

Alcoa World Alumina Australia

A global alliance between Alcoa and WMC Ltd

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Dr K Michael Acting Rail Access Regulator Office of the Rail Access Regulator Level 27, 197 St Georges Tce PERTH WA 6000

ALCOA WORLD ALUMINA'S PUBLIC SUBMISSION ON KEY PERFORMANCE INDICATORS FOR THE RAIL ACCESS REGIME

Dear Dr. Michael,

We are pleased to submit our response to the request for public comment on the key performance indicators (KPIs) that the Regulator is considering as the basis for monitoring the performance of the railway owner within the context of the Rail Access Regime.

In preparing this submission, Alcoa has referenced all its comments to the NECG report released by the Regulator as part of this public submission process. We understand that the NECG report is a generic report (as requested by the Office of the Rail Access Regulator) and does not include a final recommended set of KPIs to be adopted by WestNet Rail. In responding to this request for comments, Alcoa has sought to eliminate those KPIs that we consider would not provide any insight into the performance of the railway owner and then to prioritise the remaining KPIs.

With negotiations currently underway between WestNet Rail and Alcoa on a Draft Access Agreement, Alcoa has proposed a list of KPIs which we consider should be incorporated into the Draft Access Agreement. In responding to this request for comments, we have assumed that the proposed KPIs in our Draft Access Agreement will be adopted in full. We are therefore responding to this request for public submissions by examining the overall requirement to report performance against measurable KPIs at a regional or network level aggregated in a form that protects the commercial interests of customers, operators and WestNet Rail.

To aid with cross-referencing this response, we have numbered all of the KPIs that we were able to identify within the NECG Report from 1 to 90. We have then categorised each KPI into one of five groups. The categories selected were:

- A. KPIs that are preferred by Alcoa as a bulk haulage user.
- B. KPIs that may be useful to other operators/users.
- C. KPIs that may be useful to the Regulator.
- D. Listed measures that are not, in our view, KPIs but which may be usefully reported on regular basis.
- E. Listed measures and/or KPIs that are not worth reporting.

A detailed description of these groupings follows:

Category "A"

Category A KPIs were selected based on Alcoa's requirements as a bulk haulage user. Our contract with our above rail operator requires them to maintain deliveries of product in accordance with a pre-agreed schedule and in particular to ensure daily tonnages meet stockpile and shipping requirements. To achieve this requirement, the operator has a fleet of locomotives and wagons that will deliver the required tonnages if transit times and track standards are maintained. In Alcoa's case these cycle times include 24 hour running on several routes.

We have therefore included in this category all the performance indicators that would identify any failure to provide this required level of service.

All of the Category A KPIs require our above and below rail providers to report performance against an agreed target. This target ensures that there will be minimal disruption to the transportation of product to and from our refineries and port operations.

Delays on the network, whether caused by the track owner or by any operator, impact on cycle times as do loading and unloading delays caused by the customer. The KPIs on the track owner need to reflect that part of the total cycle time that is within the control of, and therefore the responsibility of, the access provider.

Category "B"

Category B KPIs have particular relevance to interstate freighter operations and to passenger services. They typically have less relevance to a bulk haul operator as they measure adherence to a timetable of fixed train paths. Individual KPIs in this category may still have some relevance especially where track is shared between passenger traffic and bulk haul traffic.

Category "C"

Category C KPIs relate to matters of WestNet's compliance with the requirements of the Code. We consider that this compliance is the responsibility of the Regulator and have identified those KPIs that we believe may be useful for this purpose.

Category "D"

Category D items are measurements that we did not consider to be defined as KPIs. For these measures, it was not possible or logical to determine targets for how well WestNet was

performing. However, it was acknowledged that items in this category may be of interest in identifying trends or to report activity.

Category "E"

Category E items are not considered to be KPIs and have been eliminated from our recommended list.

A detailed listing of the NECG suggested KPIs and our corresponding categorisation together with comments is contained in Attachment A. Of the ninety (90) suggested KPIs/measures in the NECG report, we have selected ten (10) Category "A" items which are preferred by Alcoa and we believe would be useful to other bulk haulage operators. We have also suggested an additional KPI that was not listed in the NECG report to the Regulator. These eleven (11) Alcoa preferred KPIs are listed below.

Alcoa Preferred KPI	Ref. No. in Attachment A
Track Quality Index for each Route Section.	46
% of each region of the network subject to temporary speed restrictions.	47
% of each region of the network subject to permanent speed restrictions.	48
Average impact on transit time of all imposed restrictions over the period as a % of expected transit time with no restrictions.	49
Total and average number of train services in a region affected by speed restrictions.	50
Periods where track is not available where Master Train Plan indicates it should be available.	53
 No. and % of train services scheduled in the MTP subsequently cancelled owing to: a) WestNet Rail b) an operator c) undeterminable party. 	54/55/56
For those trains that do not reach their destination within the agreed tolerance on account of a delay, the delay in minutes per 100 train kms for each such delay attributed to: a) a below rail cause b) an above rail cause c) unattributed cause.	74/75/76
No. of Category A incidents caused by infrastructure.	78
No. of Category B incidents caused by infrastructure.	79
% of days per year subjected to temporary axle load restrictions.	Additional.

It is important to note that targets should be set for all critical KPIs. Merely reporting the status without some indication of whether the performance is acceptable or not acceptable does not guarantee the maintenance or improvement of standards over time.

We note the Regulator's comments in the Determination on the Costing Principles that:

"...if at anytime it can be demonstrated that WNR is consistently not providing the expected standards and services on a particular route section as agreed to in access agreements, the Regulator can adjust the GRV downwards to bring about a lower price ceiling for that route section..."¹

It would therefore be useful to set the targets for the relevant KPIs such that this review could be triggered if a KPI target is not achieved. If any reduction in performance was highlighted through KPI reporting, it may still be beneficial to seek to re-establish the performance first rather than accepting compensation through an on-going reduction in access rates.

In summary, we consider that the NECG list should be reduced to a maximum of twenty KPIs. These KPIs need to be relevant to either the operation of the Code or the delivery of services by WestNet. All the KPIs chosen should include a target so that WestNet's performance can be measured and benchmarked. KPIs that are not easily measured or are subjective in nature should be avoided. Each adopted KPI should be checked against the five criteria² in the NECG Report to ensure that sufficient benefit will be achieved from the measurement and review. The Regulator should also be prepared to review the selected KPIs once the data has been recorded and delete or change KPIs to improve the reporting of the track owner's performance under the Regime. Given the significant difference between the Western Australian Code and other interstate access legislation, some experimentation will be necessary before the optimum set of KPIs is determined.

Yours faithfully

John Oliver Transportation & Logistics Manager

Alcoa World Alumina Australia Alcoa World Alumina is a trading name of Alcoa of Australia Limited, ACN 004 879 298

² Effectiveness, relevance, measurability, comparability and comprehensiveness [page 21 NECG Draft Report on KPIs for the Rail Access Regime October 2002]

¹ Determination of the Regulator on the Costing Principles to apply to WestNet Rail, ORAR, 27 September 2002 page 41 last bullet

ALCOA PUBLIC SUBMISSION

ATTACHMENT A

RESPONSE TO NECG DRAFT REPORT ON KEY PERFORMANCE INDICATORS

KEY

<u>KPI ID</u>

For simplicity, every KPI or measure stated in the NECG report has been given an identification number.

Description

The KPI/measure (sometimes in abbreviated form) stated in the NECG report.

Category

- A. KPIs that are preferred by Alcoa as a bulk haulage user.
- B. KPIs that may be useful to other operators/users but are not applicable or useful to bulk haulage users.
- C. KPIs that may be useful to the Regulator.
- D. Listed measures that are not, in our view, KPIs but which may be usefully reported on a quarterly basis as an indication of activity in these areas.
- E. Listed measures that are not, in our view, KPIs and are not worth reporting.

<u>Comments</u>

Alcoa comments on the specific KPI or measure.

KPI ID	Description	Category	Comments
NETWO	RK OVERVIEW	·	
1	Length of track.	D	All these measures are not KPIs but maybe useful, as suggested in the NECG
2	Gross tonnes.	D	report, to provide an overview of the network.
3	GTKs.	D	
4	Train kms.	D	
5	Maximum axle load.	D	
6	Maximum speed.	D	
7	Average speed.	D	
8	Maximum train length.	D	

KPI ID	Description	Category	Comments
NEGOT	IATION FRAMEWORK		
9	No. and % of breaches of negotiation timeframes.	D	
10	Average delay to complete requirement that was breached.	D	
11	No. of negotiations commenced.	D	
12	No. of negotiations completed.	D	
13	No. of access negotiations withdrawn.	D	
14	No. of negotiations in dispute.	С	Unlike the other measures in this group, if this was reported as a % of total applications then it would indicate if most access applications are resolved without arbitration and therefore indicate the appropriateness of the other aspects of the Code.
15	No. of agreements within the Code.	D	
16	No. of agreements outside the Code.	D	
17	No. of arbitrations commenced.	D	
18	No. of arbitrations completed.	D	

KPI ID	Description	Category	Comments
SEGRE	GATION ARRANGEMENTS		
19	No of breaches not reported - found at audit.	С	The number of unreported breaches as a comparison to the total number of breaches would be an indicator of the diligence with which the segregation arrangements are applied.
20	No of breaches of the segregation arrangements notified to the Regulator by WNR within 5 days of becoming aware of a breach.	С	This combined with No.19 above would be a useful indicator of compliance.
21	No of allegations of breaches of the segregation arrangements.	D	May be worth reporting but could include many unsubstantiated claims - best combined with No. 22 below.
22	No of breaches of the segregation arrangements substantiated by the Regulator.	С	This is a better measure than No. 21 but should include the total number of substantiated claims and the % of substantiated to total claims lodged giving an indication of the quantum of rejected claims.
23	No of complaints satisfactorily resolved by parties.	D	Useful data but not a KPI.

KPI ID	Description	Category	Comments
TRAIN I	PATH POLICY		
Capacit	у		
24	No. of determinations.	E	These two measures seem to miss the point of a determination under Section 10.
25	No. of determinations authorising negotiations.	E	It is our understanding that this clause is being reviewed for possible redrafting anyway.
Dispute	S		
26	No. of disputes in relation to scheduling.	С	These four measures will only capture disputes with existing users who action disputes under the relevant clause in their access agreements. Both WestNet
27	No. of complaints that are substantiated.	С	and individual operators may view this information as confidential although presumably if it was aggregated to a network level, this may be acceptable.
28	No. of complaints that are unresolved.	С	Note that these measures may not capture the other disputes that relate to a new
29	No. of complaints resolved.	С	entrant seeking paths and being told that none are available or the situation where unsuitable paths are offered to a new entrant.

KPI ID	Description	Category	Comments
TRAIN M	IANAGEMENT GUIDELINES		
30	No. of disputes in relation to train control decisions.	С	These four measures should be incorporated together into 1 KPI.
31	No of complaints substantiated.	С	
32	No of complaints unresolved.	С	
33	No of complaints resolved.	С	

KPI ID	Description	Category	Comments
COSTIN	IG PRINCIPLES		
Pricing			
34	Actual operating costs per train km and per GTK by route section.	D	These are statistics but do not provide an indication of how WestNet is performing as their actual costs may not resemble the costs allowed for in the GRV model.
35	Maintenance unit costs per GTK by route section and by region.	D	Perhaps the collation of these statistics may be useful to help determine (after a
36	Actual maintenance expenditure by route section and by region.	D	few years worth of data is collected) whether or not the GRV model adopted in the WA Access Regime is an acceptable model which does provide competitive
37	Actual routine and cyclical maintenance per km by route section and by region.	D	 access rates and an adequate return on assets.
38	Specification of savings attributable to assumed condition relative to actual expenditure by route section and by region.	D	
39	Frequency of services for passenger and other traffic.	D	
40	Traffic density.	D	
41	Average speed for freight and passenger services.	D	
42	Actual average axle loads relative to maximum axle load.	D	
43	Climate related factors such as the no. of days of extreme heat and rainfall.	D	
44	Safety, quality and reliability requirements of customers and stakeholders.	D	
Efficienc	су		
45	% of maintenance work that is completely outsourced.	E	This suggested KPI would appear to have no relevance. 100% outsourcing can be just as inefficient as 100% in house maintenance. Either way, the test should be related to benchmarking maintenance to ensure that the scope of work is neither inadequate nor "gold plated" irrespective of whether a competitive tender

KPI ID	Description	Category	Comments
			process was used.
Track Q	uality		
TQI			
46	WestNet developed TQI for each region.	A	Whilst the NECG Report proposes the use of a Track Quality Index (TQI), WestNet has not provided users with any TQI data. Until such time as WestNet is able to provide TQI data, we have proposed that the track quality be specified in terms of maximum axle load, speed and trip time for each defined traffic type (eg freight, bulk haul and passenger). This KPI need to be reported by route section.
Impact o	of Speed Restrictions		
47	% of each region of the network subject to temporary speed restrictions.	A	Alcoa has requested this KPI be maintained below a 2% maximum target in our Draft Access Agreement.
48	% of each region of the network subject to permanent speed restrictions.	A	This requires careful definition as many permanent restrictions were required by the original engineering design of the track and not a result of subsequent degradation of the assets. Certainly any permanent speed restrictions resulting from underperforming assets should be monitored as the basis for access charges is a modern equivalent asset.
49	Average impact on transit time of speed restrictions over the period as a % of expected transit time with no speed restrictions.	A	Alcoa has requested a similar (but not the same) KPI in our Draft Access Agreement. It measures cumulative delay due to either maintenance causes (e.g. temporary speed restrictions or possessions) or operational causes.
50	Total and average number of train services in a region affected by speed restrictions.	A	This may be better expressed as a % of total services.
Track A	vailability		
51	Periods on the MTP where the track will not be available to train services due to maintenance work.	E	This is not a KPI - it should be combined with No. 57 below. The KPI should measure % of planned maintenance period vs. available time. In its current form, this measure does not recognise the flexibility achieved on the SW Mainline by aligning load and unload shutdowns at the refinery with track maintenance windows and the ability in peak times to defer maintenance and run extra trains.
52	Periods on the MTP where track is available due to seasonal formation instability or other infrastructure related limitation.	В	Not applicable to SW Mainline.

KPI ID	Description	Category	Comments
53	Periods where track is not available where MTP says it is.	A	This measure may need to be related to the daily train plan rather than the MTP (Master Train Plan).
54	No. and % of train services scheduled in the MTP cancelled owing to WestNet Rail.	A	These KPIs are similar to a KPI requested in our Draft Access Agreement. We have incorporated both cancelled paths and paths delayed by more than 1 hour/4 hours depending on the route. Cancellations are then categorised into one of five
55	No. and % of train services scheduled in the MTP cancelled owing to an operator.	A	areas: 1. Maintenance possessions - planned.
56	No. and % of train services scheduled in the MTP cancelled owing to undeterminable party.	A	 2. Maintenance possessions - unplanned. 3. Incidents, derailments, accidents 4. Weather 5. WestNet internal (ops, train control, signal failure etc.) We have suggested limits to the no. of paths per week and a target % of available paths.
57	Overall % of time of actual unavailability.	B/C	This should be the KPI for No. 51 above and should also include a target figure.

KPI ID	Description	Category	Comments
OVER-P	PAYMENT RULES		
58	No of contracts negotiated outside the regime and a comparison of non-regime revenue and total regime revenue.	D	These are not KPIs but are all measures that must be reported to the Regulator each year.
59	Size of carryover.	D	
60	Balance of trust account.	D	
61	No. of route sections that breached the ceiling.	С	Unlike No. 58-60, these two are a measure of whether WestNet is controlling access rates to minimise breaches. Only breaches which could have been
62	No. of route sections that breached the ceiling by more than 10%	С	avoided should be subjected to a KPI target as these represent a failure by the track owner to comply with the rules. Unavoidable breaches are, by definition, outside the control of the track owner.
63	Overpayments to be returned in a period of a year.	D	These are not KPIs but are all measures that must be reported to the Regulator each year.
64	Overpayments to be returned over a 3 year period.	D	
65	No of overpayments actually returned.	D	
66	No of ceiling breaches which are avoidable and unavoidable, respectively.	С	This may be a useful KPI to monitor WestNet's compliance with the overpayment rules, however, it should be noted that the measure has to be by route section not route. It is also possible that both avoidable and unavoidable breaches may occur on the same route section in the same period of a year leading to only one overpayment breach.

KPI ID	Description	Category	Comments
SERVIC	E QUALITY		
Reliability			Alcoa has reviewed the suggested KPIs from the NECG Report which replicate the operational KPIs proposed by the Regulator and also those used by ARTC for interstate services. Whilst these KPIs have particular relevance to interstate freighter operations and to passenger services, they do not capture the requirements of a bulk haul operator which is basically to keep the tonnes moving on a regular basis by maintaining transit and therefore cycle times. Bulk haul operations for Alcoa assume an achievable cycle time based on the train configuration (number of wagons), locomotive power and track standard which will achieve the required tonnes delivered to port to maintain stock piles and ship loading requirements. Network delays, whether caused by the infrastructure owner or by the operator impact on cycle times as do loading and unloading delays caused by the customer. This series of KPIs needs to reflect that part of the total cycle time which is within the control of, and therefore the responsibility of, the infrastructure owner.
67	No. and % of healthy services that exit the Network within tolerance.	В	These seven measures would be useful if the definitions match the ARTC definitions for reliability. This would then allow a comparison with other networks.
68	No. and % of unhealthy services that do not deteriorate further within tolerance.	В	Time tolerances may need to be scaled because of the shorter transit times on some routes.
69	No. and % of unhealthy services that exit the Network within tolerance.	В	
70	No. and % of healthy services.	В	
71	No. and % of services that exit the Network within tolerance.	В	
72	No. and % of services that enter the Network within tolerance.	В	
73	No. and % of healthy services that exit the Network within 1 hour after schedule.	В	
Transit 1	Time		

KPI ID	Description	Category	Comments
74	For those trains that do not reach their destination within the agreed tolerance on account of a below rail delay, the delay in minutes per 100 train kms for each such delay.	A	This is similar to a proposed KPI in our Draft Access Agreement where we record cumulative delay minutes per week and set targets for maintenance delays and operational delays.
75	For those trains that do not reach their destination within the agreed tolerance on account of an above rail delay, the delay in minutes per 100 train kms for each such delay.	A	This is similar to a proposed KPI in our Draft Access Agreement where we record cumulative delay minutes per week and set targets for above rail delays.
76	For those trains that do not reach their destination within the agreed tolerance on account of neither a below nor above rail delay, the delay in minutes per 100 train kms for each such delay.	A	This is similar to a proposed KPI in our Draft Access Agreement where we record cumulative delay minutes per week and set targets for delays assigned to others.
Billing A	ccuracy		
77	No. of instances where an operator has made a complaint and WestNet was in error.	С	This may an acceptable KPI, however, in order for this to be effective, there would have to be a requirement that WestNet reports any billing complaints and errors to the Regulator and that occurrences of billing errors are inspected during audits.

KPI ID	Description	Category	Comments
PUBLIC	INTEREST CONSIDERATIONS		
Safety			
78	No. of Category A incidents caused by infrastructure.	А	These are acceptable KPIs which are already measured by WestNet and reported to the Rail Safety Director. If not already published by Rail Safety, they should be published here.
79	No. of Category B incidents caused by infrastructure.	A	
Review	of Code and Act		
80	No. of capacity determinations under section 10 of the Code.	D	These are interesting statistics that may provide an overview of the Access Regime in WA but are not KPIs as they do not measure WestNet's performance under the Regime.
81	No. of opinions provided under section 21 of the Code.	D	

KPI ID	Description	Category	Comments
82	No. of determinations by the Regulator under clause 9.	D	
83	No. of determinations of costs by the Regulator under clause 10.	D	
84	No of determinations under clause 12.	D	
85	No of agreements reached inside the regime.	D	
86	No. of agreements reached outside the regime.	D	
87	No. of agreements reached outside the regime that were commenced inside the regime.	D	
88	No. of arbitrations commenced.	С	This may be an indication of how well WestNet is able to reach agreement with parties seeking access and may be a KPI.
89	No. of arbitrations completed.	D	These are interesting statistics that may provide an overview of the Access Regime in WA but are not KPIs as they do not measure WestNet's performance under the Regime.
90	Average negotiation period for contracts.	D	

Additional KPIs suggested by Alcoa:

KPI ID	Description	Category	Comments
TRACK QUALITY			
Axle Load Restrictions			
91		A	In our Draft Access Agreement, we have requested a KPI on temporary axle load restrictions as these have a major impact on capacity in relation to a bulk haul operation. The KPI could be expressed as days/year under restriction with a suitable target figure.