8 DEPRECIATION

8.1 Introduction

The building-block approach for determining Transend's regulated revenue includes an allowance for depreciation. In the regulatory framework administered by the Commission, depreciation of an asset recognises the need to recoup its capital cost over its useful life. The regulatory depreciation allowance therefore provides the return of capital invested in the regulated business.

This chapter:

- summarises current regulatory practice for depreciation.
- presents Transend's approach to depreciation for the purposes of this revenue submission.

8.2 Current regulatory practice

The Commission's draft *Statement of Regulatory Principles* (draft *Regulatory Principles*) proposes that the standard straight-line accounting approach to depreciation may not be the best approach for regulatory purposes. In the Commission's view, the principal difficulty with the straight-line approach is that it may produce prices that are not consistent with prices in a competitive market. In particular, the Commission commented[1]:

> Given the deficiencies of traditional approaches, the Commission believes that there are arguments to reconsider the issue of depreciation. This requires an economic assessment of depreciation quite different in focus from the simpler approaches proposed by accountants and the need to develop a profile of depreciation that is expected in a competitive market.
>
> In competitive or contestable markets prices tend to be relatively stable in a static demand environment and do not depend on the vintage of the assets used to supply the service or product (e.g. airline tickets). Volatility of tariffs is not only undesirable within the life of the asset but also between different generations of assets.

On this basis, the Commission suggested adopting a 'competition depreciation' approach, which means that prices are more stable over time, and will not vary according to the average age of the asset base. In considering the benefits of smoothing prices over time the Commission referred[2] particularly to Transend's future requirements for capital expenditure:

> It may be suggested that the competition depreciation approach resolves an unimportant issue because most service providers have a portfolio of assets of different ages/vintages and replacement schedules. This is true, but only if there are compensating errors which make the issue less obvious. There are cases where price shocks associated with changes in the depreciation profile are important and have to be dealt with. These cases include single purpose assets and the range of businesses currently being privatised, which will be treated for regulatory purposes as new operations. Of more immediacy the Commission is aware that Tasmania, NSW and Queensland are currently going though very substantial augmentations of their transmission networks, where price shock concerns may be become major issues.

Despite these concerns, however, the Commission has not yet adopted competition depreciation in a revenue-cap decision. For example, in Powerlink's revenue-cap decision, the Commission commented[3]:

[1] *ACCC, draft* Statement of Regulatory Principles*, May 1999, p. 59*

[2] *ACCC, draft* Statement of Regulatory Principles*, May 1999, p. 29*

[3] *ACCC,* Queensland Transmission Network Revenue Cap*: Decision, November 2001, p. 5*

> Also included in the *Regulatory Principles* is the proposal for the return of capital to be determined through a competitive depreciation approach that links the long-term depreciation profile of the assets to a measure of the rate of technological change. The Commission has yet to use this approach in the regulation of electricity networks. In this decision, the Commission has relied on straight-line depreciation to calculate Powerlink's return of capital.

The draft *Regulatory Principles* also set out arrangements to accelerate depreciation if there is a risk of asset-stranding. In theory, this allows TNSPs to mitigate the financial loss from stranded assets. It is noted that this regulatory approach to accelerated depreciation also seeks to reflect competitive market pricing. In particular, businesses in a competitive market will seek a more rapid return of capital if there is an overt threat of asset-stranding.

The draft *Regulatory Principles* make it clear that TNSPs would be able to present a case for accelerated deprecation only at the start of each regulatory period.[4] However, this one-off opportunity creates an issue for TNSPs in forecasting the potential redundancy of assets. This issue was acknowledged in the recent Powerlink revenue cap decision[5]:

> The Commission acknowledges that there is sufficient uncertainty in the Queensland market, making it difficult for Powerlink to identify with a high degree of precision which assets will face stranding over the regulatory period. In light of the present uncertainty, at the regulatory reset, the Commission will conduct an assessment of those assets Powerlink has identified, to determine whether elements of its network were stranded during this current regulatory period. Where the Commission identifies that an asset (already identified by Powerlink) has been stranded, it will provide an additional depreciation allowance to compensate for lost revenues. It will therefore, not adjust the depreciation profile during this regulatory period.

SPI PowerNet's revenue application referred[6] to the Commission's approach on this issue:

> Asset stranding risk is not allowed for, either as a self-insurance cost or via accelerated depreciation, on the assumption that the ACCC will allow SPI PowerNet to make adjustments to its depreciation allowance at the 2008 reset in the event that a total or partial asset stranding occurs over the course of the 2003 to 2007/08 regulatory period – this assumption is based on the position that the ACCC took in the recent Powerlink revenue cap decision.

Similarly, ElectraNet argued that, to account for any asset-stranding in the intervening period, a retrospective increase in depreciation should be allowed at the next regulatory review:

> The present requirement that TNSPs forecast the reduction in service potential of assets is impractical given the impossibility of being able to predict factors that are outside of the knowledge and control of ElectraNet SA. Due to the uncertainty involved and arbitrariness of any estimation method, ElectraNet SA proposes that an allowance be included in the revenue decision for the next regulatory period to account for any ensuing reduction in asset value resulting from asset stranding or MEAV optimisations.

In summary, current regulatory practice for depreciation continues to develop. To some extent it has moved away from the approach outlined in the draft *Regulatory Principles*. Transend's approach to depreciation is described in Section 8.3, below.

[4] *ACCC, draft* Statement of Regulatory Principles*, May 1999, p. 29*

[5] *ACCC,* Queensland Transmission Network Revenue Cap*:* Decision*, November 2001, p. 26*

[6] *SPI PowerNet,* Revenue Cap Application*, p. 2*

8.3 Transend's approach to depreciation

Transend concurs with the Commission's views on price shocks, and on the potential benefit of managing these shocks by careful profiling of depreciation charges. Managing price shocks smooths price signals to customers and therefore benefits them economically. Transend therefore accepts as sound the principles of competition depreciation.

However, Transend notes that competition depreciation has not yet been applied in any Commission determination on electricity transmission revenue. For the purposes of this submission Transend has therefore adopted straight-line depreciation, adjusted for inflation effects to calculate 'economic depreciation'. Nevertheless, Transend would be willing to discuss this issue further with the Commission, especially in the light of any feedback from interested parties.

SPI PowerNet and ElectraNet, in their recent revenue applications, expressed their views on accelerating depreciation to manage stranded-asset risk. Transend agrees with these views. In particular, it is difficult to predict precisely which assets, if any, will be stranded in the forthcoming regulatory period. Therefore, it is necessary to adopt a more pragmatic approach for allowing accelerated depreciation than that outlined in the draft *Regulatory Principles*.

Transend has identified a number of assets as being potentially subject to stranding during the forthcoming regulatory period. Due to the sensitivity of this information, Transend will provide the Commission with the confidential list of assets potentially subject to stranding.

Transend expects that if any of these assets become stranded during the forthcoming regulatory period, the Commission will provide for an additional depreciation allowance (adjusted to preserve its present value) in the next regulatory period commencing 1 July 2009. The effect of this additional depreciation allowance would be to recover the cost of the stranded asset.

In addition, Transend is concerned that the DORC asset valuation process described in Chapter 4 of this submission may itself strand prudent capital investment. Transend's view is that accelerated depreciation is a reasonable mechanism for recovering any such stranded asset costs in the next regulatory period. This approach is in line with that suggested by SPI PowerNet and ElectraNet in their revenue applications. Similarly, this approach would need to recover the costs of the stranded assets, rather than just depreciate more rapidly the residual value of the assets.

The Commission, in its post-tax nominal framework, allows for 'economic depreciation'. It does this by adding the (negative) straight-line depreciation to the (positive) annual inflation effect on the asset base. Economic depreciation is applied in the Commission's building block to determine Transend's total revenue.

The calculation of the applicable straight-line depreciation component is based on the commissioning date and the economic life of each asset in the asset base. These economic lives are consistent with asset lives used in the Minister's asset valuation.

The straight-line and economic depreciation amounts are shown in Table 8.1 below.

Table 8.1: Summary of Transend's depreciation allowance January 2004 to 2008-09 (in nominal $m)

	Jan to Jun 2004	2004–05	2005–06	2006–07	2007–08	2008–09
Straight-line depreciation	13.9	31.1	34.4	37.0	38.4	39.4
Economic depreciation	8.1	19.8	22.5	24.9	25.8	27.1