction in GRV by \$2.28m to \$25.1m on the SWM and a reduction in GRV by \$0.855m to \$9.4m on the Brunswick to Premier line.

⁵ OneSteel Annual Report 2006 Figure 19 OneSteel Domestic Steel Price per tonne

4.2. Earthworks

The WorleyParsons Report provides updated figures to the GHD 2002 figures for Earthworks. In doing so, it continued the GHD approach of calculating earthworks based on imported fill and adding capping as an additional layer and does not take into account the Regulator's Determination of 24 September 2003 where:

- The 2002 GHD assumption of 100% "imported fill" was changed to a mix of "imported" material and "cut and fill" material. The 2003 Determination also concluded that the price per cubic metre should include the capping layer and the final agreed rate was \$17.00/m³ which, in the case of the South West Main, represented a linear metre cost of \$121.55 compared to the GHD 2002 figure of \$221.00/m quoted in the WorleyParsons Report.
- Current pricing for "cut and fill" is estimated to be around \$8/m³. This has been increased to an average \$10.89/m³ to allow for some imported content. This compares to the \$19.23/m³ quoted by WorleyParsons for all "imported fill". It is suggested that the 2006 figure for SWM earthworks including capping should be \$117.68/m and not \$159.92/m as quoted in the WestNet submission page 17.

The following table shows the difference between the submitted pricing in December 2002 and the approved rates in the 2003 Determination. The Regulator reduced the earthworks rate from \$19.42 to \$17.00/m³ – a reduction of 12.5% due to the balancing of imported fill and cut & fill components.

Earthworks – SG	Formation 10 m³	Capping 6 m²	Total per linear metre	Avg per m³	Approved rate per m³
GHD Report 2002	\$170.00	\$51.00	\$221.00	\$19.42	\$17.00
WorleyParsons 2006 Proposed	\$192.30	\$57.70	\$250.00	\$21.97	tba

Table 4.2.1 Comparison of composite rates for SG Earthworks – 2003 to 2006

South West Mainline

For narrow gauge track, the formation was reduced to 1m high including capping but the \$17.00/m³ was kept as the regulatory price so the costs per linear metre approved in 2003 was \$117.11. Again, the proposed pricing from WestNet ignores this previous determination and proposes pricing based on 100% imported fill.

Earthworks – NG 1 m formation	Formation 10 m³	Capping 6 m²	Total per linear metre	Reduce to 64% for NG	Avg per m³	Approved rate per m³
GHD Report 2002	\$170.00	\$51.00	\$221.00	\$141.44	\$19.42	\$17.00
WorleyParsons 2006 Proposed	\$192.30	\$57.70	\$250.00	\$159.925	\$21.32	tba
Alcoa estimate	\$60.00 ⁶	\$57.70	\$117.68	\$117.68 ⁷	\$17.08	tba

Table 4.2.2 Comparison of composite rates for NG 1 m Earthworks – 2003 to 2006

Recommendation 3:

The price used for earthworks in the APM for the SWM is assumed to be \$159.925 per metre (based on \$250 for Standard Gauge x 64% for NG). This should be changed to reflect the large volume of cut and fill possible on a greenfields site and a figure of \$117.68 per metre is suggested.

This would reduce the GRV for the SWM from \$29.2 million to \$21.5 million – a difference of \$7.7m.

Brunswick to Premier

For the Brunswick to Premier Line, WestNet has proposed an earthworks figure of 87% of the Standard Gauge calculation in the WorleyParsons Report (\$250.00 x 87% = \$217.50).

⁶ Formation cross-sectional area for Narrow Gauge recalculated based on 0.77m high equals 5.775 m² including batters

⁷ No reduction applied as formation area already recalculated

The figure used in WestNet's submission is slightly different at \$216.33 per metre or a 13.12% uplift on the 2002 figure of \$191.24/m. Neither of these figures would appear to be correct.

In the October 2003 Determination for the Worsley line, the Regulator amended the formation height for some sections of this line and also reduced the cost of earthworks to \$14.00 per m³. Based on this determination, the cost of earthworks was \$159.32 per linear metre for sections at 1.5m formation height and \$105 per linear metre for sections at 1m formation height.

The WestNet submission claims the cost from Brunswick to Worsley to have been \$191.24/lm in 2002 and proposes inflating that figure to \$216.33/lm for 2006 pricing.

The following table summarises the costs for the Brunswick line

Earthworks – NG 1.5 m formation	Formation 10 m³	Capping 6 m²	Total per linear metre	Reduce to 87% for NG	Avg per m³	Approved rate per m³
GHD Report 2002	\$170.00	\$51.00	\$221.00	\$192.27	\$16.89	\$14.00
WorleyParsons 2006 Proposed	\$192.30	\$57.70	\$250.00	\$216.33 ⁸	\$18.94	tba
Worsley estimate	85% @ \$8.50 & 15% @ \$19.23 = \$101.49	\$57.68	\$159.18	\$159.18	\$13.94	tba

Table 4.2.3 Comparison of composite rates for NG 1.5 m Earthworks – 2003 to 2006

We would submit that the new price should therefore remain at \$14 per cubic metre.

⁸ This figure is extracted from Page 17 of the WestNet Proposed Floor and Ceilings. It is not exactly 87% x \$250.00 – and this is assumed to be a rounding error on the 87% in the spreadsheet provided by WestNet.

Recommendation 4:

The price used for earthworks in the APM for Brunswick to Premier is assumed to be \$216.33 per metre (based on \$250 for Standard Gauge x 87% for NG 1.5 m height). This should be changed to reflect the large volume of cut and fill agreed for the Brunswick line in 2003 (85%) and a figure of \$159.18 per metre is suggested.

This would reduce the GRV on the Brunswick to Premier line by \$4.4m.

4.3. Ballast

The WorleyParsons report quotes an “ex quarry” cost for ballast for the South West Main of \$25.00 per tonne with an additional average transportation cost of \$12 per tonne based on 150 km haulage distance. A recent quote obtained by our consultants for ballast for the SWM was \$20.70 per tonne ex quarry⁹ with haulage quoted at \$2.33/t for the first 10 km and \$0.082 per tonne km for distances over 10 km. Based on an average haulage distance to site for the SWM of 40 km (not 150 km), this would equate to a delivered price of \$25.50 per tonne.

Based on a total requirement of 457,000 tonnes of ballast for the SWM, this results in a total cost for ballast of \$11,653,500. This is significantly less than the \$16,908,000 GRV based on using the \$37.00 per tonne figure provided in the WorleyParsons report.

Ballast – SWM 182.79km	Ex Quarry	Delivered to site	Tonnes per km	Total Cost
WorleyParsons	\$25.00	\$37.00	Assume 2500 t	\$16,908,000
Alcoa/Worsley estimate	\$20.70	\$25.50	2500 t	\$11,653,000
Overstated GRV				\$ 5,255,000

Table 4.3.1 Recalculation of Ballast GRV - SWM

⁹ Quote from Hanson, Bunbury September 2006.

Based on the different ballast depth requirements on the Brunswick to Premier line, the total requirement is 126,500 tonnes of ballast which equates to \$3.2m GRV. The difference is shown in the table below.

Ballast – Worsley Line 68.41km	Delivered to site	Tonnes per km to Worsley (23.9km)	Tonnes per km elsewhere (44.5km)	Total Cost
WorleyParsons	\$37.00	Assume 2500 t	Assume 1500 t	\$4,680,500
Alcoa/Worsley estimate	\$25.50	2500 t (59,750t)	1500t (66,750t)	\$3,225,750
Overstated GRV				\$ 1,454,750

Table 4.3.2 Recalculation of Ballast GRV – Brunswick to Premier Line

Recommendation 5:

The cost of ballast should reflect both the lowest price available ex quarry and the minimum transport cost and distance. For the SWM and the Brunswick to Premier line, the delivered price for ballast should be \$25.50 per tonne.

This price would result in a reduction of the proposed GRV of 5.25 million for the SWM and \$1.4 million for the Brunswick to Premier line.

4.4. Sleepers

Our consultants have sought to establish sleeper pricing on a range of major projects throughout Australia. Prices for Standard Gauge sleepers have ranged from \$65 to \$75 depending on quantity. Fastening prices have ranged from \$9.50 to \$12.50 per sleeper. This gives an average of \$81 per SG sleeper complete with fastenings for a competitive tender on a large project (>100 km). The WorleyParsons report has quoted a figure of \$95.00 for a SG sleeper complete with fastenings. We consider that the WorleyParsons pricing reflects an inflated WA price and is not competitive.

Assuming a 10% cost reduction for the shorter NG sleeper, we suggest that the NG sleeper price should be \$63 plus hardware at \$11 giving \$74.00 per sleeper. This figure is 13% below the suggested price in the WorleyParsons Report.

Recommendation 6:

The price for a large quantity of concrete sleepers purchased through a competitive tender process should result in an average price of \$81 per SG sleeper and \$74 per NG sleeper.

This revised cost for sleepers would result in a GRV reduction of \$3 million on the SWM and \$0.4m reduction on the Brunswick to Worsley section.

4.5. Bridges, Culverts, Surfacing, Access Roads and Walkways and Miscellaneous Costs

Throughout the WorleyParsons report, the ABS Producer Price Index data has been used to uplift 2002 pricing. The percentage uplift is based on Western Australian data and therefore includes the significant upward pressure on rates created by the demand for rail personnel on mining projects throughout WA at the current time. These figures do not necessarily reflect long term contract rates set by WestNet Rail and the ERA needs to form a view on short term price cycles and the influence these may have on the GRV. We would prefer to see the three year price resets based on efficient costs rather than indexed based solely on ABS data. This is important on two counts:

- The initial pricing used in 2002 may have been incorrect or inflated, and
- The real cost movement may include innovation or changed construction practices which reduce costs.

Recommendation 7:

Three yearly price resets for bridges, culverts etc. should be based on efficient costs and not on indexation from either December 2002 or the original 2003 Determination.

4.6. Signalling and Communications

The WorleyParsons report has identified a 16.66% uplift in pricing from 2002 prices based on input from the signalling supplier, Union Switch and Signal. The supplementary pricing from WestNet for Communications shows a 91% uplift in pricing from the 2003 Determination and the explanation given is “...and Communications Backbone infrastructure previously omitted is now included in the Kwinana to Bunbury and Forrestfield to Kalgoorlie routes”¹⁰.

Following our request for more details on the omissions in the Communications Backbone and the detailed response from WestNet, we asked our consultants to seek an independent valuation for the communications requirements for the South West Mainline to verify the claims made by WestNet. The summary cost sheet for this calculation is submitted as Confidential Appendix A to this submission. The following table shows the various estimates for Communications costs for the South West Mainline. The valuations suggest that the WestNet GRV could be up to 46% higher than the efficient cost. It is assumed that the WorleyParsons figure has no relevance to the calculation as it is based on an uplift of the 2003 Determination from which WestNet has claimed some equipment is excluded.

Communications GRV	2003 Determination	Worley Parsons 2006	WestNet supplementary GRV	ICT Consultants GRV
SWM Total \$	\$6,708,840	\$7,826,338	\$12,815,555	\$8,754,620
Increase from 2003		+16.66%	+91.02%	+30%

Table 4.6.1 Changes in Communications GRV – 2003 to 2006

Recommendation 8:

The ERA should review the recalculated Communications GRV submitted by WestNet to confirm that it is the lowest current cost.

¹⁰ Section 3.1.3.1 Asset Population, Proposed Floor and Ceilings for Mainline, Worsley line and Terminal End Bits, WestNet Rail August 2006 Review, page 7

Based on the asset information provided by WestNet, we consider the Communications GRV for the SWM to be overstated by \$4.1m.

Signalling

We have been unable to verify the uplift in signalling costs suggested in the WorleyParsons report. The difference between the 16.66% used by WorleyParsons and the 19% in the WestNet Proposed Costs has been explained by WestNet as relating to the additional loops. We have re-examined our previous 2003 submission, updated the unit prices and incorporated the savings from using common trenches for communications and signalling cabling based on input from our communications consultants. The updated figures also include level crossing boom gates and flashing light costs which were excluded in our 2003 submission. The total GRV for the signalling infrastructure on the SWM is \$23.878 million compared to WestNet's latest submission of \$37.818 million.

Signalling GRV	2003 Determination	Worley Parsons 2006	WestNet supplementary GRV	Signalling Consultants GRV
SWM Total \$	\$31,092,021	\$36,271,050	\$37,817,785	\$23,878,000
Increase from 2003		+16.66%	+21.6%	-23.2%

Table 4.6.2. Changes in Signalling GRV – 2003 to 2006

On the basis of the large disparity between the GRV calculations, we would request that the ERA examine in detail the asset listing for signalling (in conjunction with the equipment, cabling and trenching being provided by the communications infrastructure) to ensure that the original 2003 Determination provided a sound basis for the WorleyParsons uplift of 16.66%.

Recommendation 9:

The ERA should review the signalling asset list and the signalling installation costs to ensure that the economies achieved by the use of the communications backbone and the combined trenching are reflected in the Signalling GRV.

4.7. Additional Passing Loops

WestNet has provided very little commentary on the need for additional passing loops on the SWM resulting in an extra 3.5km of track¹¹. Following a request for further information, WestNet has now provided a list of the passing loops and loop extensions as follows:

Type	Location	Length
New crossing loop	Burekup (midway between Brunswick and Picton)	1110m
New crossing loop	Venn (north of Pinjarra)	1100m
Extend loop	Brunswick	From 695m to 1100m
Extend loop	Benger	From 650m to 1100m
Extend loop	Yarloop	From 610m to 1100m

Table 4.7.1 WestNet Proposed Passing Loops and loop extensions - SWM

Alcoa acknowledges that it has been in discussions with WestNet on the need for a passing loop at Burekup and the future need for extended loops between Pinjarra and Bunbury if longer trains are required to meet future increases in tonnages. Similarly, if Worsley expands operations at the refinery, there will be a requirement for additional rail capacity between Brunswick Junction and Bunbury Inner Harbour. At this stage, Alcoa has no plans to increase train lengths and we consider that the only additional infrastructure that may be required is the loop at Burekup.

No explanation has been provided on the trigger for the new loop at Venn and Alcoa has not requested any increase in capacity on this section of line.

Detailed planning has not been provided to users on these two extra loops and no timescale has been set. Alcoa acknowledges that there will be a requirement for additional capacity

¹¹ Section 2.3.2 Crossing Loops on Kwinana to Bunbury line, Proposed Floor and Ceilings for Mainline, Worsley line and Terminal End Bits, WestNet Rail August 2006 Review, page 6

on the SWM by 2011/2012 if the Wagerup 3 expansion proceeds but we consider it premature to include any changes relating to Wagerup at this time.

As stated in previous submissions, we do not agree with the current approach used by the ERA to allow full recovery of proposed capacity improvements in advance of the commissioning of these improvements especially since WestNet continues to seek direct funding for these improvements from users when they occur.

Recommendation 10:

WestNet should be required to submit a justification for additional infrastructure based on users' current and future needs and timing and the increase in ceiling costs should be phased to coincide with the availability and usability of the infrastructure.

Removing the additional loop at Venn and the loop extensions at Brunswick, Bengier and Yarloop would result in a GRV reduction of \$2.2 million on the SWM.

4.8. Terminal End Bits

WestNet has provided updated ceilings for the Terminal End Bits as part of its August 2006 report however the ERA has advised that these calculations are for a 1 January 2007 reset.

The WestNet submission implies this change is to take effect from 1 July 2006¹² and reallocations of operating costs and overhead costs between the mainline and terminals end bits have added significantly to the ceiling price quoted for the short sections. It is unclear how these changes are scheduled to flow through into a route based ceiling price applicable from 1 July 2006 since the price review is not due until 1 January 2007.

The following response applies to the price reset quoted by WestNet in Table 5.1 of the Proposed Floor and Ceilings and we request that the ERA makes it clear in its determination if these prices apply from 1 July 2006 or 1 January 2007.

The GRV for the Terminal End Bits is based on the same WorleyParsons data as the SWM. As such, the cost of rail, earthworks, ballast, sleepers, bridges, signalling and

¹² Proposed Floor and Ceilings for Mainline, Worsley line and Terminal End Bits, WestNet Rail August 2006 Review, page 12 Table 5.1 "Revised Ceiling @ July 2006"

communications identified in Sections 4.1 to 4.6 of this submission are overstated. Whilst it has been difficult to model the costs on these short sections due to the allocation methodology used by WestNet, we estimate that the Terminal End Bits GRV is overstated by \$0.743 million.

Recommendation 11:

The ERA should review the unit prices for calculation of the GRV on the Terminal End Bits and update these prices if the corresponding unit prices for the SWM and the Brunswick to Premier lines are changed.

5. ALLOCATION OF COMMON COSTS

Alcoa and Worsley have reviewed both the quantum and the allocation of operating and overhead costs. We have identified numerous anomalies with these costs and the significant issues are detailed in the following sections. We still do not consider that the allocation of common costs to route sections provides a fair representation of allocated costs but we do acknowledge that the direct allocation of operating costs has been improved substantially since 2003 although the overall increase in these costs on a network wide basis is totally unacceptable and does not reflect efficient costs.

We also found the submission by WestNet to be confusing as Section 3.2 of the proposed Operating Costs is for the whole organisation and not just for the lines under review in the document. We strongly suggest that WestNet should clearly identify in future submissions the basis for the costs provided in their documentation. In spite of several supplementary questions asked by our consultants, it is still not clear that the correct allocation of overheads and operating costs to the grain lines has been made and we would request that the ERA examine in detail the responses submitted by WestNet in response to our consultant's questions.

Recommendation 12:

WestNet should be required to provide a more detailed breakdown of Operating Costs including separate figures for Working Capital, Operating Costs, Overheads and Network Management Costs for the lines under review and also identify costs allocated to other lines on the network not the subject of the proposed review. Key indicators, such as number of full time equivalent employees, transaction costs and IT costs should be provided to prove efficient costs are being used.

WestNet has submitted proposed Operating Costs across all routes which are 17.8% higher than the original costs approved in the 2003 Determination. In particular, Overheads have increased by \$3 million (although an unspecified amount is transferred from Network Management). Operating costs have increased by \$1 million and Centralised Train Control (part of Network Management) has increased by 0.9 million

Common Costs	2003 Determination	WestNet Proposed 2006	% increase
Overheads	\$13,188,808	\$16,193,526	23%
Operating	\$5,377,680	\$6,477,000	20%
Network Management	\$5,681,864	\$5,892,358	4%
Total	\$24,248,352	\$28,562,884	17.8%

Table 5.1 Comparison of Common Costs – 2003 to 2006

We consider that no effort has been made by WestNet to reduce overheads within their organisation and we assume that the administrative head count must have increased for the new costs to be 17.8% above the 2003 Determination.

5.1. Working Capital

Whilst no figures were provided for Working Capital in the WestNet Proposed Costs, details of the Working Capital have been supplied as a result of a supplementary question asked by our consultants. The figures for the SWM have increased marginally based on the corresponding change to the GRV and the reduction in WACC. It is understood that this amount is included in Operating Costs in Table 4.1 of the WestNet submission. Given our comments on GRV in this submission, it is assumed that there will be a corresponding change to Working Capital if the GRV is reduced in this new determination. Based on the recommendation on GRV contained in this submission, Working Capital on the SWM should fall by \$60,000.

5.2. Overheads

WestNet has stated that it “has used its actual board approved 2006/2007 budget as the basis of its submission for these costs”¹³. Given the previous review in 2003, the increases in CPI over the past three years and wages growth generally in Perth, we consider that the

¹³ Section 2.2 Annual Costs, Proposed Floor and Ceilings for Mainline, Worsley line and Terminal End Bits, WestNet Rail August 2006 Review, page 6

new budget does not show any attempt to reduce the overheads of the organisation and that the recent separation of below and above rail has contributed to an increase in overheads. We consider that overheads should not have increased at a rate greater than CPI and a maximum increase should therefore be in the order of 7.5%.

If the previous 2003 Determination approved structure represented efficient cost, then the new 2006/2007 approved budget cannot represent an efficient organisation. In the absence of any detail information on organisational structure or head count, we can only recommend that the overhead cost should not exceed \$14 million.

Recommendation 13:

The ERA should review overhead costs and allocations in detail to establish if there is any justification for a 23% increase since the 2003 Determination.

Overhead allocation issues – Terminal End Bits

There have been substantial increases to ceiling costs on several sections of line approaching the Bunbury Port. In particular, the overhead costs on the Bunbury Inner Harbour 485 points and 486 points to the Alcoa/Worsley boundary have increased by over 186% since the original July 2004 determination. The following table highlights the significant increases.

Section of line	Ceiling 2004	Proposed Ceiling 2006	Overheads 2005	Proposed Overheads 2006
Bunbury Inner Harbour 485 points to Alcoa (inbound)	\$ 261,144	\$ 515,754 (+97%)	\$ 123,880	\$ 354,534 (+186%)
Bunbury Inner Harbour 486 points to Alcoa (outbound)	\$ 175,207	\$ 334,228 (+91%)	\$ 75,467	\$ 218,307 (+189%)

Table 5.2.1 Changes to overhead allocation – Bunbury Inner Harbour Short Sections

Given that the total WestNet Overheads cost has increased by 23% and that Alcoa train numbers have increase by one consist and Worsley train numbers have reduced by 1.5, we

are unable to understand the proposed changes to overheads allocated to these sections of line.

The current approved allocation of costs to the Terminal End Bits results in a ceiling for the sections used by Alcoa/Worsley of \$2,403,553 for 6.954 km or \$345,636 per km compared to an average \$141,000 per km for the rest of the SWM.

Alcoa has previously suggested to the ERA, through the working group, that some form of cap needs to be introduced to eliminate allocations which clearly cannot be substantiated. This most recent proposal from WestNet highlights the anomalies in the current allocation methodology approved by the ERA caused by the WestNet calculation of train numbers based on route sections.

Recommendation 14:

The ERA should review the allocation methodology which results in a proposed 180% increase in overhead allocation to some Terminal End Bits.

5.3. Operating Costs & Network Management Costs

Operating Costs have increased by 20% based on figures supplied by WestNet in Table 3.2.4 of their Proposed Costs excluding Network Management Costs. Network Management Costs have increased by 4% but this hides the transfer of some Network Management Overhead to Overheads. The costs for Centralised Train Control have increased by 22%.

	2003 Determination	WestNet Proposed 2006	% increase
Operating Costs	\$5,377,680	\$6,477,000	+20.4%
CTC	\$3,877,573	\$4,751,368	+22.5%
Network Management Overhead	\$1,804,291	\$1,140,990	-36.7%

	2003 Determination	WestNet Proposed 2006	% increase
Total	\$11,059,544	\$12,369,358	+11.8%

Table 5.3.1 Changes to Operating Costs - 2003 to 2006

Ignoring the decrease in Network Management Overhead which was due to a reclassification of costs to another cost centre, there appears to be no savings resulting from the implementation of a Centralised Train Control system. Given the significant reduction in labour costs which should be associated with the closure of remote train control centres and signal boxes, substantial reductions would have been expected to flow through to Operating Costs as a result of this initiative.

It would appear that we are being charged for the full capital cost of a new CTC without seeing any of the benefits flowing through to the operating expense. A similar reduction in Network Management Overhead should also flow from the new CTC but since the costs transferred to Overheads have not been quantified, it is impossible to test this item for any savings.

We would expect that a business case would have been made for centralising Train Control based on an overall cost saving. On the basis of the information provided, this does not appear to have been reflected in the Operating Costs.

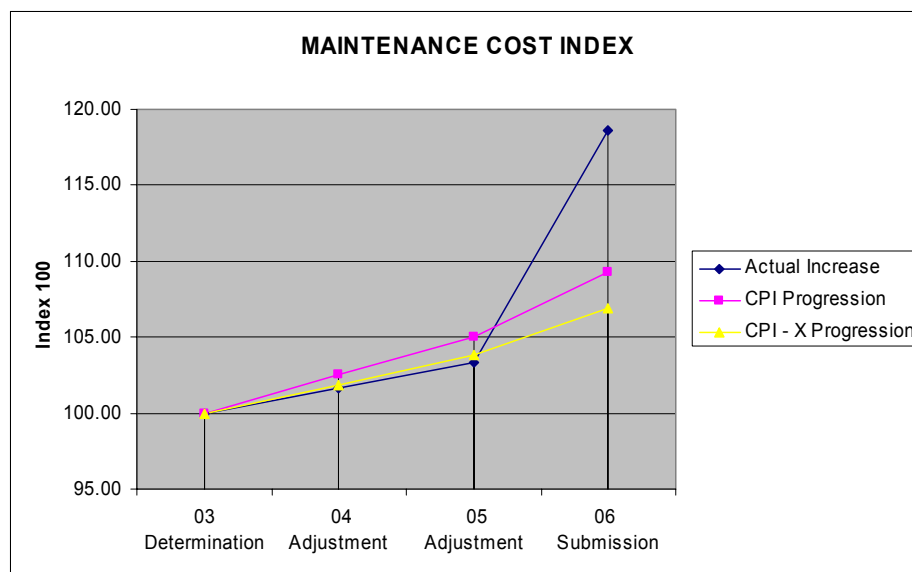
Recommendation 15:

Both the increases in Operating Costs and Network Management Costs should be reviewed against the savings anticipated from the capex investment in centralising Train Control and also benchmarked for efficient cost.

6. MAINTENANCE COSTS

WorleyParsons has expressed the view that it would be “preferable to use escalation factors from a source that has the ability to be used in future reviews”¹⁴ as the basis for a price reset. WorleyParsons then selected the ABS Non Building Construction and Road and Bridge Construction indices for Western Australia to derive a 17.4% increase in maintenance costs.

This approach does not correlate with our understanding of a three year price reset which is designed to reassess the efficient cost of providing maintenance on the network. Given the cost plus nature of the current contract, and the additional contract management costs imposed by WestNet in the latest overhead¹⁵ pricing, we consider that the proposed price of \$17,610 per km is excessive and does not reflect any attempt to provide an efficient cost base for a MEA structure.



Applying the cost model previously used for our 2003 submission and using current labour rates, our consultants have recalculated that Maintenance Costs should be \$12,700 per km. The modelling of the maintenance cost of \$12,700/km is attached in Confidential Appendix B. This rate increase (\$11,349/km to \$12,700/km) is significantly higher than both the CPI-X index used since the 2003 Determination and the CPI Index over the same

¹⁴ Review of Unit Prices for Clause 9 Ceiling Price Review Worley Parsons August 2006 page 26

¹⁵ Crossing Loops on Kwinana to Bunbury line, Proposed Floor and Ceilings for Mainline, Worsley line and Terminal End Bits, WestNet Rail August 2006 Review, page 9 Regional Administrative support

period and results from higher labour costs across the rail maintenance sector but it is still below the original 2003 Determination figure of \$15,000 per km.

Maintenance Costs per km	2003 Determination	WestNet proposed 2006	Alcoa proposed 2003	Alcoa/Worsley proposed 2006
Cost per km	\$15,000	\$17,610	11,349	\$12,700
% increase		17.4%		11.9%

Table 6.1 Changes in Maintenance Costs – 2003 - 2006

Based on our estimated rate per kilometre, the annual maintenance figure for the SWM should be \$2,300,000 for the SWM compared to a WestNet proposed total of \$3,218,985. The difference represents an overstatement of annual maintenance costs of \$0.9 million.

Recommendation 16:

The ERA should again review the maintenance costs for the MEA specification as the proposed rates are considered to be up to 38% above benchmark rates.

Indexing issues

The price escalation on Terminal End Bits used by WestNet appears to be the same percentage escalators as those used for the SWM even though the ERA Determination for the Terminal End Bits was issued in July 2004 and backdated to 1 January 2004. Whilst the data provided is insufficient to verify this precisely, the checks performed by our consultants suggest that the wrong escalation has been applied given the different determination dates. For example:

- Maintenance Costs per km were set by the 2004 Determination at \$8,000 per km, Maintenance Costs in the proposed WestNet 2006 figures total to \$98,823 for 10.522km or \$9,392 per km which is exactly 17.4% higher than the 2004 determination. This is the same figure used in the WorleyParsons report to uplift a December 2002 figure to a March 2006 figure.

If the incorrect indexing has been used, these figures should be recalculated to reflect the time period since the determination in July 2004.

Similarly, the maintenance rates for Brunswick to Premier have been quoted by WestNet in Table 6.1 as \$17,610/km and \$9,392/km for the Brunswick to Worsley and Worsley to Premier sections respectively however the rates used in the Maintenance column of the same table average \$19,618/km and \$9,489/km respectively. No explanation is given for the difference in rates used.

Recommendation 17:

The ERA should review the price escalation used for the Terminal End Bits and for the Brunswick to Premier line and verify that the correct escalation has been applied.

7. CONSISTENCY OF REVIEW DATES

Alcoa and Worsley agree with the ERA in suggesting that review dates for the different section of line should be brought into line from 1 July 2009. As stated earlier in this submission, it is not clear how WestNet have treated these different lines in the current proposed pricing as all the new ceilings proposed by WestNet have been based on 1 July 2006.

It would appear that there are inconsistencies with the ceilings proposed in the WestNet submission for the Terminal End Bits given that these ceilings are not due for review until January 2007. As a result, we would suggest that the ERA needs to request a change to the costing principles to be applied by WestNet when realigning the review dates for these other lines.

Alcoa has also noted that WestNet has submitted its Proposed Floor and Ceilings for Mainline, Worsley line and Terminal End Bits on 11 September 2006 supposedly for a determination effective from 1 July 2006. Alcoa considers that both the ERA and WestNet need to work together to provide three yearly price resets on a timely basis and therefore proposed price changes should be lodged by WestNet at least three months prior to the reset date and the ERA should issue both Draft and Final Determinations before the effective date. Alcoa believes that no backdating of price rises should be permitted and that the effective date for floor and ceiling costs must be the date of the Final Determination.

In realigning the dates for future reviews, we suggest that the ERA should also consider the length of time required for such reviews and set a timeline for submissions from the Railway Owners which ensures a better outcome than the current process.

CONFIDENTIAL APPENDIX A

Communications Cost Estimate – South West Mainline

CONFIDENTIAL APPENDIX B

Estimated Maintenance Costs – South West Mainline

