RESPONSE TO THE DISCUSSION OF ISSUES

RELATED TO

"COSTING PRINCIPLES TO APPLY TO

WESTNET RAIL"

(Draft determination of the Western Australian Independent Rail Regulator)

August 2002

1.1 General Principles and Preamble

(i) WestNet accepts the view that the Costing Principles need to have an objective and to be linked to their role in achieving the purpose of the Act and the Code.

(ii) WestNet also accepts the need to provide definitions for terms used in the Costing Principles and not defined in the Code or the Act.

1.2 Definitions and Application of Efficient Costs

(i) WestNet accepts that efficient costs are defined in the Code in Clause 4 of Schedule 4 of the Code. In applying the definition appropriate consideration must be given to the regulatory frameworks in which the railway owner, WestNet, has to operate. It will also need to take into account issues such as geographic location, differences in market characteristics for the supply of goods and services, and scope and scale issues when determining what are efficient practices that a railway owner would adopt.

(ii) WestNet agrees that efficient costs are the costs that should be used for calculating the costs for the floor and the ceiling between which negotiations for access prices will occur.

(iii) In determining efficient costs for the purposes of the floor and ceiling calculation WestNet's actual costs for the calculation of the Gross Replacement Value (GRV) and associated maintenance are not necessarily relevant given the GRV is based on Modern Equivalent Assets (MEA) and maintenance costs are also based on this premise. Implicitly this means that these will need to be modelled costs. In the case of modelled costs tests for efficiency can be based on physical assumptions in the model and unit rates.

However, some of WestNet's actual costs for operations and overheads may be relevant because they are not influenced by the infrastructure but are the reasonable costs of operating the business. In this case benchmarking of actual procedures and cost is a relevant strategy for testing efficiency of these costs.

(iv) The range of tests available for efficiency include;

- Benchmarking which can be used where it is available and comparable. Benchmarking can also be used for some operating and overhead costs.
- If the asset is MEA then unit costs from comparable tenders can be used. This will require that the population of the asset be used together with appropriate adjustments for scale and scope.
- If the maintenance programs are based on accepted industry standards for maintenance which describe the scope and frequency of the activity then this may be considered to be efficient.

- Actual costs can be used where the consumption and scope are efficient (eg. Train controller's salaries if the number of controllers and their range of duties are efficient by benchmarking).
- Actual costs can also be used where the costs;
    - come from a competitive market such as insurance
    - are regulatory costs (such as the cost of Rail Safety Accreditation)

The methodology should be selected as appropriate based on whether the costs are modelled or actual.

(v) Benchmarking is seen as an attractive way to demonstrate efficiency based on the simple premise that it is a method of comparing one business or process to another.

In practice benchmarking is useful only when data is readily available and comparable. It is unlikely that other access providers will provide data readily to WestNet . The preferred approach may be to have the Regulator to seek the information.

Benchmarking on a wide scale is also a time consuming and inherently difficult to undertake especially given the difficulty of ensuring that all the assumptions and conditions are comparable.

WestNet therefore believes that benchmarking should be concentrated on a small number of high cost processes.

(vi) The Regulator has suggested that where parts of the network are not MEA the Regulator will benchmark their costs against other comparable assets.

WestNet has constructed its costing models on equivalent or comparable assets where it is not considered that they are MEA and has costed them accordingly.

For example, on lightly trafficked grain lines with limited formation WestNet has costed this accordingly.

On the same lines WestNet has assumed the rail cost to be the nearest rail size available in the market.

WestNet's costing models define, for each route section the nature of the asset accepted for each major component of the infrastructure.

This approach is based on the application of "MEA if appropriate" test in the Code.

(vii) In part 4.2.1 (iv) of the discussion paper the Regulators independent railway engineer has suggested that there are a number of factors that could be used to determine if WestNet is operating at efficient costs.

WestNet believes these suggestions are more correctly applied to actual costs and thus are consistent with the tests normally used in DORC regimes, and have limited application in the GRV context.

(viii) WestNet agrees that the asset and the maintenance program should reflect usage and the standards required to meet existing and projected demand. Clearly, environmental factors, such as heat and rainfall, should be included in the consideration of the standard to which the asset is built and maintained.

1.3 Economic Life, Major Periodic Maintenance and Cyclical Maintenance Costs

(i) WestNet accepts the Regulators views that its asset life appears reasonable. Where the Regulator has asked for further clarification this has been included in the Costing Principles.

(ii) WestNet Rail has indicated that it has set Major Periodical Maintenance (MPM) at zero but this statement was based on a different definition of MPM to that proposed by the Regulator.

WestNet rejects the suggestion that MPM as defined is widely used in the rail industry.

WestNet's position on saying that MPM was set to zero was based on its understanding that MPM was in effect an asset renewal program based on maintaining the infrastructure in perpetuity and commonly associated with DORC models.

For example, a timber sleepered track may be maintained by an asset replacement of one third of the sleepers every ten years or so.

Activities included in the Regulators definition of MPM such as rail grinding and resurfacing may also be included in cyclic maintenance in order to achieve safety or operating standards or to achieve the targeted life of the assets.

Therefore WestNet's statement about MPM was based on its understanding of a different definition of MPM as follows;

"MPM is major programmed activities which are, or are associated with, partial asset renewal to maintain functional condition of the infrastructure and which occur at intervals greater than one year".

The exclusion of asset renewal is consistent with the GRV model which assumes the asset is new at commencement and depreciates over time until the asset has reached its nominated economic life.

Consistent with the Code WestNet believes that both routine and cyclical maintenance should be included in the costs that make up the ceiling.

Therefore WestNet defines routine maintenance as;

"Routine Maintenance is regular and ongoing maintenance activities which are required to meet specific levels of defined safety and operational standards and commences from day one of operation and is generally continuous for the life of the operation. There are two major activity classifications;

(a) Routine Inspections –

(i) Track – includes patrolling; track recording using on-track recording technology, ultrasonic testing, site inspections; and structures inspections; and

(ii) Signalling and Communication - includes programmed inspections and systems and equipment testing.

(b) Routine Maintenance – usually undertaken as a result of the inspection process.

(i) Track - includes replacement of failed sleepers or components; cross boring; recanting of curves; geometry corrections and tamping following inspections; turnout maintenance, minor formation repairs; and fastening replacement.

(ii) Signalling and Communications - includes scheduled services, replacements and cleaning etc.

Again consistent with the GRV approach in the Code cyclic maintenance is also included and defined by WestNet as;

"Cyclic Maintenance are tasks that are undertaken at regular intervals (eg. Annually or specific longer intervals) which are necessary to:

(a) achieve the expected asset life; or

(b) to meet operational and safety requirements and appropriate service quality".

Tasks under category (a) could include:

(i) track resurfacing - rail grinding; calculation, ballast top up and cleaning, rail defect removal, and structures maintenance.

(ii) signalling and communications - servicing, component replacement and cleaning.

Tasks under category (b) could include:

(i) track - firebreaks, scrub slashing, drainage, access roads, road seal on level crossings; and

(ii) signalling and communications upgrading of components and change out for detailed servicing.

The definitions are the basis upon which WestNet has incorporated maintenance costs in its costing models.

(iii) WestNet has established maintenance models for each major category of track which describes the scope and level of each maintenance activity. These maintenance costs increase over the life of the assets as there is a greater need for maintenance expenditure (to assure operating standards are met) as the asset ages.

The appropriate treatment of this projected stream of maintenance costs is to determine the expected net present value of costs over the life of the asset, then determine an equivalent annual charge that will return an equivalent net present value of maintenance charges over the life of the asset. This is done by finding the net present value of the projected stream of maintenance costs over the economic life of the asset, then applying the annuity formula.

WestNet notes that there appears to be a misconception about the term "new asset" as it is applied to the GRV methodology and has submitted a separate paper on the differences between the more commonly used DORC method and the GRV. The purpose of the GRV methodology is to determine an equivalent annual payment that would ensure full recovery of the costs over the life of an asset (ie. from when the asset is new) these should be dealt with correctly to account for the timing of cash flows. In contrast, a number of submissions made to the Regulator appear to be of the view that only the maintenance costs in year one are relevant, whereas the capital costs of the new asset should be spread over the life of the asset. This view reflects an inconsistency in the treatment of costs over the life of the asset.

This maintenance regime is based on MEA assets and defined processes dependent on track standards.

Those assumptions are detailed in WestNet's Costing Models which are based on the Costing Principles.

(iv) WestNet notes the Regulators observation as to the wide range of variance in per kilometre estimates of routine and cyclical maintenance and simply suggests that unless the exact assumptions and costs are comparable there will always be the potential for apparent significant gaps.

(v) WestNet has based its maintenance requirements and intervals on the WestNet Code of Practice for Infrastructure Maintenance which mirrors the requirements of the National Code of Practice.

In the case of signalling and communication maintenance testing and inspection levels are based on industry practice and the requirements submitted as part of WestNet's Accreditation as an owner under the Rail Safety Act. This includes the use of remote monitoring.

1.4 Gross Replacement Value for Modern Equivalent Assets

(i) WestNet believes that the methodology for calculating the GRV of the assets should be to use best practice capital cost unit rates per kilometre based on;

- the type of formation, rail, ballast and sleepers used in or considered MEA for that route;
- the capital cost of an efficient signalling and communication system for that route taking into account the density of the traffic and safety factors related to usage;
- the value on a population basis in each route section of other assets such as bridges, culverts and level crossings at agreed rates on a unit basis.

(ii) WestNet will make all its models and assumptions available to the Regulator and accepts the Regulator may want to undertake independent validation of these models.

(iii) WestNet accepts the Regulators definition of MEA.

(iv) WestNet believes that the requirement that the MEA for mainline tracks should be broadly consistent with the Australian Transport Council's standards should only apply to that part of the Network that is part of the Defined Interstate Rail Network (DIRN).

These standards were set by the ATC expressly for the interstate business and did not consider the needs and interest of others, especially bulk users.

The DIRN is the standard gauge line from Kwinana to Kalgoorlie.

For the remainder of the network the existing operating standards will be adopted. These vary between mainlines and also between branch lines dependent on use and customer requirement.

(v) WestNet agrees that undertaking a full optimisation exercise would be an extensive and expensive exercise.

From public submissions received to date only one area of the network has been suggested as not being optimised and for which an exercise will be undertaken.

WestNet believes that examination of optimisation studies should only be undertaken where there is clear evidence that there may be an issue.

(vi) WestNet's costing model for GRV contains, on a route section basis, the assumptions on which the asset valuation is based.

(vii) WestNet has included the cost of formation (including earthworks) in its cost calculations because it is consistent with the adoption of a "greenfields" approach.

(viii) WestNet believes that the assets on which the GRV calculation should be made should include all assets needed to meet the service demands irrespective of whether they are contributed by WestNet or by operators or from a government source.

Whether or not the equivalent annual cost or an annuity for operator or government contributed assets should be credited to the operator and the route section in the calculation if any overpayment should be dependent on the nature of the contribution and the basis on which it was made.

In the case of operator contributed assets it is unlikely that the operator will make that contribution without some discount (including acceptance of pre-paid) access rates. Effectively the owner is purchasing the asset and should be entitled to include it in the GRV calculation. The owner may have taken a risk of recovery from other operators.

In the case of Government contributed assets that increase the ceiling (because the Government wanted to upgrade the track for example) these would be included but a compensating reduction in the ceiling may be appropriate. However, if the Government made contributions in some other way to WestNet to achieve some policy outcome then that should not be automatically included.

For certainty, consideration should only be given to contributions made since the commencement of the regime.

(ix) WestNet supports a GRV review every three years because the costs of an annual review are likely to be high compared to the speed at which technical change will cause the GRV to vary significantly.

1.5 Inclusion of Design, Construction and Project Management Fees

(i) WestNet accepts the Regulators analysis that the costs of 34% for design, construction and project management fees are higher than those approved/agreed for other regimes.

WestNet believes that a higher fee under a GRV regime than a DORC regime is applicable because it is a green fields approach and approvals such as environmental clearances would justify a higher figure.

(ii) Other regulatory outcomes provide some guidance. The rate recommended to IPART for the Hunter Valley was 21%. WestNet believes that in the case of the greenfields approach the costs of surveying; geo-technical surveys and environmental approvals would add 1.5% to that figure. Therefore WestNet proposes to use 22.5%.

1.6 Inclusion of Interest Costs During Construction

(i) WestNet supports the Regulators view that interest on construction costs is a valid inclusion.

(ii) Construction rates will vary depending on scale and scope and also the geography and the impact of other infrastructure on the route. WestNet accepts the proposed construction rate of 1 kilometre per day.

In the case of the Alice Springs Darwin railway because of its length (1420km) it is being constructed on two faces and has little, if any, other infrastructure or land uses to deal with.

(iii) WestNet will apply the WACC to the cash flows in calculating these costs.

1.7 Annuity Formula for Calculation of Capital Costs

(iii) The calculation of the annuity for the purposes of the calculation of ceiling is complicated by the fact that the revenue stream is received on a monthly basis whereas the Code stipulates that the ceiling annuity payment be calculated on a yearly time step. If the annuity calculation is based on end of year revenue stream, there will be an overcharging of capital; whereas it if is based at the start of the period, as set out in the Draft Determination, WestNet will under-recover its capital charge entitlements.

(iv) The correct method of calculating the annuity is to base it on a monthly time step, where the monthly period interest rate is based upon the formula $((1 + WACC)^{1/12} - 1)$. The resulting monthly charge offers a discount to clients for payments that occur before the end of the year; and when the interest earned by WestNet on this revenue stream is accounted for, the total recovery is equivalent to the figure that would be calculated if payments were annually in arrears.

(v) In the Draft Determination, the Regulator states that the annuity payment is to be calculated based on a beginning of year payment. WestNet has calculated the extent of under-recovery associated with calculating the annuity on the basis of a beginning of year payment, and has determined that it is approximately 4% of the GRV, based on the current WACC.

It is suggested in the Draft Determination that WestNet should inflate the GRV calculation by half the CPI, to account for potential under-recovery in capital associated with the up-front annuity calculation. The average CPI over the last 5 years is less than 3%.

WestNet argues that there is no economic justification for using a CPI inflator on what is essentially an opportunity cost of capital issue. We propose that the interest foregone on the beginning of period annuity calculation be compensated by adjusting the start of cycle GRV by half the annual WACC.

This will result in a payment for capital to WestNet that is close to the payment that would be received if monthly calculation of the annuity charge were permitted.

(vi) WestNet also proposes to add a working capital charge to the operating cost calculation, that accounts for the credit terms offered to clients. WestNet incurs annual operating, overheads and maintenance costs throughout the year but offers clients credit terms of 7 weeks. The working capital charge will be based on the cost of supplying those credit terms, which is the cost of supplying the overheads, maintenance and operating costs for the 7 week period, multiplied by WestNet's overdraft rate.

1.8 WACC

(i) WestNet notes the Regulators determination of the WACC to apply from 1 July 2002 is 7.8% on real pre-tax basis and will use that in its calculations.

1.9 Allocation of Costs for determining the Floor and Ceiling Cost

(i) The principle of the floor test is that the minimum charge to the client should be the cost that would be avoided if the service were not provided. In most cases, the avoidable cost includes the costs of direct overheads, operating and maintenance. However, where it is necessary to make capital expenditure to provide the service, it is appropriate to include the cost of this capital in the floor charge. These circumstances will usually be limited to situations where capacity has to be expanded to meet the customers requirements. In that case the life of the additional assets may have a life limited to the life of the transport proposal for the calculation of the floor.

1.10 Escalation of Ceiling Costs

(i) WestNet supports full CPI indexation of the ceiling.

(ii) There are two justifications for an X factor in CPI indexation. The X factor provides an incentive for ;

(a) improvement in the technical efficiency of current practices; and

(b) for adoption of technical change.

In many regulatory regimes, the X factor is introduced as an incentive for former public monopolies to adopt technically efficient practices, that is, move from inefficient to most efficient practice based on current technology. This concept applies where actual costs are the basis for regulation. It is not relevant to compare the X factor in other Australian rail access regimes when determining an X factor for WA, because the WA Code is less reliant on actual costs in the determination of ceiling costs.

(iii) WestNet agrees that an X factor that reflects the rate of technical change is a relevant deduction from CPI inflation in the case of the WA regime, since technical change could reduce the cost of supplying the MEA. However, it

is noted that the rate of technical change in the supply of rail infrastructure is very slow, and is likely to be zero between the 3 year regulatory reset period.

Thus, WestNet argues that MEA should be reviewed, in terms of definition of population data and unit rates in the costing model, whenever ceiling costs are reset. This would provide sufficient incentive for adoption of technical innovation, and there would be no need for an X factor between the reset period.

1.11 Defining Minimum Service Quality for Floor and Ceiling Costs

(i) WestNet accepts as a general principle that operators paying for access are entitled to seek levels of service are commensurate with the price paid for that access.

The levy mechanism for ensuring this rests within the access agreement where the capacity exists for the parties to negotiate, within the floor and ceiling limits, prices which reflect the required performance standards agreed to by the parties.

This will clearly be measured between the operators and WestNet Rail and because of the confidential nature of some of this information may only be published in aggregated form.

(ii) The Regulator has powers under the Act and Code to request a wide variety of information. In measuring the effectiveness of the Costing Principles there are two issues.

- The first is service quality relative to the GRV. WestNet notes that operators, under their access agreements, will be in the best position to monitor this but accepts that the Regulator may intervene if the standards are not being met for prolonged periods.
- With respect to specifically addressing the effectiveness of the Costing Principles WestNet believes that a number of the proposed measures in the draft determination appear irrelevant.

  For example, the total operating cost per GTK has little or no relevance to the Costing Principles.

  Nor is it apparent how the number of agreements ‘inside’ or ‘outside’ the Code are influenced by the Costing Principles.

  The reference to the number of ceiling price disputes being referred to the Regulator is also problematical.

  Ceiling prices will have either been determined by the Regulator under Clause 9 of Schedule 4 or will be determined under Clause 10 of Schedule.

  It is therefore difficult to determine how a dispute could arise.

WestNet believes that the real issue is whether or not the Costing Principles have been complied with in WestNet's modelling and therefore suggests that compliance is best monitored by an independent audit.