

## Appendix D: Tilt adjustments

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- 1.1 Optus submits there a number of modelling parameters that should be applied across each of the scenarios proposed by Optus. Appendix D discusses in detail the tilt parameters that should be taken into account in addition to each of the scenarios being proposed by Optus.
- 1.2 As indicated within the tilted annuity worksheets in the Analysys model, there are two key tilt calculations that need to be taken into account – the price trend, and the tilted annuity.

### Price trend

- 1.3 Price tilts are used by the model in the tilted annuity calculation of annualised capital costs, in which the tilt is intended to represent the expected annual price change for each asset type.
- 1.4 In addition to the comments made by Network strategies (refer to Appendix B), Optus considers that the price trend for fibre cable is too negative and that the forward-looking price trend should be -5 per cent.
- 1.5 Optus has reviewed the vendor prices it receives for 6 different types of fibre cable over the last 9 years.<sup>1</sup> The fibre costs are actual vendor prices obtained from two suppliers, **CiC**.
- 1.6 Optus has listed the prices of each type of fibre in the tables below. It is clear from the table that the price of all types of fibre cable move in a similar direction and Optus therefore considers that the average trend is a suitable estimator for the overall price trend.
- 1.7 **CiC** However, the price has stabilised again and it appears that the price of fibre cable appears to have ‘bottomed out’ with the market reaching an equilibrium position. Fibre cable prices are now declining consistently at around 5 per cent per year.
- 1.8 This market is behaving in this way because the volume of fibre products being manufactured globally is tending to increase. The demand for fibre is strong as more and more operators around the world seek to replace their legacy copper networks with fibre based architectures.
- 1.9 Overall Optus considers that the price of fibre cable in the next few years will fall by between 3 and 5 per cent, using a trend of -5 per cent is therefore likely to be a reasonable estimator.

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<sup>1</sup> The 6 classes of fibre cable were - internal, external (core), specific (rodent proof), specific (direct buried, LSZH and ADSS) cable.

**CiC**

1.10 Optus considers that these vendors prices (and resulting trends) are reliable because:

- Optus is a significant purchaser of telecommunications-grade fibre cable, and
- Optus' network expenditure is subject to stringent procurement procedures which ensure that it obtains the best possible price and commercial conditions for every purchase of goods or services.

- 1.11 Optus presently owns and operates over 10,000 kilometres of fibre cable as part of its various telecommunications networks in Australia and is therefore a significant purchaser of fibre cable and a major player in the market.<sup>2</sup> Therefore, the type of vendor prices presently available to Optus would at least be available to a hypothetical new entrant building a new fixed line network.<sup>3</sup>
- 1.12 Optus' procurement processes are extremely robust and thorough and that network costs are incurred with a high degree of efficiency. Optus' network expenditure is subject to stringent procurement procedures which ensure that it obtains the best possible price and commercial conditions for every purchase of goods or services.
- 1.13 As supporting evidence Optus refers to its current Procurement Policy and Procedure Documentation.<sup>4</sup> This document illustrates that Optus has implemented clear procurement guidelines which must be followed for all purchases. It describes the key procurement procedures that are followed at Optus, including the Request for Tender process and regulations regarding formal and informal Quotations.<sup>5</sup>
- 1.14 Furthermore, Optus has established a 'Procurement Ethics Policy' that ensures that the selection of suppliers is made on the basis of objective criteria.<sup>6</sup> This policy includes strict guidelines that all Optus staff who engage with suppliers must adhere to.

### **Depreciation (tilted annuity)**

- 1.15 Optus has consistently supported the use of a titled tilted annuity formulation for determining annual capital costs, regardless of the cost model that is applied.<sup>7</sup>
- 1.16 Using a tilt in the annuity formulation allows one to replicate the cost recovery conditions that would be faced by a firm in a competitive market. The tilt achieves this by as it is set with reference to the expected price trends of assets that are being valued. The price trends themselves are influenced by a number of market and economic expectations and therefore provide a reasonable forecast of the depreciation profile that a hypothetical new entrant would actually face. Factors influencing price trends include:
- the level of competition in the telecommunications market;

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<sup>2</sup> This estimate includes fibre cable used by Optus' mobile, fixed-line and HFC networks.

<sup>3</sup> Given the amount of fibre required by a new entrant to deploy a completely new CAN it is likely that they would receive significantly lower prices than those currently available to Optus or any other Australian operator.

<sup>4</sup> CiC

<sup>5</sup> CiC

<sup>6</sup> CiC

<sup>7</sup> Optus, *Submission on Telstra's access undertaking for the unconditioned local loop service: response to discussion paper – Appendix A*, August 2008

- supply and demand of the asset (e.g. supply of raw materials);
- expectations of new technologies, and
- changes in the replacement cost of relevant assets.

1.17 It is important to note that an annuity with a tilt provides Telstra with the same net present value (NPV) for the level of compensation it receives over time as compared to a flat annuity, however the tilt means that the profile of that compensation will rise/fall over the life of the asset (depending on the degree of tilt). Indeed the assurance that the level of compensation does not change regardless of the tilt applied is the competitive market condition.

1.18 Further, although it is assumed that there will be a constant level of tilt for the relevant period this does not mean that the annuity need follow a single tilt over the life of the asset, as the actual return path can be flexible. As the value of the asset rises or falls with the trend in asset values so will the depreciation values rise and fall.

1.19 Moreover, as the Commission has highlighted previously, replacement costs of assets may vary from year to year. In a recent proceeding before the ACT, Senior Counsel acting for the Commission quoted the following comments from the ACCC's Outline of Submissions statement:

*“To achieve fair compensation under a TSLRIC model where revaluation periodically occurs - so that is recognising that in the regulatory context you could be doing resets every three years - an annuity needs to increase at the expected rate of change of new asset values”*<sup>8</sup>

1.20 Issues of under and/or over compensation might only be posited to arise if forecast future prices (as derived by the price trends) are not equal to the actual future prices. It is correct that future price trends (and technological advancements) are often difficult to forecast precisely. Inherent in the traditional approach adopted by the Commission is the potential for substantial discontinuity in access prices as expectations change, but this is not inconsistent with what might be expected in a competitive market.

1.21 Indeed investors would not be concerned by this forecasting error potential if prices are set based on the 'best' and unbiased estimate of future input price trends and technological development. This is because any residual uncertainty is fully diversifiable and will be factored in to the equity betas used in the CAPM. Further, the timing of reviews undertaken by the Commission minimises the potential for significant variation between actual and forecast price movements by revaluing the asset base each year.

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<sup>8</sup> ACT transcript, Ms M Sloss, 27 August 2009, para 30-35, P-255.