

KEY PERFORMANCE INDICATORS TO APPLY TO WESTNET RAIL ARTC SUBMISSION

The Acting WA Independent Rail Access Regulator (“Regulator”) has requested submissions from interested parties with regard to a consultancy report it has published as a basis for public comment, titled ‘Draft Report on Key Performance Indicators for the Rail access Regime’ prepared by NECG (“Report”).

A key issue for ARTC with respect to the key performance indicators (“KPIs”) to apply to WestNet Rail (“WNR”) is that they relate to activities occurring on the WA rail network and associated infrastructure currently leased from the WA Government by WNR, which includes part of the interstate rail network between West Kalgoorlie and Perth. Management of access in WA, for interstate operators, of services between the eastern states and WA would be subject to the KPIs, as well those indicators incorporated in ARTC’s Access Undertaking (accepted by the Australian Competition and Consumer Council (ACCC) in May 2002) for any movement east of Kalgoorlie. A copy of ARTC’s Access Undertaking can be located at the ACCC’s website www.accc.gov.au.

In accordance with an Inter-Governmental Agreement made in 1997 which brought about the incorporation of ARTC as the track manager of the interstate rail network, ARTC developed and executed with the Western Australian Government Railways Commission (Westrail) which was the owner of that part of the interstate rail network in WA, a wholesale agreement providing ARTC with the exclusive right to sell access for interstate train operations to that network. The agreement was developed in accordance with the principles for access now incorporated in ARTC’s Access Undertaking. The agreement provides for the purchaser of the Westrail rail freight network (Australian Railroad Group) to assume Westrail’s role following the sale.

General Comments

ARTC has previously made submissions¹ to the Regulator in relation to the KPIs in which it stated that its main concern is to ensure reasonable consistency between the KPIs applicable to WNR and the terms and conditions of the wholesale agreement and, therefore, the principles endorsed by the ACCC in ARTC’s Access Undertaking.

¹ Westnet Submissions to the Acting Rail Access Regulator, ARTC Submission, 24 Jan 2002

The wholesale agreement provides for WNR and ARTC to develop a set of key performance indicators, using a set of indicators included in the agreement as a guide. The key performance indicators would be incorporated into the wholesale agreement and into any ARTC access agreement (or any agreement novated to ARTC). The 'guide' indicators incorporated in the wholesale agreement are intended to be similar to those incorporated in Schedule 6 of the Indicative Access Agreement forming part of ARTC's Access Undertaking.

ARTC has noted that NECG have used as a guide for the development of KPIs, in some cases, the KPIs incorporated in ARTC's Access Undertaking, KPIs provided for in QR's Access Undertaking and KPI's and indicators and targets adopted for the interstate network by the Australian Transport Council ("ATC"). ARTC would like to draw to the attention of the Regulator that the ATC has more recently proposed a consistent set of measures and targets for intermodal trains on the interstate network. These measures relate to reliability, transit time, train length and double stacking. The ATC is intending to establish a regime of measurement and reporting in order to monitor performance of the interstate network on an ongoing basis. The measures and targets are detailed at Attachment 1 to this submission.

Once again, ARTC seeks the Regulator's consideration of the issue of consistency of conditions of access to the interstate rail network for interstate users in its deliberations.

ARTC has further noted WNR's proposed commitment to developing key performance indicators under access agreements is similar to that made by ARTC in its Indicative Access Agreement forming part of the Access Undertaking. In its undertaking, ARTC has also undertaken to publicly report on both its own and operators' performance with respect to train running on a quarterly basis. Such reporting is at an aggregated level to preserve confidentiality, whilst reporting within agreements would be at an operator level.

In its submissions to the Regulator, ARTC also suggested that, given WNR's vertically integrated structure, regular public reporting of a similar nature would be appropriate where performance of third party services and performance of related party services should be separately identified.

ARTC supports the use of key performance indicators by track owners and operators as a means of monitoring quality of service provided by the track owner to the operator, but also that provided by the operator (which can impact on the ability of the track owner to meet quality requirements of other users),

and that provided by both the track owner and operator (together) to the rail customer. In the end, it is probably the last of these three performances that is most important if rail is to maintain and improve its involvement in the overall logistics chain.

ARTC's past experience in the development of indicators has largely been in the areas of service quality, relating particularly to reliability and achievement of desirable transit time. These two aspects have been at the forefront of ARTC's strategy development over the past 5 or so years, together with reducing the cost of access to users, with a view to increasing efficiency of interstate rail.

ARTC notes that operators also consider these aspects of service as most critical to business and modal success. The National Audit concluded service reliability (and availability) along with efficiency related requirements such as train length and the ability to double stack, as key elements for improvement in rail's competitive environment.

Having said this, ARTC's experience in past negotiations with customers have given rise to a view that the industry is somewhat inexperienced in the robust collection and interpretation of data relevant to service quality performance measurement. In particular, following separation of responsibilities for performance of above and below rail activities, it has become necessary to identify measures that can measure the respective parties performance. Traditional measures (eg on time departure and on time arrival used by integrated rail systems) fail to make this separation and are also more suited to an environment where only one rail system carries the freight and passengers and overall performance of the system is most important. In a separated environment where multiple parties use the network, the performance of services associated with individual parties becomes paramount, possibly to the detriment of overall system performance.

Early on in negotiations, ARTC sought to separate above and below rail performance measurement by introducing the concept of 'healthy'² and 'unhealthy'³ services (which is purely an above rail classification and depends solely on above rail performance), and then separately identify below rail performance requirements with respect to services falling within these classifications. In broad terms, ARTC sought to develop in access agreements, and ultimately in its access undertaking, service performance requirements relating to:

² A healthy service is one that has experienced no significant above rail related delay (within tolerance).

³ An unhealthy service is one that has experienced above rail related delay in excess of tolerance.

- On time exit of healthy services
- No further deterioration of unhealthy services (in addition to the extent of above rail delays).

ARTC further sought a more 'value adding' goal relating to on time exit of unhealthy services (full recovery of the service) to the extent possible given the first two requirements above.

ARTC considers that measures of these types better reflects the responsibilities of each party and, importantly, provides a strong incentive to operators to maintain train 'health'. This has benefits to the operator, in upgrading ARTC commitment to on time exit, and benefits to the track owner, in allowing more efficient network operations to the benefit of all users.

To recognize inexperience in the industry as described above, ARTC sought to provide in access agreements for the development of measures, in consultation with operators, relating to these aspects of service quality, as well as other below rail aspects relating to:

- Level of speed restriction and impact on service running
- Track quality
- Safety

and above rail related measures related to:

- The extent of healthy performance
- Rollingstock condition
- Safety.

In other words, the access agreement would incorporate measures on both parties, promoting a two-way commitment to overall quality. Following a period of development, on-going measurement and consultation, the parties may subsequently agree to enter into a financial arrangement incorporating penalties and incentives.

Whilst ARTC does not oppose the use of penalties and incentives, provided they are two-way, ARTC has in the past expressed some concerns with their use. In particular, care must be taken in determining the extent of access revenue (or operator cost) that might be placed 'at risk'. If set too low, the purpose of penalties and incentives could be defeated. If set too high, there is a risk that both parties may focus excessively on issues of blame and minimization of revenue risk, rather than on the 'main game' which is the maintenance and

improvement of service quality and network safety. This again defeats the purpose of having performance measures in the first place.

To this end, ARTC believes that there is some value in using performance measures as a basis for regular 'good faith' consultation between the parties with a view to overall service quality improvement. On the other hand, this may be less appropriate where the service provider is vertically integrated and may have different commercial motivations to that of a separated provider.

NECG Consultancy Report

ARTC notes that NECG were engaged to identify and recommend a range of KPIs for the Act, Code and the Regulator's determinations, relating to:

- Segregation determinations
- Costing Principles
- Overpayment Rules
- Train Management Guidelines
- Train Path Policy.

Further KPIs have been developed to assist the Regulator in performing other functions including the assessment as to whether amendments are required to the Act or Code.

ARTC's comments are made roughly in the same order as issues are covered in the Report.

The Rail Network

ARTC would argue NECG's assertion that the different types of traffic operating on the WNR network 'operate over separate portions of the network with little overlap', and that 'it is certainly possible to identify the dominant traffic over every part of the network'. That part of the interstate mainline between Kalgoorlie and Perth which represents a significant part of the network is shared by all of the distinct traffic types identified by NECG, namely country and interstate passenger, interstate general freight, grain and bulk commodities.

On this part of the network, there isn't any obvious dominant user, in ARTC's view, when considered on a tonnage/GTK and/or number of services basis.

From a network management perspective, there is also a great deal of interaction between services.

With regard to east west intermodal operations, NECG has asserted that the balance of tonnage 'is heavily in the east to west direction by a ratio of approximately 2 to 1'. ARTC would point out that, over the last four or five years, this imbalance has reduced significantly, largely as a result of improved operational economics on the network, improved service quality and more aggressive marketing of the backloaded direction by operators. In 2001/02, the ratio was about 1.5:1.

Criteria for development of KPI regime

Effectiveness

NECG makes the following point.

'..., whilst it is possible to closely examine several aspects of track condition, in practice track condition manifests itself principally in transit times and speed restrictions. Communicating track quality through KPIs based on transit times and speed restrictions not only allows network users to understand the information, as it is in a familiar and practical form, but also facilitates comparison with the service levels they have received.

Accordingly, presenting track condition on the basis of transit times and speed restrictions provides users with more relevant information than, say, measures such as the eccentricity or elasticity of the track. These latter measures may inform or assist in the optimization of track maintenance strategies, but are not appropriate for the KPI regime at this time.'

ARTC agrees with this position in that it is the service performance of the asset in terms of capability, reliability and transit time that are critical to users. It may be that there are other means by which the service performance level of the asset can be maintained or improved without necessarily maintaining or improving certain aspects of track condition. It is this proposition that is one of the drivers behind ARTC's asset management strategy, which takes a more holistic view of the asset, than is commonly found in other jurisdictions. For example a new signaling system may represent, to the access provider, a far more cost effective means of achieving a certain performance level than improving track geometric quality. To the point where track quality deteriorates such that the commercial risk of operating on the network becomes too high, the users of the network are

more likely to support the most efficient means of achieving an outcome rather than a less efficient 'band-aid' option focused on one aspect of the infrastructure. The use of optimization in regulatory asset valuation reinforces this.

ARTC has committed to reporting a measure of track quality in its access undertaking to the ACCC. This is largely done for comparison with other jurisdictions, in the context of unit maintenance cost and efficiency on the ARTC network.

On the other hand, ARTC has previously indicated that a vertically integrated access provider has a commercial imperative to explore means of gaining competitive advantage over third party operators. One means of this being achieved in a way that would be difficult for a regulator to detect until after commercial damage had been done would be to 'strategically' invest in those parts of the network that are exposed to the least third party competition (and so offer lower risk). Should the remaining network be neglected to the point that third parties could be forced out of the market, the way would be left clear for the provider to re-invest in the network, and regaining market for an associated operator.

Whilst service quality deterioration could be picked up by relevant 'output' measures, the use of track quality (input) measures may identify problems before there is a significant impact on service quality.

In its access undertaking, ARTC has committed to publishing both input (track quality, unit cost of service) indicators and output (reliability, transit time) indicators.

Measurability

ARTC agrees with NECG's concerns regarding the difficulty in ensuring that delay cause information recorded by train controllers is consistent. ARTC also agrees that the best approach for dealing with this is to develop a robust set of procedures and rules, and to ensure adequate training of controllers in methods of recording in accordance with those rules.

Relevance

ARTC agrees with NECG's assertion that performance indicators relevant to the 'micro' level of an individual agreement may not be appropriate for the 'macro' level of the regime, due to the individual requirements of contracting parties and the need to observe confidentiality requirements.

ARTC has endeavoured to achieve some consistency between the indicators it has committed to publish under the access undertaking, and the type of measures offered in ARTC's indicative access agreement. This is so that the key performance indicator regime does not become too unwieldy.

ARTC has committed to publishing key performance indicators on a whole of network or whole of corridor basis in order to address any confidentiality concerns. ARTC is of the view that where the access provider is vertically integrated, it is essential that key performance indicators separate, as a minimum, the performance of associated parties and third parties.

Appraisal and development of KPIs

Negotiating framework

ARTC broadly supports the types of KPIs proposed by NECG, the reporting frequency (annually) and separation of performance by associated and third part customers. It has been ARTC's experience that the number of occurrences of a 'negotiation' over a twelve month period is very few, perhaps five to ten. This may limit the value of some of the KPIs. From a customers perspective, redress for poor performance is more like to come from the threat or actuality of regulatory intervention in individual circumstances. In any event, this reporting (separated by associated and third parties) would provide a reasonable indication of equitable treatment of prospective users.

Segregation Arrangements

ARTC strongly supports the need for a detailed and formal approach to the reporting of breaches of the segregation arrangements. It is noted that critical elements of the segregation arrangements are the provision of an annual compliance report, an annual independent external audit, a compliance manual detailing the types of behaviour considered in breach of the requirements, and a

requirement for WNR to report any breaches of the arrangements to the regulator with 5 business days.

Train Path Policy

NECG has identified two dimensions with regard to assessing the performance of the Train Path Policy, namely network capacity and disputes concerning the scheduling process.

With regard to network capacity, NECG has recommended that the frequency of determinations authorizing negotiations under section 10 of the Code be reported. It is suggested that this provides an indication of the availability of the network for new entrants and highlights the sections in which further investment is socially desirable. ARTC is unclear as to how this indicator would assist the Regulator in assessing the efficacy of the Train Path Policy.

Train Management Guidelines

ARTC considers that it is the application of the train management guidelines that provides a vertically integrated track owner with the greatest opportunity to discriminate between the operations of associated parties and third parties in the least obvious way.

ARTC notes from previous correspondence that WNR have proposed to use a 'cut-down' version of ARTC's network management principles (removing the split between different flagfall categories) as its matrix of rules. In this regard, ARTC welcomes the use of management guidelines that are consistent across the national network.

Despite the existence of such principles, there is still reasonable opportunity for WNR train control personnel to make specific decisions based on particular circumstances at the time. This also provides an opportunity for discrimination that is unlikely to give rise to regulatory attention in an isolated circumstance. Such activity repeated time and again may eventually attract the Regulators attention, through user complaint or assessment of KPIs, and may occur 'after the horse has bolted'.

NECG has proposed quarterly indicators relating to the frequency of disputes about train control decisions as applicable on a regional basis, and separated between related parties and third parties. Given the above, ARTC is not convinced that this extent of measurement and reporting will be sufficient to

assess whether or not the train management guidelines are working. For example, a dispute is likely to only arise following a serious or repeated evidence of discrimination.

ARTC is not advocating that a third party operator should be able to 'stand behind' the train controller to make an assessment of every decision, but a more thorough assessment of performance than proposed would represent a better balance of interests, and result in greater industry confidence, where the access provider is vertically integrated.

In addition to the proposed measures, another approach might be that any train control decision made contrary to the guidelines should be documented as such. A spot audit (independently selected) of such decisions could be undertaken by WNR on a regular basis and the circumstances surrounding the decision reported to the Regulator. The regulator may choose to carry out an independent audit of these decisions. Whilst this may not necessarily result in the identification of any more evidence of discriminatory behaviour, there exists a threat of independent audit of any 'suspect' decision.

There is also a manifestation of regular and/or serious occurrences of discrimination in the service quality indicators discussed later, but it is likely that these indicators would be too aggregated and infrequent to be of great assistance in this regard.

Costing Principles

In its access undertaking, ARTC has committed to annually publish unit maintenance and train control costs on its website. The two main reasons for this are to demonstrate ARTC's low and efficient cost structure, and to demonstrate the adequacy of ARTC's asset management. ARTC also published floor and ceiling revenue limits on all pricing segments determined in a manner endorsed by the ACCC.

NECG has proposed that the following information be published annually with respect to each region of the network:

- Actual operating costs per km and GTK
- Actual maintenance unit costs per GTK
- Actual maintenance expenditure
- Actual routine and cyclical maintenance per km
- Actual MPM per km

- Specification of savings attributable to assumed condition relative to actual expenditure.
- Service frequency for passenger and other traffic
- Traffic density
- Average speed for freight and passenger services
- Actual average axle loads relative to maximum axle load
- Climate factors
- Safety, quality and reliability requirements of customers and other stake holders

The publishing of this information would enable assessment of floor and ceiling prices.

By and large, ARTC provided this information to the ACCC, included calculation of floor and ceiling limits for the whole of the term of the undertaking. ARTC proposed that ACCC endorsement of the calculated limits (published) would be sufficient for industry confidence without the need for publishing excessive cost detail going forward. In order to enable endorsement, the ACCC sought independent assessment of ARTC's levels of expenditure, proposed asset valuation, and approach to floor and ceiling calculation.

To establish the degree of efficiency embedded in WNR's cost structure, ARTC recommends the publishing of unit cost information sufficient to enable benchmarking to be carried out, in addition to the extent of outsourcing as proposed by NECG. Publishing of the above information should facilitate this. Furthermore, publishing of track quality information as proposed should enable an assessment of adequacy of maintenance to be made.

ARTC notes that, under the regime, gross replacement value is to be based on a track that is of suitable standard, giving rise to the NECG proposal to include KPIs relating to track condition, impact of speed restrictions and track availability. During the assessment of ARTC's access undertaking, the ACCC sought an assessment of the suitability of the standard of ARTC's infrastructure as part of making an assessment of the value of ARTC's assets for floor/ceiling purposes. Nevertheless, ARTC has incorporated the development of similar measures in its indicative access agreement and undertaking.

Overpayment Rules

ARTC supports those recommendations made by NECG with regard to KPIs needed to measure WNR's compliance with the overpayment rules.

Service Quality

NECG has proposed KPIs relating to reliability, transit time and billing accuracy.

The reliability indicators proposed are identical to those committed to by ARTC in its access undertaking. The intention of the indicators chosen by ARTC were to not only report publicly on ARTC's performance, but also that of the industry as a means of monitoring the performance of the arrangements set in place in the interstate network through the undertaking. Indicators relating to the exit performance of healthy and unhealthy services are measures of below rail performance (as described in earlier sections). Measures relating to health of services and entry performance of services are measures of above rail performance. Measures relating to exit performance of all services, regardless of health, are outcome measures of the overall service, of interest to rail users, and are affected by both above rail and below rail performance.

With regard to the transit time indicators, NECG has recommended reporting of below rail delay, but only with respect to services arriving late on account of a below rail delay. Similar KPIs relate to above rail delay and neither above or below rail delay. Late exit of services is almost invariably a combination of the impact of delays resulting from both above rail and below rail performance (as well as other causes). It would be extremely difficult to make a call as to whether late running is caused by any single cause or responsibility, and in any event lacks transparency and is open to some abuse. ARTC does not believe that the measures proposed by NECG are manageable or useful.

As an alternative, ARTC suggests the use of transit time indicators and delay reporting as committed to by ARTC in its access undertaking. These indicators are relatively easy to prepare from the RAMS system, but do not avoid the issue of consistent and appropriate allocation of delays discussed earlier in the submission.

Further indicators relating to the improvement and equitability of the product made available to users may also be appropriate. For example indicators could relate to the average **scheduled** transit time made available to users and how these compared, and varied over time, with respect to related and third parties.

Public interest considerations

With regard to review of the Act and Code as is periodically required, ARTC supports the types of measures proposed by NECG. In addition, ARTC believes it would be appropriate to consider performance indicators that measure performance of the regime against relevant criteria in the Trade Practices Act or Competition Principles Agreement.

For example,

Does the regime, bring about (in practice) behaviour whereby 'the owner of the facility that is used to provide the service should use all reasonable endeavours to accommodate the requirements of persons seeking access'⁴

or

Does the regime, bring about (in practice) behaviour whereby 'the owner or user of a service shall not engage in conduct for the purpose of hindering access to that service by another purpose'⁵

Whilst not certified, the current regime is purported to satisfy the certification criteria (notwithstanding the issue of consistency with other jurisdictions).

Timing/Transitional Issues

ARTC agrees with the NECG assertion that the KPIs identified will present some challenges. ARTC collects significant data on its own network, sufficient to enable the reporting it has committed to. WNR's systems for data recording are similar to ARTC's. As such most KPIs relating to train management and service quality should be reasonably easy to report (notwithstanding consistency and training associated with robust data input described earlier).

Regarding confidentiality issues, ARTC would suggest that reporting to the Regulator, followed by regulatory endorsement, might satisfy industry confidence issues where confidentiality prevents public reporting.

⁴ Cl 6(4)(e) of the Competition Principles Agreement.

⁵ Cl 6(4)(m) of the Competition Principles Agreement

PROPOSED DRAFT ATC TARGETS FOR INTER-MODAL TRAINS

All corridors At axle loads up to and including 21 tonnes, a maximum speed of 115 kph.

| Corridor | On Time Reliability ⁶ (%) | Transit Time ⁷ (HOURS) | Train length ⁸ (metres) | Double stack (conventional containers) |
|--------------------|---|--------------------------------------|--|---|
| Melbourne-Sydney | 75 ⁴ | 10.5 | 1500 | No |
| Sydney-Brisbane | 75 ⁴ | 17.5 | 1500 | No |
| Melbourne-Brisbane | 75 ⁴ | 29.5 | 1500 | No |
| Melbourne-Adelaide | 80 | 11.5 | 1500 | No |
| Melbourne-Perth | 80 | 56 | 1500 Adelaide east 1800 Adelaide west | West of Adelaide |
| Sydney-Perth | 80 | 65 | 1500 Parkes east 1800 Parkes west | West of Parkes |
| Adelaide – Perth | 80 | 41 | 1800 | Yes |
| Adelaide – Sydney | 75 ⁴ | 26 | 1500 Parkes east 1800 Parkes west | West of Parkes |

Timeframe: **All targets in all corridors to be achieved prior to December 2007, within the context of both engineering and operational improvements identified in the ARTC Audit being implemented.**

Collection: **Data to be submitted by Track Managers to Rail Group for collation and analysis on a quarterly basis.**

Performance indicators: **An annual rail market share indicator for interstate non-bulk freight measured on a net tonne kilometres (ntk) basis.
A price movement indicator on a corridor basis to be included subject to further research by Rail Group.**

Note: The term *Inter-modal trains* refers to high performance trains in direct competition with road transport.

Note: Train priority should be determined by access arrangements, ie, no additional priority should be assigned to train operations on the basis of targets.

⁶ On Time Reliability is measured in terms of the percentage of intermodal freight services (being 21 tonne axle loads and capable of a maximum speed of 115kph) arriving not more than 15 minutes after their scheduled destination time.

⁷ Average *scheduled* transit time for all intermodal freight services (being 21 tonne axle loads and capable of a maximum speed of 115kph) on the corridor, ie terminal to terminal travel time making no adjustment for time zones.

⁸ Unrestricted length for interstate services, ie the train length up to which operators can operate *any* scheduled interstate services without reference to the track manager.

⁴ On-time reliability for these corridors is expected to be lower in the short-term as significant investment is required on this corridor to improve performance.