



Office of the Rail Access Regulator

Report on Key Performance Indicators for the Rail Access Regime

March 2003

Abbreviations

Act	Railway (Access) Act 1998
ARG	Australian Railroad Group
ARTC	Australian Rail Track Corporation
ATC	Australian Transport Council
AWR	Australian Western Railroad
Code	Railways (Access) Code 2000
CPI	Consumer Price Index
DORC	Depreciated Optimised Replacement Cost
GRV	Gross Replacement Value
GTK	Gross Tonne Kilometres
IPART	Independent Pricing and Regulatory Tribunal (NSW)
KPI	Key Performance Indicator
MEA	Modern Equivalent Asset
MPM	Major Periodic Maintenance
ORAR	Office of the Rail Access Regulator
QCA	Queensland Competition Authority
ORC	Optimised Replacement Cost
RAMS	Rail Access Management System
RAS	Revenue Accounting System
RIC	Rail Infrastructure Corporation (NSW)
TMG	Train Management Guidelines
TPP	Train Paths Policy
WACC	Weighted Average Cost of Capital
WAGR	Western Australian Government Railways Commission
WNR	WestNet Rail

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1 Introduction

An integral part of the rail access regime in Western Australia is ensuring that the rail access providers, WestNet Rail (WNR) and Western Australian Government Railways Commission (WAGR), are complying with the requirements of the Act, the Code and the Rail Access Regulator's determinations. To achieve this, a key performance indicator (KPI) framework is required to be developed to assist the Regulator in monitoring compliance with the regime.

To this end, Network Economics Consulting Group (NECG) were engaged to identify and recommend a range of KPIs for assessing WestNet Rail's (WNR) compliance with the Act and the Code and each of the Regulator's rail access determinations, specifically:

- Segregation Arrangements (WNR Final Determination, June 2002);
- Costing Principles (WNR Final Determination, September 2002);
- Overpayment Rules (WNR Final Determination, September 2002);
- Train Management Guidelines (WNR Final Determination, November 2002); and
- Train Paths Policy (WNR Final Determination, November 2002).

NECG has proposed a range of KPIs as the basis for determining WNR's compliance with the regime including for each determination as well as for the Act and the Code. Whilst a KPI regime is yet to be developed for WAGR, it is considered that the thrust of the KPI regime outlined in this paper can be expected to provide a starting point for WAGR's KPI arrangements.

NECG produced a draft report in October 2002. NECG's approach to the development of the draft report was as follows:

- undertake a literature review covering general performance measurement theory and specific application within the regulatory setting;
- develop criteria to assess determinations using information generated from literature review;
- complete an environmental appraisal of the State's rail access regime, including a review of the rail determinations; and

- identify KPIs for each significant component of the regime.

In developing the KPIs for the draft report, the Regulator sought a comprehensive list of KPIs so as not to pre-empt comment from interested parties. Submissions in response to the draft report were received from:

- WestNet Rail;
- Australian Rail Track Corporation; and
- Alcoa World Alumina Australia.

These submissions have been considered in the finalisation of this report. In addition, the ORAR convened a workshop to short list KPIs from those outlined in the draft report. This final report has been prepared with the benefit of the submissions and the discussion at the workshop.

One issue that has become clear is that the KPIs which underpin WNR's public reporting differ materially from the information the Regulator reasonably requires to monitor WNR's compliance with the regime. Consequently, in this report two sets of reporting arrangements have been separately identified – the information to be provided to the Regulator and that to be publicly released.

This report is structured as follows:¹

- section 2 considers the rail network highlighting the diversity in traffic that traverses Western Australia;
- section 3 considers the theory behind performance monitoring and develops criteria to be applied for the development of KPIs for the Regulator;
- section 4 develops KPIs for WNR – both in respect of public reporting and for reporting to the Office; and
- section 5 considers transitional issues.

¹ The Appendices that formed part of the draft report have not been included in this final report.

2 Background

2.1 The Rail Network

The railway networks in the South West (SW) of Western Australia controlled by WNR and WAGR supports railway operations involving passenger transport, general freight and bulk commodities. There are four distinct traffic types operating over the network:

- suburban passenger transport in the Perth metropolitan area as well as country and interstate passenger transport;
- intermodal freight on the main East-West corridor to the eastern states²;
- grain transport to four major sea ports; and
- bulk commodity transport.

With the exception of the East-West corridor, the distinction between these traffic types is pronounced with each traffic type dominating separate portions of the network. Other minor traffics operate as well on these dominant routes but do so as a secondary operation. We consider these traffic types in turn.

2.1.1 Passenger Operation

A modernised and growing suburban passenger train service operates in the Perth metropolitan area. The network comprises 95kms of double track electrified route of narrow gauge³ extending East to Midland, South to Fremantle, North to Currambine and South West to Armadale. There are plans to construct a new route from the City and South to Mandurah approximately 82kms away. A northern route extension is underway.

² South Australia, Victoria, New South Wales and Queensland

³ Rail gauge being nominally 1067mm

The Perth suburban system was electrified between 1990 and 1992 together with a line extension to the North and a refurbishment of the infrastructure. It is the 'newest' heavy rail passenger system in Australia. Passenger forecasts have been regularly exceeded and it has often been held up as a rail success story. In terms of passenger numbers and extent of network it ranks behind Sydney and Melbourne and is on a par with Brisbane carrying approximately 30 million passengers yearly. With the planned extension to Mandurah the system will increase in size by approximately 75%.

In addition, country and interstate passenger operations include the Australind (running between Perth and Bunbury, initially via the Armadale suburban line), the Prospector (operating between Perth and Kalgoorlie) and the Indian Pacific (linking Perth and the eastern States). Finally, there are a number of heritage steam trains operate, including the Hotham Valley Tourist Railway.

2.1.2 East West Intermodal Operation

The main East-West route extends from Perth to Kalgoorlie using heavy duty⁴ standard gauge⁵ track. The route supports the transport of intermodal trains⁶ to and from the eastern States. The balance of tonnage is heavily in the east to west direction by a ratio of approximately 1.5 to 1.

Other traffics use this route including iron ore transport from Koolyanobbing to Esperance and grain from Merredin west to the port of Kwinana, 25kms SW of Perth. The route is essentially single track except for the section from Northam to Kwinana, a distance of approximately 120kms of double⁷ dual gauge⁸ track. At Northam the narrow gauge tracks branch to service the grain network.

⁴ Up to 25 tonne axle load

⁵ Rail gauge being nominally 1435mm.

⁶ Containers able to be lifted on and off trains to road trucks.

⁷ Two lines where two trains can move in each direction at the same time

⁸ Both narrow gauge and standard gauge trains can be operated.

This main line was upgraded in the early 1980's using concrete sleepers and 60kg rail and is suitable for the Prospector passenger service that operates between Kalgoorlie and Perth⁹. The Indian Pacific train service also operates on this route. The Prospector passenger service is the only operation undertaken by the government of Western Australia on this route. A number of private freight operators operate on this route including Australian Western Railroad (AWR), Pacific National (formerly National Rail), Specialized Container Transport (SCT) and Great Southern Railway (GSR).

2.1.3 Grain Network Operation

The grain network in SW Western Australia is extensive and consists of approximately 3000kms of narrow gauge lines. Some grain is carried on the standard gauge network from Merredin to Kwinana and on the Esperance line.

Essentially the narrow gauge grain network extends roughly radially from the ports of Albany, Kwinana and Geraldton although the geography of the lines has been somewhat constrained by the topography. The main topographic feature influencing the network is the North-South Darling Range which together with its periphery extends the entire length of the SW coast of Western Australia separating the hinterland from the coastal plain.

Due to the large grain storage and handling facilities, as well as the deepwater port and efficient rail access, Kwinana dominates the grain task. Approximately half of the grain task on rail is channelled into Kwinana, both with narrow gauge and standard gauge trains. The influence of Kwinana has extended further and further into the network and Albany and Geraldton have historically given up tonnage to Kwinana.

A program of track upgrading and storage and handling facility upgrading on the network has enabled very efficient train operations and a rationalisation of port operations and rollingstock utilisation. Western Australia is credited with having the most efficient grain transport and handling system in Australia. Bunbury and North Fremantle grain handling facilities have been disbanded over the last decade in the rationalisation of the system to produce efficiency.

⁹ The East Perth rail terminal.

Sections of the infrastructure has gradually been upgraded with the adoption of a 1 in 4 steel sleeper strategy as a minimal standard.

2.1.4 Bulk Commodity Operation

On the standard gauge network bulk mineral products comprise the Koolyanobbing Iron Ore task to Esperance port as well as the tasks associated with the goldfields mines around and to the north of Kalgoorlie.

In the goldfields, the rail network services the nickel tasks north of Kalgoorlie to Malcolm on the Leonora branch line and south on the Esperance line to Kambalda. General mining supplies are also provided from Perth/Fremantle/Kwinana port to the goldfields and consist of supplies such as sodium cyanide and milling balls for minerals processing. Nickel products from the goldfields are transported to Kwinana or Esperance.

Other bulk mineral operations are centred along the coast north and south of Perth but with the greatest concentration south of Perth. Four hundred kilometres north of Perth, mineral sands operations 150kms south of Geraldton at Eneabba require transport support to enable further processing and export through the port of Geraldton. A branch line between Eneabba and Dongara used solely for the purpose supports this task. Other tracks in the vicinity of Geraldton are part of the grain network.

This region also shows potential for iron ore mining and processing, and advanced planning has occurred for projects that involve rail transport both on existing and new tracks. Also approximately 60kms north of Perth at Muchea, mineral sands operation is supported by rail for the transport of the product to Kwinana.

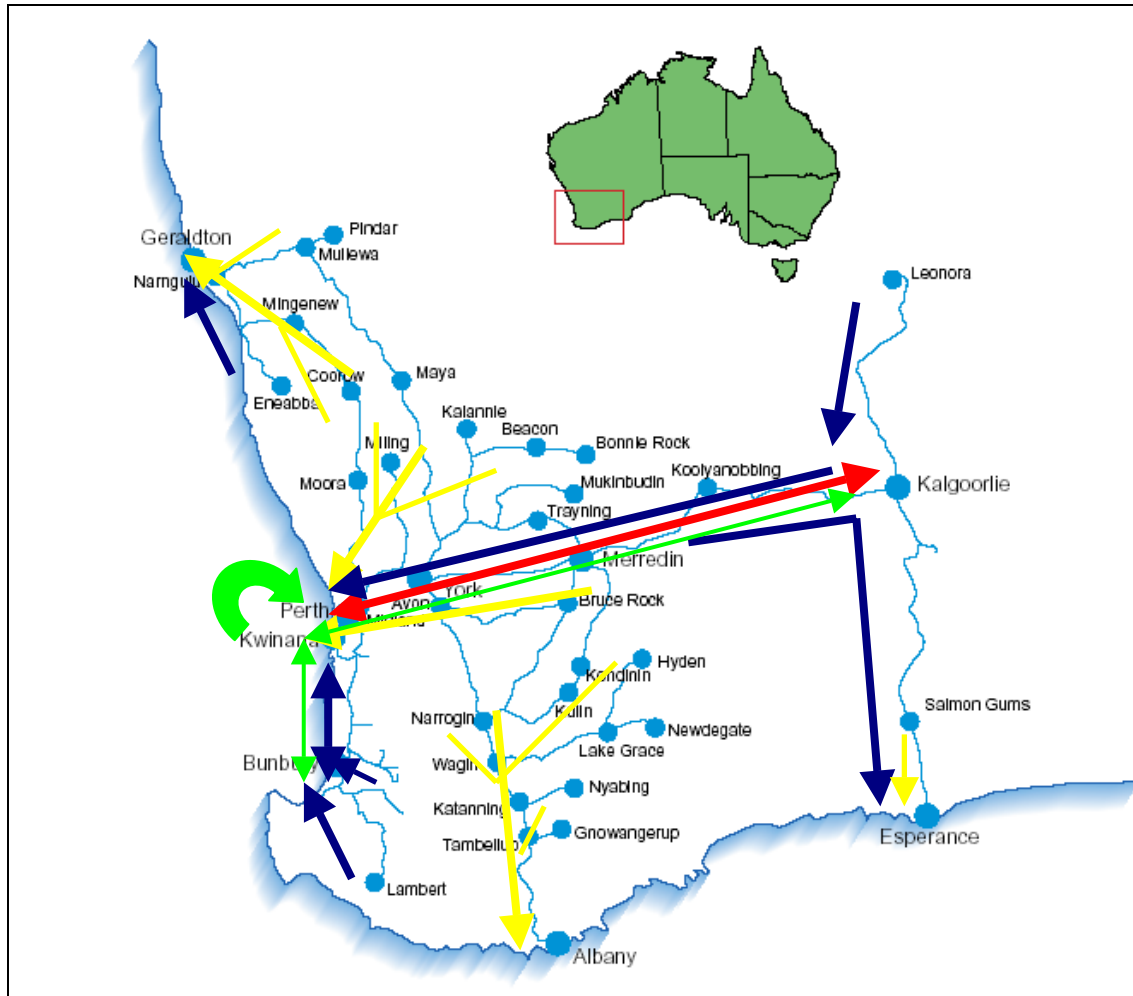
Along the Darling (Range) escarpment south of Perth significant bauxite mining and processing industry works are located on a number of fronts, which are operated either by Alcoa or Worsley. Trains transporting bauxite, alumina and caustic soda heavily use the main Perth to Bunbury line in order to bring the product to the ports of Bunbury and Kwinana for export.





The main Perth to Bunbury line has a number of branch lines servicing these needs. In addition the line supports the Australind passenger service between Perth and Bunbury as well as some minor bulk product and container hauls. The network around Bunbury also includes a branch line to Lambert near Manjimup used solely for woodchip trains exporting via Bunbury port.

A branch line that services the Worsley alumina operations also supports coal haulage from Collie. Coal is transported in relatively small amounts to various destinations including for electricity generation at Kwinana, energy at Worsley and for the mineral sands industry.

Figure 1 provides an outline of the rail network in Western Australia.

Figure 1: Overview of Rail Network Western Australia



-  Grain network operations
-  Bulk mineral and woodchip operations
-  East West Intermodal operation
-  Perth suburban and country passenger services

2.2 Rail access regime in Western Australia

The rail access regime in Western Australia is made up of the following elements:

- the Railways (Access) Act 1998 (the Act);
- the Railways (Access) Code 2000 (the Code); and
- each of the Regulator's determinations, such as:
 - segregation arrangements;
 - costing principles;
 - overpayment rules;
 - train management guidelines; and
 - statement of train path policy.

The object of the Western Australian rail access regime is described by section 2A of the Act, which states that the main object of this Act is:

“...to establish a rail access regime that encourages the efficient use of, and investment in, railway facilities by facilitating a contestable market for rail operations.”

This requires that the KPI regime achieve a balance between the needs of railway owners and access seekers. One important area where such a balance can be achieved is in the timing and transitional arrangements for the implementation of the arrangements (refer section 5 of this report).

2.3 Role of the Regulator

The Regulator's primary role is to monitor access provider's compliance with the Act and Code.¹⁰ In carrying this role the Regulator's responsibilities include to:

¹⁰ Section 20 of the Act.

- review of the Act and the Code¹¹;
- approve the segregation of access-related functions of the railway owners from their other functions¹²;
- approve the negotiation of an access proposal that may consume all available capacity on a route section and thereby preclude other entities from access¹³;
- provide an opinion as to whether or not the access price sought by the railway owner complies with the regime¹⁴;
- establish a panel of arbitrators to hear disputes and the appointment of an arbitrator upon receipt of a dispute notice, respectively¹⁵;
- register access agreements¹⁶;
- approve train management guidelines and train path policy¹⁷;
- approve the railway owner's costing principles and over-payment rules that relate to determination of floor and ceiling prices¹⁸;

¹¹ Section 12 of the Act and section 49 of the Code.

¹² Sections 29 and 42 of the Code.

¹³ Section 10 of the Code.

¹⁴ Sections 21 of the Code.

¹⁵ Sections 24 and 25 of the Code.

¹⁶ Section 39 of the Code.

¹⁷ Sections 43, 44 and 45 of the Code.

¹⁸ Sections 46 and 47 of the Code

- approve the weighted average cost of capital of railway routes and infrastructure for the determination of floor and ceiling costs for each route;¹⁹
- determine floor and ceiling costs of certain routes²⁰;
- enquire into and report and make recommendations to the Minister on matters relating to the operation of the Act or the Code and how either instrument may be amended²¹; and
- disseminate information that relates to the carrying out of the Act or the Code.

¹⁹ Clause 3, 7 and 8 of schedule 4 of the Code.

²⁰ Clause 9, of schedule 4 of the Code.

²¹ Section 49 of the Code. Section 12 of the Act also requires the Regulator to carry out a review of the Code as soon as practical after the third anniversary of its commencement and the expiry of every five years thereafter.

3 Key Performance Indicators and Monitoring

In this section we review the literature covering performance monitoring, measurement and key performance indicators (KPIs). Performance monitoring needs to be considered in the context of the following:

- why measuring performance is important;
- what common characteristics are generally measured in performance monitoring regimes; and
- what criteria ought to be applied for the development of KPIs for the Regulator's use.

3.1 Why measure performance

3.1.1 Principal-agent theory²²

The activity of measuring performance of an enterprise or person stems from the inherent weakness in principal-agent relationships. Wherever there is a separation of ownership and control, the principals, who own the enterprise, require information to monitor, control and influence the actions of those they employ to run the enterprise, their agents. This permits principals to judge performance and to take corrective action.²³

²² Principal agent issue arise whenever one person (the Regulator) seeks to motivate another (regulated business) to pursue a particular course of action. There is extensive literature on the issue supporting this approach. See, for example, Laffont and Tirole, 1993, *The Theory of Incentives and Procurement*, MIT Press and Vickers and Yarrow ((1988) *Privatisation: An Economic Analysis*, MIT Press.

²³ Dr Paul Moy (1993), "Why measure performance? Measuring the Economic Performance of Government Enterprises (Swan Consultants Pty Ltd Conference)," page 1.

In other words, principals must be able to ensure that agents act in a manner that is consistent with the pursuit of the principal's objectives rather than the objectives of the agent. Principals can achieve this by:

- structuring the incentives in a way that encourages compatible behaviour; and
- securing information to monitor the conduct and performance of agents.²⁴

Before considering these measures, we consider the nature of principal agent relationships in a regulatory environment, where they take on an additional layer of complexity, as the Regulator acts as:

- an agent for Government by undertaking responsibilities independently from the current government; and²⁵
- a principal in its relationship with the railway owners (who are agents). This relationship is defined by the Act, the Code and other components of the access regime and is characterised by the Regulator's significant information disadvantage relative to the railway owner.

In the regulatory setting, the principal's problem is that once subject to regulation, a regulated business will have incentives to act in a way that minimises the impact of the regime on its commercial success. This may be through delivering low service quality (or in some cases increasing service quality to socially undesirable levels by goldplating)²⁶ or conferring a competitive advantage upon a related business.²⁷

²⁴ Ibid, page 1.

²⁵ There is yet another layer of principal agent relationships by virtue of the Government acting as an agent for the electorate.

²⁶ Spence, Michael., (1975), "Monopoly, Quality and Regulation", Bell Journal of Economics, 6(2):417-429.

²⁷ In contrast, aligning incentives in the private sector is often more straightforward (although by no means perfect as recent accounting scandals have indicated). In private sector arrangements the use of explicit contracting supports the use of ongoing performance measurement with the subsequent use of incentives for adequate performance and penalties for poor performance. The measurement, monitoring and interpretation of performance is relatively easily applied and understood given the settled nature of the indicators used to measure performance and the commonality of the criteria used to interpret the findings.

3.1.2 Service quality incentive arrangements

In dealing with this issue, Regulators and governments have available four alternative mechanisms for quality regulation:²⁸

- publication of information on performance – where the regulated firm releases information and the regulation occurs as a by-product of community and political pressure in response to poor quality outcomes;
- adjusting prices – including a direct adjustment in the pricing formula based on a quality measure (service quality index), although this may mean that individual consumers are not compensated for inferior service;
- customer compensation schemes – the quality threshold payment and penalty arrangements which allow individual consumers to be compensated for inferior service; and
- minimum quality standards – this approach penalises the regulated firm for failure to meet minimum levels of accepted service quality.²⁹

Utility regulation in Australia and overseas has at various times and in various jurisdictions applied each of these mechanisms. Indeed, the Act and the Code adopt each incentive mechanism - the first (information dissemination), the second (potentially adjusting asset values for poor service quality), the third (customer compensation for poor performance

²⁸ Rovizzi, L., and Thompson, David., (1995), "The Regulation of Product Quality in the Public Utilities", *The Regulatory Challenge*, Edited by Matthew Bishop, John Kay and Colin Mayer, page 350.

²⁹ A study by Besanko, Donnenfeld and White (1987) found that the minimum quality standard form of quality regulation was superior than the other forms of quality regulation providing the firm continued to serve all consumers after the standards have been enacted – ie universal service obligations in telecommunications or 'provider of last resort' in electricity (refer Besanko, David & Donnenfeld, Shabtai & White, Lawrence J, 1987. "Monopoly and Quality Distortion: Effects and Remedies," *The Quarterly Journal of Economics*, 743-67 Vol. 102 (4) pp. 743-67).

through changes in asset valuation approach) and the fourth (penalties for hindering access and not complying with the segregation arrangements).

Irrespective of the mechanism that is applied, it is necessary for principals to be able to measure, collect, collate and interpret data that provides an accurate idea of progress or performance towards the principal's objectives. Monitoring and performance measurement is an important aspect within principal-agent relations as it:

- encourages improved performance through incentives (rewards) or punishments;
- assists the future design of the regime and contracts made under it; and
- is necessary to ensure compliance with the terms and conditions of the relations.

3.2 What is measured in the regulation of utilities

The area of performance monitoring of utilities in regulatory environments has developed over recent years. In this subsection, we review some of the approaches adopted in the electricity, water, gas and rail sectors.

3.2.1 Rail

Regulator endorsed performance monitoring regimes are well established for ARTC in relation to the interstate network and QR.³⁰

Another Australian performance monitoring regime for public transport can be found in Victoria for rail, trams and buses following privatisation in 1999. Under the performance regime, incentive based payments or penalties apply to the operators and the Government monitors:

- punctuality based on on-time running;

³⁰ IPART developed KPIs for the then Rail Access Corporation in its report *Aspects of the NSW Rail Access Regime – Final Report* April 1999, page73. However, these KPIs relate principally to financial information rather than service quality or compliance with the regime.

- reliability – percentage of cancellations; and
- customer satisfaction – using passenger surveys to measure whether franchisees are providing the quality service their customers expect.³¹

The Australian Transport Council (ATC) has adopted the following set of performance indicators and targets for the interstate network track:³²

- Less than 2% track length subject to temporary speed restriction;
- At axle loads up to 21 tonnes, 80kmph average, 115kmph maximum speed;
- For axle loads between 21 tonnes and 25 tonnes, 60kmph average and 80kmph maximum;
- Ability to double stack conventional containers;
- Train lengths of 1500m on the north-south corridor and 1800m on the east-west corridor;
- Reliability, within 15 minutes of schedule;
- Transit Time, average actual rail transit time;
- Service availability, service available to % of total market; and
- Service cut-off time for AM delivery (forward direction).

³¹ Victorian Government (2000), "Track Record – Quarterly Performance Bulletin April – June 2000", page 1-2.

³² These targets have been used for various purposes including the recent ARTC Interstate Rail Network Audit.

3.2.2 Electricity

Jurisdictional Regulators under the National Electricity Code have required electricity distributors to report quarterly and annually on a range of service quality performance indicators including:

- reliability measures – including System Average Interruption Duration Index, System Average Interruption Frequency Index and Customer Average Interruption Duration Index by feeder;
- quality of supply data – complaints by symptom, that is, those that breach pre-determined thresholds and response;
- customer service – general customer service performance reporting, such as, network call centre performance across a range of common client service characteristics, speed of new connection, re-connection and repairs; and
- complaints management – aggregate data, by type and cause, speed of resolution and frequency of repeat complaints.

In addition, aggregate data for the network is reported, including total customers length of distribution lines, energy delivered, distribution losses (%), number and capacity of transformers, asset utilisation, and maximum demand.

3.2.3 Gas

The gas pipeline industry in Australia is required to measure performance on reliability, service quality, customer surveys and complaints management measures. However, the regulation of service quality in gas is dissimilar to electricity in the following ways:

- service quality and technical performance monitoring is not necessarily undertaken by a single Regulator;
- access agreements will include explicit conditions relating to the quality of service provision; and
- in States where domestic reticulation dominates the service load, measuring the performance of the customer service interface will receive greater attention.

Despite these observations, the general approach to the setting of performance regimes for gas businesses will require regulated businesses to report against:

- aggregate data – total customers, disaggregated by type and level of consumption, asset length, consumption levels and unaccounted for gas or leakages;
- reliability measures – number of planned and unplanned interruptions, number of customers effected by interruptions, and number of low pressure incidents; and
- customer service interface – aggregate number of complaints and complaints by type or expected cause and categorised by resolution.

In some instances the gas business may be required to make penalty payments for breaches of agreed performance thresholds, which could be a part of individual access agreements or set down by the Regulator in the form of minimum standards. Penalty payments may also be reported under the KPI regime.

3.2.4 Water

Every major urban (above 5,000 connections) and non-urban water supplier in Australia, including bulk water providers, provides information to the annual quality of service publication of the Water Services of Association of Australia (WSAA).³³ Product quality is often regulated as minimum standards which form license conditions.³⁴

3.3 Criteria for the development of KPI regime

The following criteria have been developed to assess the applicability of particular KPIs for the performance monitoring regime:

- effectiveness in identifying and communicating compliance with the regime and performance;
- measurability so that the relevant KPIs are amenable to quantification. In a limited number of instances, qualitative measures may be appropriate;

³³ WSAA*facts*.

³⁴ Essential Services Commission in Victoria for water and IPART for Sydney Water, Hunter Water etc.

- relevance so that measures captured in individual contracts would not be caught under the KPI regime except in an aggregated form;
- comparability with other regimes to provide a basis for benchmarking performance; and
- comprehensiveness of the KPI regime to provide a vehicle for the holistic assessment of compliance with the regulatory regime.

3.3.1 Effectiveness

Clearly a fundamental aspect of the KPI regime is to ensure that it reflects the principles and objectives of the regulatory environment. In other words, it is important that the KPIs considered as a whole provide a basis against which the Regulator can properly assess compliance with the regime.³⁵

Whilst it is important for the KPIs *as a whole* to identify compliance with the regime, it is equally important the individual KPIs provide information relevant to particular performance measures in identifying compliance and performance. For example, the KPIs must be designed so that each critical aspect of the regime is addressed. Balanced against this is the need to keep to a manageable number of indicators so that they are informative.

KPIs must also communicate information to an audience in a way that is easily comprehended so that stakeholders are able to assess the characteristic of performance under consideration in absolute terms, but often also in relative terms. For example, 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

³⁵ A separate consideration concerns the appropriateness of the regime and wider public interest considerations, which are considered below.

or elasticity of the track. These latter measures may inform or assist in the optimisation of track maintenance management strategies, but are not appropriate for the KPI regime at this time.

Also, in order to be effective in communicating information, it is important that the KPIs be accompanied by explanations and justifications by service providers of their performance where divergence from benchmarks occurs.

3.3.2 Measurability

Sources of information, for the purposes of performance measurement, can be labelled as:

- output related measures – such as transit times and reliability;
- input related measures – such as costs of service, which is relevant to efficiency considerations;
- processes – which examines the integrity of the processes adopted. This is particularly relevant in the case of segregation arrangements; and
- outcomes – relates to user perceptions and levels of satisfaction with aspects of the regime or conduct under the regime.

It is likely that a mix of these measures will be appropriate depending in part upon the characteristics of the available or readily obtainable information and the nature of the KPI being measured. As well, the availability of the information is likely to be a significant issue during the initial phase of KPI implementation, as systems of recording and consistency of recording will require development. For example, train controllers will be required to measure on-time running or train delays and these parameters will need to be apportioned by cause in the recording system. The consistency of recording this information is a key part in its integrity and it is likely that train controllers will need to be trained in certain methods of recording according to a robust set of procedures.

Whilst output and input related measures are amenable to quantification, and hence able to be verified, in some cases, qualitative measures may be appropriate, although regulatory regimes generally have found it more difficult to settle on qualitative measures of performance.

Indeed, the holistic approach recognised above needs to take into account that in some cases, a review of the processes that are being implemented properly forms part of the performance

monitoring regime. For example, any assessment of compliance with the segregation arrangements is likely to be qualitative in nature and focus on processes, and in some cases, outcomes (eg satisfaction with the outcomes of complaints on train control decisions).

3.3.3 Relevance

It is expected that individual access agreements will also contain KPI reporting frameworks.³⁶ It is therefore important that a distinction is drawn between the KPIs that are appropriate for individual contracts, and those that are appropriate for KPIs in the context of the regime as a whole.

In general, measures that could be expected to be captured in individual contracts would not be caught under the KPI regime except in an aggregated form. This highlights the fact that there is a clear distinction between the types of measures relevant for individual contracts, which are directed at compliance with the contract, and the KPI regime, which is directed at identifying performance against the regime as a whole.

Another important reason to draw the distinction between the “micro” level of individual contract and the “macro” level of the regime as a whole is that the former is likely to involve issues of commercial in confidence information that should be a matter for the contract itself whereas the latter will not.³⁷

By aggregating individual contractual information, it will be possible to develop a KPI regime that provides the necessary information without unduly compromising commercial in confidence information. However, in the early stages of the operation of the regime, there may be relatively few third party operators on parts of the network. Consequently, the Regulator may decide to aggregate reporting in a way that achieves a balance between the desired level of accountability and individual operator’s and railway owners’ confidentiality concerns.

³⁶ Refer to clause 11 of schedule 3 of the Code.

³⁷ Section 50 of the Code obliges the ORAR to have regard to the confidential nature of information that might be disseminated in pursuit of the Regulator’s functions.

This also highlights a more subtle interaction between the contracts and the KPI regime – it is likely that the choice of KPIs for the regime will influence the choice of KPIs for individual contractual performance.

Finally, to be relevant, KPIs must be reported in a timely fashion.

3.3.4 Comparability

It is considered desirable that comparability with other rail regimes be preserved to the extent that this is possible, particularly against other rail access regimes. It is noted that there are two rail regimes in Australia that have been endorsed by the relevant regulatory authorities, namely the ARTC Undertaking (ACCC) and the QR Undertaking (QCA). Both these regimes potentially provide measures of particular relevance to WNR on account of the fact that:

- like the WA access regime, the QR undertaking was developed for a vertically integrated railway; and
- the ARTC regime covers track with which there will be significant overlap with the WNR arrangements, particularly on the standard gauge line. This highlights the importance of compatibility and comparability between the regimes, particularly for traffics that will be subject to both in a single movement.

Another aspect of comparability involves aggregating the information in a way that is meaningful. The segmentation of the reporting regime occurs at several levels, including:

- frequency – which reflects the segmentation of reporting over time. It is proposed that the KPIs be reported quarterly or annually, depending upon the indicator;
- geographically – there is enormous diversity in the WNR and WAGR systems and in the traffics traversing those systems. Accordingly, an issue arises as to the appropriate aggregation of individual route sections for the purposes of the KPI regime. To some extent there is a natural separation by virtue of control of the network being separated between WAGR (suburban passenger transport in the Perth metropolitan area) and WNR. However, in addition, the geographic disaggregation on WNR's network generally reflects the predominant traffic type and accordingly, in many cases, it will be appropriate to segregate the reporting of KPIs on a regional basis where reporting is disaggregated to regions served by the following railway lines:

- main East-West standard gauge line to the eastern states;
 - the Leonora to Kalgoorlie and Kalgoorlie to Esperance standard gauge railway lines;
 - main narrow gauge railway line to the South West; and
 - the narrow gauge grain network.
- segregation by user – broadly, there are two categories of user, being AWR (the above rail operator which is also a related entity of WNR) and other third party operators. For many KPIs, it will be appropriate to separately report on KPIs affecting these customer groups as well as the aggregate.

3.3.5 Comprehensiveness

It is important that the KPI regime provide a vehicle for the holistic assessment of compliance with the regulatory regime with reference to the wider public interest considerations that underpin its existence. Particular issues of note include:

- safety considerations, and in particular that third party access does not contribute to an unacceptable safety risk, which is of particular relevance considering;
- section 20(4)(f) of the Act requires the Regulator to take account of the operational and technical requirements necessary for the safe and reliable use of the railway infrastructure; and
 - clause 6(4) (vi) of the Competition Principles Agreement requires that the dispute resolution body when considering the terms and conditions for access should take into account the operational and technical requirements necessary for the safe and reliable operation of the facility;
- the Regulator’s responsibility under the regime to continually monitor and assess its efficacy, and in appropriate cases, recommend changes to the Minister.

Finally, it is important to recognise that reporting systems are likely to evolve over time with new developments and the increasing familiarity with the system.

3.4 Stakeholders

We consider the principal stakeholders for the KPI regime to be:

- the public;
- third party operators;
- AWR;
- end customers;
- the railway owners, WNR and WAGR;
- Parliament;
- the Safety Regulator;
- the Corridor Minister, the Treasurer and the Transport Minister; and
- Commonwealth authorities, including the NCC and the Commonwealth Treasurer.

As indicated in section 1, the Office undertook a consultation process on the draft report that involved a consideration of public submissions received and a workshop. Issues raised in public submissions, which are considered significant, are discussed in section 4 within the context of the relevant section of the proposed KPI framework.

4 Appraisal and development of KPIs for WNR

4.1 Introduction

To identify key performance indicators (KPIs) for WNR we undertook an appraisal of the regulatory regime consisting of the relevant parts of:

- the Act and the Code; and
- the Rail Access Regulator's determinations.

The primary purpose of the appraisal is to identify the KPIs to be measured, assessed and monitored through the reporting framework. The following areas are considered for the development of KPIs:

- network overview;
- negotiation framework;
- segregation arrangements;
- costing principles;
- over payment rules;
- train management guidelines;
- statement of train paths policies;
- service quality; and
- public interest considerations, including the efficacy of the regime.

4.1.1 Results of consultation

Whilst comments made specifically about the KPIs listed in the draft report are set out under the relevant sections, a number of more general comments that were received from respondents are set out below.

WNR

WNR suggested that the legislative basis underpinning the WA rail access regime distinguished it from the Queensland and ARTC arrangements and that as a consequence, these other regimes required more detailed monitoring than would be the case for the WA regime. WNR drew a distinction between assessing compliance with the regime under the WA arrangements and giving effect to the regime in these other jurisdictions.

WNR's approach to the assessment of KPIs involved a two step process. First, the draft list of KPIs was put through a legal screen to assess whether or not the Regulator had the power to require it. It then considered whether or not those KPIs which the Regulator could legitimately (in its view) request or assess against the relevance to monitoring compliance with the regime. Those that remained were then assessed having regard to three criteria being public interest considerations, support for the Regulator's determinations and general measures of performance. This resulted in a very limited number of 9 KPIs being put forward.

WNR also argued that the segregation arrangements alone meant that WNR should not be required to separately report on standards of service delivered to AWR as opposed to third party operators.³⁸

ARTC

ARTC's general comments on the KPI regime are as follows:

- consistency with the ARTC regime is critical for the purposes of the East-West corridor;
- strong endorsement of the differentiation of reporting between service provided to affiliated entities of WNR and to third party operators;

³⁸ WNR's specific suggestions regarding proposed KPIs are addressed under the relevant sections.

- service quality reporting for a third party access environment with multiple parties makes the performance of individual parties becomes paramount – possibly to the detriment of overall system performance;
- KPI reporting works best when it is a two way process between the above rail operator and the access provider – although this perhaps relates more to the contractual arrangements rather than the KPI regime per se; and
- there is the risk of strategic investment by an access provider whereby investments are made in regions that benefit its above rail operator but not third party operators – although it is not proposed to incorporate KPIs in relation to investment by WNR.

Alcoa

Alcoa developed a categorisation of KPIs as follows:

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

Alcoa also suggested that KPIs have targets.

NECG view on public submissions

Whilst it is thought that WNR's conceptual approach has merit, NECG does not consider that the Regulator's ability for assessing the performance of railway owners is subject to the legal constraints suggested by WNR. The critical point is that the Regulator needs to secure sufficient information to monitor compliance with the Regime, and to be satisfied with the way in which the regime is operating. However, a more limited set of KPIs for public reporting has been adopted partly in response to WNR's comments.

Whilst there is no evidence to indicate that WNR is showing any favouritism to AWR, NECG believes that WNR may still have an incentive and capacity to discriminate in favour of its

own traffics. In practice, the KPI regime provides an important vehicle for indicating whether there is any evidence of favouritism being shown, and this forms the basis of NECG's view that, where possible, KPIs should be reported separately for AWR and other operators. This requirement is critical to the credibility of the regime and the confidence that stakeholders will have in the Regulator's performance. This point was also highlighted in the submission from ARTC.

NECG considers that Alcoa's categorisation of KPIs is also useful and has assisted NECG in the shortlisting process. In response to this position, several KPIs have been categorised as being of relevant background information rather than as KPIs in and of themselves. In addition, the KPIs that Alcoa categorised as in class E have been deleted from the report (although it is proposed that the level of outsourcing of maintenance still be separately reported to the Regulator).

In relation to Alcoa's other suggestion that KPIs have targets, NECG believes that the assignment of targets for KPIs is currently premature.

4.2 Network overview

Whilst relevant background information may not constitute KPIs in and of themselves, this information is nevertheless critical to an understanding of the network and the performance of WNR. Accordingly, it is considered that the provision of relevant background information forms an essential part of the KPI regime. As the nature of the framework for reporting to the Regulator varies from the public KPI regime, the nature of the background information also varies.

4.2.1 Reporting to the Regulator

The purpose of the network overview is to gain an overview of the usage and service potential of the network, by the identification of the following in respect of each route section:

- length of track;
- gross tonnes;
- gross tonne kilometres;
- train kilometres;

- maximum axle load;
- maximum speed;
- average speed;
- length of standard track able to accommodate double stacked containers; and
- maximum train length.

It is recommended that this information be reported to the Regulator each quarter on an exception basis after initial reporting (noting that several KPIs are derived from these variables, such as operating costs per train kilometre which is derived from train kilometres). It is noted that some of this information is already required to be made public by railway owners under Section 6 and Schedule 2 of the Code.

4.2.2 KPI regime for public reporting

In terms of public KPI reporting, it is recommended that this information be reported on an exception basis each quarter. In other words, the reporting arrangement would operate on the basis that a comprehensive disclosure would initially occur, with subsequent reporting undertaken on an exception basis. Reporting of GTK information would be aggregated for each region to preserve confidentiality.³⁹

4.3 Negotiation framework

4.3.1 Background and legislative requirements

An important part of the access regime relates to the negotiation framework established under the Code. The main steps in the negotiation framework are as follows:

³⁹ Over the course of the application of the KPI regime, the Regulator may also wish to mandate the full disclosure of this background information again.

- a person may seek to be provided with preliminary information within 14 days of a request⁴⁰;
- in response to a written proposal seeking access, the railway owner must acknowledge receipt within 7 days and provide the proponent with certain information including the railway owner's requirements and costing information⁴¹;
- the railway owner must observe certain obligations in negotiating access agreements, including not to unnecessarily delay the process or unfairly discriminate between proponents⁴²;
- where the railway owner is dissatisfied with the proponent's managerial or financial ability or where there is insufficient capacity on the system, the railway owner must communicate this to the proponent within a defined period and provide reasons⁴³;
- once satisfied of the proponent's managerial and financial ability the railway owner is required to give a notice of its readiness and nominate a date to begin negotiations within a defined period and to set a negotiation period⁴⁴;
- the Regulator may be called upon to provide an opinion whether or not a price sought by the railway owner is consistent with the requirements of the Code⁴⁵; and
- the arbitration process in the event of a refusal to negotiate or negotiations have broken down⁴⁶.

⁴⁰ Section 7 of the Code.

⁴¹ Section 9 of the Code.

⁴² Section 16 of the Code.

⁴³ Section 18 of the Code.

⁴⁴ Sections 19 and 20 of the Code.

⁴⁵ Section 21 of the Code.

⁴⁶ Sections 22 to 35 of the Code.

4.3.2 Results of consultation

WNR submitted that the KPI framework be limited to the number of access negotiations undertaken, the number of access agreements completed and the number of breaches of negotiation timeframes (all published annually). It is acknowledged that there is merit in the approach suggested by WNR and is reflected in the KPIs recommended for public reporting. However, more detailed information should be provided to the Regulator to enable assessment of compliance with the regime.

4.3.3 Reporting to the Regulator

Identification of KPIs

It is recommended that the following KPIs be adopted to assess compliance with the regime (noting that reporting could be undertaken through the provision of the relevant registers to the Regulator):

- the number and percentage of breaches of the negotiation timeframes outlined in the Code⁴⁷;
- where breaches of the negotiation timeframes have occurred, the average delay in days taken to complete the requirement that was breached (with the Regulator retaining the discretion to require a further breakdown into specific breaches and the causes of those breaches);
- the average negotiation period for access agreements concluded through the reporting period;
- the number of negotiations commenced within the year;
- the number of negotiations completed resulting in an access agreement being signed;

⁴⁷ In the event there are several breaches of the timeframes, it may be appropriate for a further breakdown to be provided.

- the number of access negotiations withdrawn by the access seeker;
- the number of negotiations in dispute (refer section 25 (2) of the Code);
- the number of agreements reached “inside” the Code;
- the number of agreements reached “outside” the Code;
- the number of arbitrations commenced; and
- the number of arbitrations completed.

It is also recommended that more detailed information should be provided to the Regulator in the form of a table identifying, for each breach, the requirement that was breached as well as the number of days in which WNR was in breach.

Reporting framework

It is recommended that the following framework be adopted in respect of these KPIs:

- reporting be undertaken annually;
- there be no geographic segregation; and
- customers be separated according to whether or not they are related entities of the railway owner.

4.3.4 KPI regime for public reporting

It is recommended that the KPIs for the Negotiation Framework be limited to:

- the number and percentage of breaches of the negotiation timeframes outlined in the Code⁴⁸;

⁴⁸ In the event there are several breaches of the timeframes, it may be appropriate for a further breakdown to be provided. Note that where there is an agreement as to an extension of time for a requirement of the Negotiation Framework, fulfilment of the requirement within the agreed time will not result in a breach being recorded.

- where breaches of the negotiation timeframes have occurred, the average delay in days taken to complete the requirement that was breached; and
- the average negotiation period for access agreements concluded through the reporting period.

However, the following background information would inform these KPIs and should therefore be available to the public:

- the number of negotiations commenced within the year; and
- the number of negotiations completed resulting in an access agreement being signed.

The reporting framework should mirror that for the reporting of information to the Regulator.

4.4 Segregation arrangements

4.4.1 Background and legislative requirements

Segregation, or “ring-fencing”, refers to the separation of access related functions from other activities, in particular train (or above rail) operations. There are several aspects to segregation:

- functional separation – where duties are assigned between above rail and below rail sectors;
- cost allocation – to ensure that there is no inappropriate allocation of above rail costs to the below rail part of the business; and
- confidential information – to manage confidential information, so that any associated “above-rail” company does not receive commercial information that would provide it with a competitive advantage.

The integrity and enforcement of segregation arrangements is critical to the efficacy of the regime – unless operators and potential operators have confidence in these arrangements, they will simply not invest the time and effort to attempt to enter the market.

The requirements of the Act for segregation are as follows:

- duty to segregate – a railway owner must make arrangements to segregate its access-related functions from its other functions, and have appropriate controls and procedures to ensure that the arrangements in place operate effectively and are being complied with⁴⁹;
- define the powers of the Regulator in relation to segregation – the railway owner must obtain the Regulator’s prior approval for its segregation arrangements or variations to such arrangements. The Regulator may provide written directions to the railway owner in relation to segregation and these directions are to be complied with⁵⁰;
- protection of access seekers or rail operators confidential information from improper use and disclosure by officers of the railway owner⁵¹;
- avoidance of conflict of interest - officers must have no conflict in duties between the performance of access-related functions and other business of the railway owner⁵²;
- duty of fairness - in performing their functions relevant officers must not have regard to the interests of the railway owner in a way that is unfair to persons seeking access or to other rail operators⁵³; and
- form as to enable all income, expenditure, assets and liabilities relating to the carrying out of its access-related functions to be properly recorded and distinguished from the railway owner's other income, expenditure, assets and

⁴⁹ Section 28 of the Act.

⁵⁰ Section 29 of the Act.

⁵¹ Section 31 of the Act.

⁵² Section 32 of the Act.

⁵³ Section 33 of the Act.

liabilities and in the case of common or shared costs that these are apportioned in a fair and reasonable manner.⁵⁴

4.4.2 Key aspects of the segregation arrangements

The Regulator has identified critical elements of the segregation arrangements as follows:

- provision of an annual Compliance Report detailing a Compliance Plan with specific procedures for ensuring segregation arrangement compliance and measures for monitoring compliance;
- a detailed annual independent external audit of compliance with other aspects of the Segregation Arrangements on a negative assurance basis, with the Regulator having the ability to select the auditor and the final audit report being made public;
- a compliance manual detailing the segregation arrangements including the types of behaviour which breach segregation requirements and the appropriate corrective action for each breach and notification procedure; and
- the requirement that the railway operators must report any breaches of the segregation arrangements to the Regulator in writing within 5 business days.⁵⁵

4.4.3 Results of consultation

WNR suggested that the reporting should be limited to the number of major breaches of the segregation arrangements substantiated and a description on the remedial action taken and the consequences of the breach. It is acknowledged that this is the key issue for the reporting of compliance with the Segregation Arrangements. However, it is recommended that more detailed information should be provided to the Regulator to enable assessment of compliance with the regime.

⁵⁴ Section 34 of the Act.

⁵⁵ ORAR, (2002), "Segregation Arrangements to Apply to the WestNet Rail – Determination of the Western Australian Independent Access Regulator", page 34.

4.4.4 Reporting to the Regulator

Identification of KPIs

The key goal of the KPIs for the segregation arrangements is to inform the Regulator, as well as prospective access seekers and operators, as to the integrity of the ring-fencing arrangements. In particular, it is important that all parties be assured that there are no inappropriate transmissions of confidential information and that there is no preferential treatment accorded to the railway owner's related entities. It is also important there be credible enforcement of identified breaches through remedial action, the levying of penalties or through the triggering of hindering access provisions.

There is little room for latitude for breaches of the segregation arrangements because of their seriousness. For instance, breaches of the confidential information protections can seriously damage an operator and significantly affect the perceptions of those who might consider becoming competitors in the above rail market.

Unlike other parts of the State's rail access regime, the effectiveness and compliance of WNR can largely be measured by KPIs associated with process, and, to a lesser extent, outcomes. This is because performance is focused on the consistent application of a process – a breach of the segregation arrangements will normally be occasioned by a breach of the process set out in the Compliance Manual. Nevertheless, breaches of process can suggest actual breaches of the segregation arrangements and signal a future breach of the segregation requirements occurring and accordingly, it is important that they be recorded as KPIs.

Compliance manual and external audit

It is apparent from the Regulator's decision on the segregation provisions that the compliance manual that is to be developed by WNR will form a critical part of the regime. This is because the compliance manual will form an essential "how to" guide to compliance with the regime and with it, a basis for a compliance audits.

With this in mind, the key KPI to be considered is the audit report into compliance with the segregation arrangements and the Compliance Manual. It is expected that the audit would cover the following:⁵⁶

- the treatment of confidential information, including:
 - the efficacy of controls over physical and electronic separation of data;
 - the effectiveness of RAS and RAMS protection;
 - the acknowledgment from employees who will perform prescribed duties about the need for maintaining confidentiality;
 - the signing of deeds;
 - the effectiveness of staff training on the Compliance Manual; and
 - compliance with information disclosure protocols for the chief executive and board members of ARG; and
- in relation to conflicts of interest, ensuring that rotations that occur in emergencies are notified to the Regulator.

It is therefore expected that the audit will not only provide advice as to the future improvement of the arrangements but also indicate the number of breaches identified through the audit process. The number of such breaches ought to have the status of KPIs under the regime.⁵⁷

⁵⁶ Specific KPIs are being developed elsewhere in the regime to assess the requirement for the railway owner to act fairly.

⁵⁷ It may be appropriate for the Regulator to adopt a more detailed and formal approach to reporting of breaches of the segregation arrangements in the future – especially as a precursor to action being taken under the Act or the Code.

Remaining KPIs

In addition, it is suggested that the following KPIs be developed:⁵⁸

- number of breaches of the segregation arrangements notified to the Regulator by WNR within 5 business days of becoming aware of the breach and a description on the remedial action taken and the consequences of the breach;
- number of breaches of the segregation arrangements substantiated by the Regulator and a description on the remedial action taken and the consequences of the breach;
- number of complaints of alleged breaches of the segregation arrangements;
- number of complaints of alleged breaches of the segregation arrangements that are being assessed;
- number of complaints of alleged breaches of the segregation arrangements that have been assessed and were not substantiated; and
- number of complaints satisfactorily resolved by the parties.⁵⁹

Reporting framework

It is recommended that the following framework be adopted in respect of these KPIs:

- reporting be undertaken quarterly;⁶⁰ and

⁵⁸ In relation to WNR's requirements under section 34 of the Act, it is assumed that the Regulator will separately enquire into the appropriateness of WNR's accounting practices and the timeliness and integrity of its financial statements, and that such reports will also be publicly available.

⁵⁹ The audit report will need to make it clear which of the breaches identified through the audit process have been reported through these KPIs to avoid double counting.

⁶⁰ Although it is proposed that the audit report be undertaken annually and accordingly quarterly reports will necessarily be incomplete in this respect.

- there be no geographic segregation in reporting.

As all disputes are likely to involve entities external to WNR and any associated company, there is no reason to attempt to separate reporting by customer.

4.4.5 KPI regime for public reporting

It is recommended that the KPIs for the Segregation Arrangements be limited to:

- number of breaches of the segregation arrangements substantiated by the Regulator and a description on the remedial action taken and the consequences of the breach.

In order to provide relevant information to enable interested parties to interpret this KPI, it is suggested that the following background information also be reported:

- number of complaints of alleged breaches of the segregation arrangements that are being assessed; and
- number of complaints of alleged breaches of the segregation arrangements that have been assessed and were not substantiated.

It is recommended that the audit process should be relied upon to address any remaining issues for public reporting of compliance. The reporting framework should follow the format set out in Reporting to the Regulator.

4.5 Statement of Train Paths Policy

4.5.1 Background and legislative requirements

Section 44 of the Code requires the railway owner to develop and have approved by the Regulator a Train Paths Policy (TPP) relating to the allocation of train paths and the provision of access to train paths that have ceased to be used. The TPP therefore addresses scheduling issues but not the real time management of train services, which is addressed in the Train Management Guidelines (TMG).

4.5.2 Key aspects of the Train Paths Policy

The key parameters that need to be measured from the TPP include:

- the initial allocation of train paths;
- the subsequent cancelling or reallocation or removal of train paths by WNR;
- the use of conditional train path allocations for seasonal operations;
- the use of temporary variations to train path allocations by WNR and the reasons for the temporary variations;
- the use of permanent variations to train path allocations by WNR and the reasons for the permanent variations;
- the occurrence of services on train path allocations under section 3.8, such as mechanical failure of access user, failure in the access user's equipment, and repair, maintenance or upgrading of the network;
- the cancellation of services by access users; and
- the number and nature of disputes made by access users under the dispute resolution process.⁶¹

The measurement of these parameters, by appropriate and reasonable KPIs, would provide the Regulator with the ability to determine the efficacy of WNR's TPP, when amended to align with the requirements of the Regulator.

4.5.3 Results of consultation

WNR suggested that the reporting should be limited to the number of disputes in relation to scheduling processes. It is acknowledged that this is the key issue for the reporting of compliance with the TPP and is reflected in the KPIs recommended for public reporting.

⁶¹ ORAR, (2002), "Train Path Policy to Apply to the WestNet Rail – Draft Determination of the Western Australian Independent Access Regulator", pages 26-33.

However, it is recommended that more detailed information should be provided to the Regulator to enable assessment of compliance with the regime.

4.5.4 Reporting to the Regulator

Identification of KPIs

The effectiveness of the application of the TPP can also be measured by looking at the frequency of complaints made by access seekers and operators against the railway owner leading to the following KPIs:

- the number of complaints in relation to scheduling processes (including for temporary variations, permanent variations and reallocation of train paths);
- the number of breaches of the Train Paths Policy (including for temporary variations, permanent variations and reallocation of train paths) that were substantiated (which may be substantiated through a dispute resolution process)⁶²;
- number of complaints of alleged breaches of the Train Paths Policy that are being assessed;
- number of complaints of alleged breaches of the Train Paths Policy that had been assessed and were not substantiated; and
- the number of complaints that are resolved to the parties' satisfaction without further intervention.

It is recognised that a formal definition of complaint as well as a formal complaint resolution process may need to be adopted in order for a consistent approach being taken to the collection and reporting of this data. In addition, WNR may be required to develop a formal complaint tracking process to enable the Regulator to be confident in the accuracy of the information it is provided.

⁶² The term “substantiated” refers to a finding that the complaint has been sustained by the complainant through the dispute resolution process.

In addition, it would also be appropriate for the Regulator to be able to require a breakdown of this information by source of dispute (eg complaints for cancellation of train paths as opposed to temporary variations and so on).

Reporting framework

It is recommended that the following framework be adopted in respect of these KPIs:

- reporting be undertaken quarterly;
- reporting be undertaken on a regional basis for the WNR; and
- customers be separated according to whether they are related entities or not of the railway owner with reporting also for the network as a whole.

4.5.5 KPI regime for public reporting

It is recommended that the KPIs for the Train Paths Policy could be limited to:

- the number of breaches of the Train Paths Policy (including for temporary variations, permanent variations and reallocation of train paths) that were substantiated (which may be substantiated through a dispute resolution process).

In order to provide relevant information to enable interested parties to interpret this KPI, it is suggested that the following background information also be reported:

- number of complaints⁶³ of alleged breaches of the Train Paths Policy that are being assessed; and
- number of complaints of alleged breaches of the Train Paths Policy that had been assessed and were not substantiated.

The reporting framework should follow the format set out in Reporting to the Regulator.

⁶³ Please note change in wording from draft report - "disputes" has been replaced with "complaints".

4.6 Train Management Guidelines

4.6.1 Background and legislative requirements

It is critical that operators and prospective operators have confidence in the non-discriminatory application of the real time management of train services on the network. Section 43 of the Code requires the railway manager to develop the TMG to apply to the real time management of train services and to have those guidelines approved by the Regulator.

4.6.2 Key aspects of the TMG

In its draft determination on WNR's draft TMG, the Regulator identified, among others, the following areas as having received some concern from stakeholders:

- application of the TMG for operators outside the regime;
- terms and definitions used and relationship of the WNR Network Rules, i.e the operating rules relating to WNR's safeworking systems, which are needed to meet the requirements of the Rail Safety Act 1998;
- broad powers of WNR in the management of trains due to the inclusion of "the exercise of reasonable care";
- lack of a completed train decision matrix within the TMG;
- need for a long range possession management process; and
- key performance indicators and frequency at which the TMG will be reviewed.

Ultimately, train control decisions that unjustifiably dispute train operations have the potential to result in claims of hindering access against railway owners.

4.6.3 Results of consultation

WNR suggested that the reporting should be limited to the number of disputes in relation to train control decisions. It is acknowledged that this is the key issue for the reporting of compliance with the TMG. However, it is recommended that more detailed information should be provided to the Regulator to enable assessment of compliance with the regime.

4.6.4 Reporting to the Regulator

Identification of KPIs

The effectiveness of the application of the TMG can be measured by looking at the frequency of complaints made by access seekers and operators against the railway owner leading to the following KPIs:

- the number of complaints in relation to train control decisions;
- the number of breaches of the TMG that were substantiated⁶⁴ (which may be through a dispute resolution process);
- number of complaints of alleged breaches of the TMG that are being assessed;
- number of complaints of alleged breaches of the TMG that have been assessed and were not substantiated; and
- the number of complaints that are resolved to the parties' satisfaction without further intervention.

Again, the issues mentioned in relation to the definition of complaint and the need for a formal complaint registration and tracking process arise in this context. In addition, WNR train controllers should log all decisions made contrary to the matrix and these should be available for the Regulator (or a person acting on behalf of the Regulator) to inspect.

The results of any spot audits (if undertaken) should also be reported.

Another dimension of the operation of the TMG relates to the on-time performance of the network. However, delays can be occasioned by several factors other than train control decisions, including, for example, track quality. Accordingly, reliability related KPIs are considered separately in the service quality section below.

⁶⁴ The term "substantiated" refers to a finding that the complaint has been sustained by the complainant through the dispute resolution process.

Reporting framework

It is recommended that the following framework be adopted in respect of these KPIs:

- reporting be undertaken quarterly;
- geographic segregation be undertaken on a regional basis; and
- customers be separated according to whether or not they are related entities of the railway owner.

4.6.5 KPI regime for public reporting

It is recommended that the KPIs for the TMG be limited to:

- the number of breaches of the TMG that were substantiated (which may be substantiated through a dispute resolution process).

In order to provide relevant information to enable interested parties to interpret this KPI, it is suggested that the following background information also be reported:

- number of complaints of alleged breaches of the TMG that are being assessed; and
- number of complaints of alleged breaches of the TMG that have been assessed and were not substantiated.

The reporting framework should follow the format set out in Reporting to the Regulator.

4.7 Costing principles

4.7.1 Background and legislative requirements

The primary functions of the costing principles under the regime are to:

- keep and present the railway owner's accounts and financial records; and

- determine costs for the floor and ceiling price tests⁶⁵.

Under Section 46 of the Code, the railway owner is required to obtain the Regulator's approval for the costing principles it is proposing to implement.

4.7.2 Key aspects of the Costing Principles

In its final determination on WNR's draft costing principles, the Regulator identified the following areas as having received the greatest concern from stakeholders:

- general principles;
- operating costs, including the definition of the different cost categories and the application of efficient costs;
- asset valuation issues, including the application of the GRV methodology as well as other costs to be included as part of the valuation; and
- issues associated with the quantification of total costs.

4.7.3 Results of consultation

WNR submitted that cost data did not need to be captured by the Regulator under the KPI regime as the procedure for the Regulator gaining information as to WNR's costs was provided by the Code. In contrast, ARTC suggested that unit costs and the levels of outsourcing should be published. It is suggested that costing information need not form part of the public KPI regime, at least initially. However, the information relating to track quality, including information on speed restrictions and track availability should form part of the KPI regime for public reporting. In addition, it is recommended that more detailed information should be provided to the Regulator to enable assessment of compliance with the regime.

⁶⁵ ORAR, (2002), "Costing Principles to Apply to the WestNet Rail – Final Determination of the Western Australian Independent Access Regulator", page 2.

4.7.4 Reporting to the Regulator

Identification of KPIs

In general terms, therefore KPIs in relation to compliance with the costing principles fall broadly into the following categories:⁶⁶

- information relating to the assessment and verification of floor and ceiling prices;
- efficiency related information; and
- information to inform decisions about track quality and asset valuation.

Assessment and verification of floor and ceiling prices

Under Schedule 4 of the Code, the Regulator is to make determinations about the level of floor and ceiling prices for a route section. It is therefore important that information is continuously provided to all parties to inform the accuracy and appropriateness of these determinations.

One of the challenges presented by the regime is the assumption of the “new” network for regulatory purposes. Effectively, this assumption requires a distinction be made between actual expenditure on the network (assuming it is efficient) and the levels of expenditure appropriate to “new” infrastructure. Only the latter is relevant for the purpose of price ceilings and floors, but only the former can be actually observed. Accordingly, it is recommended that KPIs comprise a mixture of both actual and assumed values for expenditure with the following information being published annually in respect of each of the regions:

⁶⁶ Section 34 requires a railway owner to maintain separate accounts for its access related functions. The requirements in relation to the integrity of this separation will be established through a separate auditing process and hence will not be considered in the context of the KPI regime (except in relation to failure to produce statements and the outcomes of the audit process).

- actual infrastructure operating costs per train kilometre (TKM) and per gross tonne kilometre (GTK), for each route section identified by the Regulator and for each region;
- actual maintenance unit costs for infrastructure maintenance (\$/GTK) for each route section identified by the Regulator and for each region;
- actual maintenance expenditure for each route section identified by the Regulator, and for each region;
- actual routine and cyclical maintenance per kilometre for each route section identified by the Regulator and for each region;
- actual expenditure on MPM per kilometre for each route section identified by the Regulator and for each region; and
- specification of savings attributable to assumed condition relative to actual expenditure for each route section identified by the Regulator and for each region.

In the Regulator's *Final Determination on the Costing Principles to Apply to WNR* (September 2002), the Regulator indicated the following operating cost drivers should be included⁶⁷:

- the frequency of services for passenger and other traffic;
- traffic density;
- average speed for freight and passenger services;
- actual average axle loads relative to maximum axle load;
- climate related factors such as the number of days of extreme heat and rainfall; and
- the safety, quality and reliability requirements of customers and other stakeholders.

These background factors ought to be determined on a route section basis for those route sections nominated by the Regulator as being of particular significance.

⁶⁷ ORAR, (2002), "Costing Principles to Apply to the WestNet Rail - Final Determination of the Western Australian Independent Access Regulator", page 14.

Efficiency

Efficiency for a railway infrastructure business is difficult to monitor precisely on an input or output basis due to the multi-dimensional nature of the expenditure over time. However, one indicator can be provided by the extent to which the maintenance work is competitively outsourced. Whilst this is not an absolute measure of efficiency and it is possible that the maintenance task may be inefficiently conducted despite outsourcing, the propensity for outsourcing suggests a willingness to expose this major area of expenditure to competitive forces. Accordingly, the proposed KPI in respect of efficiency is the percentage of the maintenance work that is competitively outsourced.

*Track quality*⁶⁸

Fundamental to the access regime is the inclusion of the gross replacement methodology for asset valuation purposes. However, clause 13 of Schedule 4 makes it clear that the GRV approach is only to be applied to track that is of a suitable standard. Accordingly, the development of KPIs for track quality assumes particular significance in the regime. Suggested KPIs are as follows:

- track quality indices;
- the impact of speed restrictions; and
- track availability measures.

⁶⁸ The *Rail Freight System Act 2000* defines the functions of the Corridor Minister, which could extend to monitoring the railway infrastructure standards maintained by WNR. If KPIs or similar measures are established by the Corridor Minister under the *Rail Freight System Act 2000*, it is recommended that the Regulator consider their application under this regime to the extent they present a viable substitute for the KPIs contained in this report (ie to the extent such measures capture the essence of the KPIs suggested in this report).

Track quality indices

One measure of track condition is a track quality index (TQI).⁶⁹ For example, both the ARTC and QR are required to provide a quarterly report on a TQI to be averaged over each segment.

The issues associated with the production of the TQI are complex. On balance, it is considered that for heavily trafficked routes that there is sufficient benefit in the publication of such an index. Initially it is recommended that WNR produce a TQI for the main East-West and South-West railway lines on an annual basis.

Impact of speed and axle load restrictions

In addition to the TQI, it is proposed that the Regulator require the following KPIs on a quarterly basis for of the main East-West and South West railway lines:

- percentage of each region of the network subject to temporary speed restrictions;
- percentage of each region of the network subject to permanent speed restrictions;
- the average impact on transit time of speed restrictions over the period as a percentage of expected transit time with no speed restrictions; and
- the total and average number of Train Services in a region affected by speed restrictions.

In addition, any instances of axle load restrictions being imposed on railway operators should also be detailed.

⁶⁹ TQI is a statistical measure based on the standard deviation of variations from perfect railway track. It is the sum of deviations from perfect geometry of various parameters including the vertical alignment (top), line (horizontal alignment), twist (relative vertical position of each rail) and the gauge (distance between the rails). Some of the parameters are relevant for each rail making a total of 6 parameters.

Track availability

The Master Train Plan (MTP) will allude to the requirement for track to be available for services for certain periods throughout the day and year. Periods will occur where for maintenance reasons or other seasonal reasons the track will not be made available for train services. Track availability may also be affected by above rail operators.

Therefore it is necessary for the MTP to explicitly indicate when the track will not be expected to be open. It is proposed that the Regulator require the following performance indicators for each of the route sections being reported quarterly:

- periods on the MTP where the track will not be available to train services where the MTP indicates it should be available;
- number and percentage of Train Services scheduled in the master train plan cancelled due to a reason that can be attributable directly to the railway owner;
- number and percentage of Train Services scheduled in the master train plan cancelled due to a reason that can be attributable directly to an operator;
- number and percentage of Train Services scheduled in the master train plan cancelled due to a reason that cannot be clearly assigned as directly attributable to an operator or to the railway owner; and
- overall percentage of time of actual unavailability to actual availability.

4.7.5 KPI regime for public reporting

It is recommended that the KPIs for assessing the effectiveness of the Costing Principles be, as a minimum, limited to:

- periods on the MTP where the track will not be available to train services where the MTP indicates it should be available;
- number and percentage of Train Services scheduled in the master train plan cancelled due to a reason that can be attributable directly to the railway owner;
- number and percentage of Train Services scheduled in the master train plan cancelled due to a reason that can be attributable directly to an operator;

- number and percentage of Train Services scheduled in the master train plan cancelled due to a reason that cannot be clearly assigned as directly attributable to an operator or to the railway owner; and
- overall percentage of time of actual unavailability to actual availability.

In addition to the minimum KPIs above, NECG believes that the Regulator should also publish KPIs relating to TQI, speed restrictions and track availability (relating to the number and percentage of cancellation of trains in total and the number and percentage of cancellation of trains attributable to the railway owner). In addition, any instances of axle load restrictions being imposed on railway operators should also be made publicly available.

The reporting framework should follow the format set out in Reporting to the Regulator.

4.8 Over-payment rules

4.8.1 Background and legislative requirements

Under Section 47(1) of the Code, WNR is required to obtain the Regulator's approval where breaches of the ceiling price test occur on the part of that railway owner that could not reasonably be avoided. The Over-payment Rules are designed to provide a mechanism in the regime to:

- calculate the amount by which revenue exceeds the total costs attributable to the route section and infrastructure; and
- reimburse operators where over-recovery occurs.

4.8.2 Key aspects of the over-payment rules

In its final determination, the Regulator set out a detailed process to be applied where breaches of the ceiling occur.

The Regulator's required overpayment rules can be used to effectively identify where KPIs would be able to be applied.

4.8.3 Results of consultation

The issues associated with the Overpayment Rules represent one of the areas of greatest interest to users of the network – since the Overpayment Rules will indicate where WNR is recovering access charges in excess of the ceiling.

4.8.4 Reporting to the Regulator

Identification of KPIs

In establishing appropriate KPIs to measure WNR's compliance with overpayment rules it is recommended that the following be considered:

- WNR be required to produce a confidential spreadsheet listing revenue under each contract and apportioning it to each route section in accordance with the Final Determination and identify any percentage of over-recovery. The spreadsheet should separately record private contributions and government subsidies from access charges;
- the number of contracts negotiated outside the regime and a comparison of non-regime revenue against the total regime revenue;
- the quantum or size of carryover of overpayments each period, ie effectively a measure of annual overpayment balance;
- balance of the Overpayment Account and a statement of compliance with the rules, ie balance, reconciliation and appropriate application of interest;
- number of route sections that breached the ceiling;
- number of route sections that breached the ceiling by more than 10%;
- the number and quantum of overpayments proposed to be returned by WNR by September 30 in the year;
- in the event of there being contracts negotiated outside of the regime, the number and quantum of additional amounts that would have had to be returned by WNR if there were no contracts negotiated outside the regime;

- the number and quantum of overpayments proposed to be returned by WNR in the previous 3 years;
- the number and quantum of overpayments actually returned by WNR in the previous period; and
- the number of breaches of ceiling prices tests by route and reason, that is, avoidable and unavoidable as defined by the Final Determination.

It is recommended that the Regulator consider publishing the results of its audit report on WNR's compliance with the over-payment rules.

Reporting framework

The nature of these KPIs is such that many will be confidential where they could reveal the access charges paid by a user of the network. Consequently, the measures listed in this section should be performed annually for the period to 31 July each year. Public reporting of KPIs in this respect is addressed below.

4.8.5 KPI regime for public reporting

It is recommended that public reporting of KPIs be limited to:

- a listing of route sections for which the ceiling had been breached;
- a statement of compliance; and
- a statement of the balance on the Overpayment Account.

In addition, any audit report on WNR's compliance with the Overpayment Rules should also be published (although the public version of the report may need to be excise commercial in confidence information). This information would be published annually for the period to 31 July each year.

4.9 Service quality

4.9.1 Background

Several aspects of the customer/railway owner interface either do not fall exclusively into any of the above areas or are not specifically addressed in the regulatory framework. These KPIs mainly concern service quality.

4.9.2 Reporting to the Regulator

Identification of KPIs

Accordingly, it is proposed that the following KPIs be considered:

- reliability;
- transit time; and
- billing accuracy.

Reliability

It is recommended that the reporting regime for reporting to the Regulator in relation to reliability be limited to:

- the following identified KPIs would be reported for the main East-West and South West railway lines:

- number and percentages of healthy⁷⁰ Services⁷¹ that exit the Network within tolerance;⁷²
 - number and percentage of unhealthy Services that do not deteriorate further, within tolerance;
 - number and percentages of unhealthy Services that exit the Network within tolerance;
 - number and percentages of Services which are operated in a healthy manner;
 - number and percentage of Services which exit the Network no later than schedule, within tolerance;
 - number and percentage of Services which enter the Network no later than schedule, within tolerance; and
 - number and percentage of Services which exit the Network no later than one hour⁷³ after schedule;
- the following would be reported for the remainder of the network:

⁷⁰ For this purpose, a healthy service is one that has experienced no above rail related delay, within tolerance. Delays are attributed by WNR personnel following advice from relevant sources (including the Operator). The attribution will determine the health or otherwise of the Service.

⁷¹ Services include Scheduled and Conditional Train Paths and seasonal train paths once they have been agreed.

⁷² For this purpose tolerance is to be set under the regime but is suggested to be 15 minutes (unless otherwise agreed). In some cases, an operator may request that a healthy train be delayed so that another of the operator's trains that is unhealthy can gain priority. In such a case, the agreed tolerance for the healthy train would increase accordingly.

⁷³ It may be appropriate to employ shorter or longer timeframes as appropriate depending on corridor transit times.

- number and percentages of healthy⁷⁴ Services⁷⁵ that exit the Network within tolerance;⁷⁶
- number and percentage of unhealthy Services that do not deteriorate further, within tolerance; and
- number and percentages of unhealthy Services that exit the Network within tolerance.

Transit times

For transit times, it is also recommended that histograms be developed indicating the delay as follows for the main East-West and South West railway lines:⁷⁷

- 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 kilometres, for each such delay;⁷⁸

⁷⁴ For this purpose, a healthy service is one that has experienced no above rail related delay, within tolerance. Delays are attributed by WNR personnel following advice from relevant sources (including the Operator). The attribution will determine the health or otherwise of the Service.

⁷⁵ Services include Scheduled and Conditional Train Paths and seasonal train paths once they have been agreed.

⁷⁶ For this purpose tolerance is to be set under the regime but is suggested to be 15 minutes (unless otherwise agreed). In some cases, an operator may request that a healthy train be delayed so that another of the operator's trains that is unhealthy can gain priority. In such a case, the agreed tolerance for the healthy train would increase accordingly.

⁷⁷ It is suggested that the terminology could be replaced by reference to delays for healthy and unhealthy trains.

⁷⁸ An additional measure that may be appropriate for a subset of the below rail services provided by WNR is the average cycle time and deviation from agreed average cycle time due to below rail related reasons. In addition, the Regulator's attention is drawn to the

- for those train services that do not reach their destination within agreed tolerance, on account of an above rail delay, the delay, in minutes, per 100 train kilometres for each such delay; and
- for those train services that do not reach their destination within agreed tolerance, on account of neither an above rail or below rail reason, the delay, in minutes per 100 train kilometres for each such delay.

Billing accuracy

Billing errors have the capacity to materially affect perceptions of service quality and accordingly it is recommended that a KPI be adopted providing information on billing performance, being the number of instances where an operator has made a complaint to WNR about an incorrectly calculated bill, and where WNR's investigation into the complaint identifies that the bill was incorrectly calculated where WNR has required the amount in dispute be paid. In instances where WNR does not require amounts in dispute be paid, there is no reason to report on billing inaccuracies.

Reporting framework

It is recommended that the following framework be adopted in respect of these KPIs:

- reporting be undertaken quarterly;
- geographic segregation be undertaken on a region basis for the WNR network as a whole; and
- customers be separated according to whether or not they are related entities of the railway owner.

ARTC framework which identifies the number of percentage of services within scheduled time, the average and total delay (total minutes and minutes delay per transit hour) attributable to below rail and above rail reasons respectively as well as the average and total delay that could not be attributed to above rail or below rail reasons.

4.9.3 KPI regime for public reporting

It is recommended that at least initially public reporting of KPIs be limited to:

- the following identified KPIs would be reported for the main East-West and South West railway lines:
 - number and percentages of healthy⁷⁹ Services⁸⁰ that exit the Network within tolerance;⁸¹
 - number and percentage of unhealthy Services that do not deteriorate further, within tolerance;
 - number and percentages of unhealthy Services that exit the Network within tolerance;
 - number and percentages of Services which are operated in a healthy manner;
 - number and percentage of Services which exit the Network no later than schedule, within tolerance;
 - number and percentage of Services which enter the Network no later than schedule, within tolerance; and

⁷⁹ For this purpose, a healthy service is one that has experienced no above rail related delay, within tolerance. Delays are attributed by WNR personnel following advice from relevant sources (including the Operator). The attribution will determine the health or otherwise of the Service.

⁸⁰ Services include Scheduled and Conditional Train Paths and seasonal train paths once they have been agreed.

⁸¹ For this purpose tolerance is to be set under the regime but is suggested to be 15 minutes (unless otherwise agreed). In some cases, an operator may request that a healthy train be delayed so that another of the operator's trains that is unhealthy can gain priority. In such a case, the agreed tolerance for the healthy train would increase accordingly.

- number and percentage of Services which exit the Network no later than one hour⁸² after schedule; and
- the following would be reported for the remainder of the network:
 - number and percentages of healthy⁸³ Services⁸⁴ that exit the Network within tolerance;⁸⁵
 - number and percentage of unhealthy Services that do not deteriorate further, within tolerance; and
 - number and percentages of unhealthy Services that exit the Network within tolerance.

In relation to transit times the reporting would be limited to the main East-West and South West railway lines. NECG notes that as yet agreement has not been reached as to whether this information would be attained via histograms.

The reporting framework should follow the framework set out in Reporting to the Regulator.

⁸² In may be appropriate to employ shorter or longer timeframes as appropriate depending on corridor transit times.

⁸³ For this purpose, a healthy service is one that has experienced no above rail related delay, within tolerance. Delays are attributed by WNR personnel following advice from relevant sources (including the Operator). The attribution will determine the health or otherwise of the Service.

⁸⁴ Services include Scheduled and Conditional Train Paths and seasonal train paths once they have been agreed.

⁸⁵ For this purpose tolerance is to be set under the regime but is suggested to be 15 minutes (unless otherwise agreed). In some cases, an operator may request that a healthy train be delayed so that another of the operator's trains that is unhealthy can gain priority. In such a case, the agreed tolerance for the healthy train would increase accordingly.

4.10 Public interest considerations

An important part of the ongoing regulatory arrangements involve ensuring that public interest considerations are adequately incorporated, not only into the Regulator's decision making, but the Regulator's duty to continuously monitor the efficacy of the regime.

The following issues have also been identified as being of particular relevance to the public interest considerations associated with the regime:

- safety; and
- review of the Act and the Code⁸⁶.

4.10.1 Results of consultation

ARTC submitted that reporting should extend to KPIs to assess the regime against the Competition Principles Agreement. However, it is suggested that this is more a matter for the Regulator to report on rather than WNR.

4.10.2 Safety

Regarding access issues and the operation of the network, a general concern relates to safety, particularly given the potential for third party access to affect safety outcomes. The impact of third party access on operational and technical safety of a railway route is a matter that the Regulator is required to take account of by:

- section 20(4)(f) of the Act, which requires the Regulator to take account of the operational and technical requirements necessary for the safe and reliable use of the railway infrastructure; and

⁸⁶ Another public interest criterion concerns compliance with the Competition Principles Agreement (CPA). The access regime is yet to be certified under Part IIIA of the Trade Practices Act 1974. Accordingly, a further consideration in the development of KPIs is to ensure that the regime itself is compliant with the requirements of the Competition Principles Agreement. Whilst this may not impact upon the identity of individual indicators, it does highlight the importance of the integrity of the arrangements as a whole.

- clause 6(4) (vi) of the Competition Principles Agreement, which requires that the dispute resolution body when considering the terms and conditions for access should take into account the operational and technical requirements necessary for the safe and reliable operation of the facility.

NECG considers that the current Australian Standard for rail safety, AS4292 (which is specifically formulated to ensure that Rail Safety Regulators' around Australia have a common base from which to administer their particular Rail Safety legislation) would provide the Regulator with a range of rail safety data that is suitable for interpreting the performance of access providers and users.

The Australian Standard calls for the reporting of incidents (where there has been a lack of control) by the accredited operator⁸⁷ or infrastructure owner⁸⁸ responsible for that operation or territory or where an incident occurred that had the potential to cause serious consequences. In general, all Australian jurisdictions use two classifications of incident. Those of a more serious nature where death or serious injury has occurred, Category A, and those of a less serious nature where lesser consequences have occurred or where the potential existed for more serious consequences, Category B, definitions are provided in the Standard.

The key purpose of reporting incidents under Category A and Category B is to discern whether the incidence of events indicates a trend over time. Whilst no single event and no single type of event would provide definitive proof of a sustainable trend in overall infrastructure performance, the information could be combined with information on speed restrictions and average speed could provide evidence of the trend. As this information is already collected, it provides a ready source of data for performance monitoring of infrastructure.

Safety related KPIs that could indicate the effectiveness of the rail access regime include:

⁸⁷ As defined in the Acts but generally the train operator and/or suppliers.

⁸⁸ As defined but generally the infrastructure manager, that organisation in control of the infrastructure and/or suppliers to the owner (NSW).

- the number of Category A⁸⁹ incidents attributable to infrastructure related causes; and
- the number of Category B incidents attributable to infrastructure related causes.

NECG believes that such measures are likely to be readily available, as they are likely to be reported by the railway owner to the Western Australian Rail Safety Regulator. It is also likely that the safety-related KPIs already reported to the Rail Safety Regulator would be useful for Regulator's purpose.

Providing the Regulator with a copy of the report that the railway owner submits to the Rail Safety Regulator is expected to allow an assessment of the effectiveness of the rail access regime in respect of safety matters. The provision of such information to the Regulator would be for information purposes only. Nevertheless, the Regulator should retain a capacity to implement further KPIs if it becomes clear it is necessary to do so in order to discharge the Regulator's statutory obligations.

4.10.3 KPI regime for public reporting

In relation to the issues cited in section 4.10.2, no KPIs would be reported.

4.10.4 Review of the Act and the Code

Section 12 of the Act requires the Regulator to carry out a review of the Code as soon as practicable after the third anniversary of the commencement of the regime (due on 1 September 2004) and every five years thereafter. The Regulator must prepare a report based on its review and provide it to the Minister that then becomes considered in the context of possible amendments to the Code. Moreover, section 49 of the Code states that it is the function of the Regulator to enquire into and report and make recommendations to the minister on matters relating to the operation of the Act or the Code or the manner in which it may even be amended.

⁸⁹ As defined in AS4292.1 Rail Safety Management

It is difficult to develop KPIs for the regime, when in practice the most important consideration will be the satisfaction of those interacting with the regime that it is producing efficacious outcomes, having regard to the various interests of the parties. Accordingly, in practice, a survey and consultation could provide this information, although such an approach is unlikely to form a KPI on its own.

It is interesting to note however that the regime does adopt some specific roles for the Regulator that do not apply universally elsewhere in Australia, and it is thought that some measure of the outcomes produced by these provisions could warrant KPIs to inform future assessments of the Act. Accordingly, it is recommended that the Regulator consider KPIs in respect of:

- the number of opinions provided under section 21 of the Code on whether or not the price sought by the railway owner in negotiations for an access agreement meets the requirements of clause 13(a) of schedule 4;
- number of determinations by the Regulator under clause 9 of schedule 4;
- number of determinations of costs by the Regulator under clause 10 of schedule 4;
- number of determinations by the Regulator under clause 12 of schedule 4;
- number of agreements reached inside the regime;
- number of agreements reached outside the regime;
- number of agreements reached outside the regime that were commenced inside the regime;
- number of arbitrations commenced; and
- number of arbitrations completed.

It is recommended that these KPIs be reported annually for the network as a whole to the Regulator only (no separate public reporting of KPIs).

5 Timing and transitional issues

For reporting purposes, it is important that the cycle that is established conform to the requirements of the regime. In this regard, the most important cycle is established by the Over-payment Rules. Accordingly, it is recommended that reporting to the annual reporting cycle be completed in mid-August for each year. This allows time for the completion of the relevant sections of the Over-payment rules to be completed as well as providing WNR approximately 6 weeks to complete other reporting arrangements. Quarterly reporting could then follow this cycle (for example, reporting for the September quarter to be completed by mid-November and so on).

There is no doubt that the range of KPIs identified will present some challenges in data collection and analysis. In particular, the availability of the information is likely to be a significant issue during the initial phase of KPI implementation, as systems of recording and consistency of recording will require development. For example, train controllers will be required to measure on-time running or train delays and these parameters will need to be apportioned by cause in the recording system. The consistency of recording this information is a key part in its integrity and it is likely that train controllers will need to be trained in certain methods of recording according to a robust set of procedures.

Accordingly, it is recommended that the implementation of the KPI regime proceed in close consultation with WNR, both in terms of the latitude that may be allowed in respect of the more difficult KPIs as well as the potential for WNR to report on a “dry-run” basis in the initial periods of reporting, at least for identified parameters. Of course, there are likely to be parameters that are not appropriate for any latitude to be allowed. Compliance with reporting in respect of the Over-payment Rules is likely to fall into this later category.

Finally, issues of commercial confidentiality arise in relation to the reporting of KPIs, especially where it discloses issues relevant to above rail operations. In practice, the best way to approach the issue is likely to be to consult with the interested parties to ascertain key sensitivities in the implementation of the arrangements.