

**Optus Submission to  
Australian Competition and Consumer Commission  
on  
Telstra's PSTN OTA and LCS Undertaking**

**July 2006**

**Public version**

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## 1. Executive Summary

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- 1.1 In this submission Optus strongly recommends that the ACCC rejects Telstra's access undertaking for PSTN origination and termination access (OTA) and Local Call Service (LCS) prices. The undertaking is fundamentally at odds with the LTIE criteria and is, therefore, inconsistent with the Trade Practices Act.
- 1.2 Telstra's undertaking represents a cynical attempt to overturn the long standing ACCC pricing principles and to wind-back the regulatory clock to the late 1990's. These pricing principles were accepted as recently as two years ago by Telstra when it submitted PSTN OTA and LCS undertakings that were accepted by the ACCC. Its change of position is, however, consistent with its current managements' disregard for the interests of competition, consumers and the economic prosperity of Australia.
- 1.3 Acceptance of the undertaking would leave Australia with the dubious honour of having the highest PSTN prices in the developed world. In this submission Optus identifies the following material concerns with Telstra's undertaking:
  - (a) Whilst Telstra purports to have followed the ACCC's pricing principles in setting LCS and PSTN prices it clearly has not. Telstra has effectively included a sizeable surcharge in PSTN OTA prices to reflect the ACCC's preferred approach to setting LCS prices on a retail minus basis. This means that PSTN OTA prices are not cost based.
  - (b) Whilst Telstra claims that the undertaking will have a minimal impact on access seekers, this is clearly not the case. The undertaking represents a significant increase in the costs of interconnection, especially when combined with the recent increase in the price of wholesale basic access. Access seekers will face significantly increased costs and reduced margins if this undertaking is accepted.
  - (c) Telstra's PIE II model, which is the basis for setting Telstra's prices, is a backward looking inefficient estimate of costs. It takes no account of Telstra's plans to migrate its voice, broadband and data services to a common core IP network that were loudly trumpeted in its November strategy briefing. Failure to reflect the cost savings that Telstra will generate from these plans will lead to a significant over recovery of costs.
  - (d) PIE II is an unreliable cost model. Many of the assumptions and inputs into the PIE II model are flawed and lead to inefficiently high costs. This model has never been fit-for-purpose in setting interconnect prices. However, these problems have been compounded by the way Telstra has rolled the model forward. Whilst the total costs of the IEN appear to have fallen, the per units cost output from PIE II have increased.
  - (e) Optus recommends that the ACCC rejects the outputs from PIE II and in conjunction with the industry develop a new cost model that is based on truly forward looking efficient cost principles. Until such a model can be developed then prices should be set consistent with the ACCC's model prices. This would imply a PSTN rate of 0.7 cents/min for 2006-07 and not the 2.18 cents/min claimed by Telstra.

## 2. Undertaking inconsistent with ACCC's pricing principles

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- 2.1 One of the fundamental issues with Telstra's undertaking is the way it has used LCS prices to influence the level of PSTN prices. Optus submits that the proposed structure of the undertaking is deliberately designed to game the ACCC's proposed pricing principles for LCS and PSTN.
- 2.2 Whilst Telstra has claimed to set LCS prices on a Retail Minus Retail Cost (RMRC) basis, it has clearly not adopted the approach supported by the ACCC. In accepting Telstra's previous undertakings for PSTN and LCS, the ACCC adopted the following principles:
- (a) Services using the PSTN IEN, including PSTN OTA, local calls and ISDN, are allocated an appropriate share of the TSLRIC cost of the IEN. PSTN OTA prices are then set on the basis of the TSLRIC cost.
  - (b) LCS prices are set on the lower of RMRC and TSLRIC cost.
- 2.3 Telstra's current approach is quite different. Telstra calculates the RMRC of LCS. It then deducts this from the IEN cost pool, leaving the balance of costs to be allocated to PSTN services. Effectively, it is allocating any difference between the RMRC of LCS and the TSLRIC of LCS to PSTN. That is local calls do not receive their appropriate share of costs in the PSTN model. As a consequence PSTN OTA services effectively bear an LCS surcharge.
- 2.4 This problem is further exacerbated because the LCS price includes the discount associated with basic access services. This is notwithstanding the fact that wholesale basic access falls outside the scope of the undertaking. However, Telstra's motive is clear, the lower the LCS price the higher the resultant price of PSTN.
- 2.5 The table below helps to highlight this issue. Optus has recalculated the PSTN OTA rate on the basis of;
- (a) Allocating the RMRC discount to basic access. This still means that there is a local call surcharge on PSTN OTA, but it is much smaller; and
  - (b) Allocating local calls a cost based on the output from PIE II. Optus has used the 2004-05 price and local call volumes for this purpose since the model does not produce a 2006-07 cost for local calls.

	<b>Telstra approach</b>	<b>Adjusted for basic access</b>	<b>ACCC approach</b>
Network costs \$	c-i-c	c-i-c	c-i-c
Allocated to Local \$	c-i-c	c-i-c	c-i-c
Allocated to LCI \$	c-i-c	c-i-c	c-i-c
Allocated to PSTN \$	c-i-c	c-i-c	c-i-c
<b>PSTN rate \$</b>	<b>0.0218</b>	<b>0.0077</b>	<b>0.0068</b>

- 2.6 It is clear from the analysis above that Telstra's undertaking is not at all consistent with the ACCC's pricing principles for PSTN services. These principles require PSTN OTA services to be priced on the basis of TSLRIC. They do not allow for a local call surcharge. For this reason alone, Telstra's undertaking should be rejected.

- 2.7 In sections F2 and F3 of its submission in support of its undertaking, Telstra sets out some supposed difficulties with the ACCC's approach to LCS and PSTN OTA prices and its approach to addressing those problems. In particular, it asserts difficulties in allocating potentially joint costs associated with the CAN and IEN. At a minimum we would say that Telstra has not provided any estimate of the joint costs or that its approach provides a basis for allocating those costs in a manner which promotes any of the legislative criteria under Part XIC. Indeed, in terms of efficiency, Telstra's loading of costs on PSTN services is likely to be welfare reducing given the accepted wisdom that those services have a high own price elasticity of demand.

### 3. Impact of Telstra's proposed undertaking prices

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#### *Telstra's imputation testing*

- 3.1 Telstra has made a number of claims in support of its undertaking that seek to down-play the impact of the very significant price increase proposed in the undertaking. It has, for example, noted that;
- (a) The substantial increase in PSTN prices will have a minimal overall impact on access seekers given the associated decrease in prices for LCS;
  - (b) That the impact of the price increase will be minimal when considered across the bundle of fixed line services;
  - (c) That significant margins continue to be available to access seekers providing the bundle of PSTN services; and
  - (d) That changes to the undertaking prices have a negligible impact on the margin available across the bundle of fixed line services.
- 3.2 Telstra has put forward the results of its internal imputation testing to support the above claims. However, Optus submits that these claims do not stand up to scrutiny. Neither are they supported by Telstra's own data.
- 3.3 Telstra's imputation testing results indicate that the margin available for residential customers drops from 14.3%<sup>1</sup> across the PSTN bundle (basic access and local, long distance, international and fixed to mobile calls) to **c-i-c**. This represents a 60% reduction in the margin across these services. Further, if part of the reduction in mobile termination rates is backed out of these calculations then the reduction in the margin is even more significant – at around 67%. Optus contends that it is reasonable to make this adjustment since Telstra is on record as supporting the ACCC's belief that any reduction in mobile termination prices will be passed through to end-users<sup>2</sup>.
- 3.4 Across the average of business and residential customers the decline in margin whilst a little lower at 40% is still substantial. Again if the reduction in mobile termination rates is backed out then this decline increases to 52%.
- 3.5 Telstra attempts to justify these figures by noting that the undertaking prices only contribute a small proportion to this margin decline. This is a disingenuous statement that only holds if the undertaking prices are looked at in isolation from Telstra's recent increase in wholesale line rental prices. Telstra has long argued that the costs of basic access must be taken into account when setting access prices for PSTN and Local Call

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<sup>1</sup> Fixed telephony imputation report for September Qtr 2005, historical cost.

<sup>2</sup> Note Optus has only adjusted for 50% of the reduction in mobile termination rates to reflect a more conservative assumption that only part of the rate reduction is passed through to end-users.

services. In practice, these services are taken as bundle. It is reasonable, therefore, to include the price of basic access when assessing the impact of the undertaking prices.

- 3.6 The margin impacts disclosed by Telstra are consistent with Optus' own modelling. The application of the Telstra's proposed undertaking prices together with its recent increase in wholesale basic access fees will reduce the expected net present value of a typical resale customer by **c-i-c**. It is unarguable that Telstra's recent and proposed changes to access prices will substantially reduce the margins available across the bundle of PSTN services. Since margins from voice services are being used to subsidise the growth of broadband services it is becoming increasingly untenable for resellers to compete with Telstra.

*Access Seekers face a significant cost increase*

- 3.7 The above points are reinforced by an examination of the cost implications of Telstra's proposed prices.

**Commercial-in-confidence**

- 3.8 Optus also notes that Access Seekers operating in mobile services markets are likely to be particularly effected by the price increase. The proposed increase in PSTN OTA prices is likely to lessen competition in the market for mobile services and reduce the rate of fixed to mobile substitution. Such an outcome will benefit Telstra as the largest fixed operator.

*Telstra's proposed price increases are out of step with expectations*

- 3.9 Telstra's proposals are clearly out of step with market expectations. Optus had anticipated a further decline in PSTN rates through 2007-08 as the access deficit component was finally eliminated from Telstra's prices. Such an expectation is consistent with the ACCC's model prices for core services.
- 3.10 In setting its model prices for PSTN services in October 2003, the ACCC accepted that Telstra should no longer be able to include an ADC component within PSTN prices. However, this approach was to be introduced in a phased manner with a gradual wind-back of the ADC over 3 to 4 years. At the time Optus argued strongly that this approach unduly favoured Telstra since it continued to set PSTN prices above cost for this period. Telstra has greatly benefited from this approach. Notwithstanding this, we had understood that in return for the phased wind-back of the ADC Telstra would have to accept that PSTN prices for 2006-07 would be based on conveyance costs only and would be in line with the ACCC's model terms and conditions.

*"The Commission considers that the transition from current PSTN pricing to TSLRIC+ pricing should end in 2005/06 with the 2006/07 price therefore based solely on call conveyance. The starting point for the transition process should be the average negotiated PSTN price in 2002/03 with the end point being the currently estimated 2006/07 conveyance cost. Using information currently available to the Commission from both Telstra's PIE II model, and its n/e/r/a model, the Commission believes the 2006/07 call conveyance charge is likely to be well below 1 cent per minute and at this stage is forecast to be around 0.7 cents per minute".*

*Following the release of the Draft Determination the Commission and Telstra have discussed the possibility of Telstra lodging new access undertakings for core services for the three years commencing with 2003-04. As part of these discussions, Telstra indicated it would consider making a commitment that it would not seek an ADC following the conclusion of the 2005/06 year. The Commission considers that such a commitment should be provided as part of Telstra lodging any revised undertakings for*

*PSTN access services”.*<sup>3</sup>

- 3.11 Clearly this has not eventuated and Telstra appears to have reneged on the regulatory deal. As noted above, there has been an acceleration of the wholesale price increase on basic access services. Coupled with this Telstra has sought to revert PSTN prices back to the levels that applied in the late 1990’s. Whilst it has not claimed an ADC (since basic access prices have risen substantially) it has included an LCS surcharge, which amounts to much the same.
- 3.12 Neither of these outcomes could have been expected. Optus had reasonably based its business plans on expectations drawn from the ACCC’s model prices determination. This determination signalled accelerating reductions in PSTN rates.

*In this regard, the Commission considers that a concave path, as is evident under its more gradual approach, is appropriate. This type of a path leads to smaller reductions in the early years, but larger reductions in the later years. It is considered this will best cushion the impact of the change in regulatory approach and will be the least distorting, since it will allow the industry more time to plan for the larger decreases in the PSTN price. This is in contrast to introducing a more sudden, unexpected rate drop, as given by a more convex glide-path.*<sup>4</sup>

#### **Commercial-in-confidence**

- 3.13 By increasing Optus’ cost burden, Telstra will necessarily limit our ability to aggressively compete for fixed line services across key consumer and business segments.

#### *Recent Telstra retail initiatives inconsistent with access prices*

- 3.14 Optus also notes that the wholesale price trends are inconsistent with Telstra’s recent retail marketing initiatives for fixed voice services. Telstra has recently announced the introduction of capped plans for its bundled fixed voice services. These include a combination of;
- (a) Unlimited local and STD calls (Homeline ultimate);
  - (b) Untimed local calls and capped long distance (Homeline together); and
  - (c) 10 cent local calls and untimed long distance (Homeline Reach)
- 3.15 By raising wholesale access prices Telstra will significantly increase the business risks for access seekers to compete with Telstra on plans that include caps and/or untimed calls.

#### **4. PIE II Model no longer a reasonable estimate of forward looking efficient costs**

*Are there faults with the PIE II cost model and how should these faults be addressed?*

*Has Telstra improved its PIE cost model? Is it necessary to construct an alternative cost model to Telstra’s updated PIE II model?*

- 4.1 Optus will present a separate submission that outlines in detail our specific concerns with Telstra’s PIE II model. However, even if all of these faults were to be addressed recent trends in technology indicate that the PIE II model is no longer an appropriate model for setting efficient access prices.

<sup>3</sup> ACCC, Final Determination for model price terms and conditions of the PSTN, ULLS and LCS services, Oct 2003 pg 63.

<sup>4</sup> Ibid page 64.

- 4.2 The objective of promoting the economically efficient use of, and investment in, infrastructure under Section 152AB(2)(e) is commonly interpreted to require neutral ‘build or buy’ decisions to the extent to which dynamic, productive and allocative efficiencies are achieved. Dynamic, productive and allocative efficiencies are said to be maximised when efficient ‘build or buy’ decisions are neutralised.
- 4.3 Optus submits that in the context of modelling costs for a monopoly PSTN business the appropriate approach is to calculate a regulated price which will provide appropriate incentives for the monopoly operator to be productively efficient. We contend that an incumbent PSTN operator would operate a network which would enable the supply of voice services, broadband service using xDSL technologies and other data services. It is therefore only prices that result from such a network that will promote efficient use of infrastructure and as a consequence, the LTIE. No incumbent (or new entrant) would contemplate building a network to provide voice only services.
- 4.4 This fact was recently acknowledged by Telstra in its Network Strategy briefing of 16 November 2005. In that detailed briefing Telstra indicated that it plans to transform both its access and core network with the aim of delivering an “integrated triple-play of voice, data and video services”.
- 4.5 The plans announced by Telstra that it intends to replace large elements of its copper based network with the roll-out of Fibre to the Node (FTTN) and the migration of its core network to a Next Generation technology, is a very clear indication that today’s predominantly copper switched network is no longer an efficient forward looking network.
- 4.6 Whilst there is still some uncertainty surrounding Telstra’s planned FTTN roll-out, we understand that its plans to migrate its core network to a Next Generation Network (NGN) are well advanced. Central to Telstra’s plans are the development of a common IP core platform for the carriage of voice data and video services.
- 4.7 Whereas today, Telstra has a number of separate platforms to support its different products, the move to an NGN will enable it to “collapse” many of the current platforms into a single platform.

*“Where we are today, well, within the core and the distribution area, we have a large number of networks and distribution footprints... So with that, a little bit about what the new world might look like, ...it's about integrating voice, video data and mobiles distribution plots into a single plot which we do separately today”.<sup>5</sup>*

- 4.8 These plans are expected to transform Telstra’s cost base. The migration to an NGN in its core network will enable Telstra to reduce the amount of equipment deployed in its network. In its November briefing, Telstra indicated that it will deploy 10 “softswitches” that will enable it to replace 116 of its existing voice switches. Such a move will enable Telstra to take advantage of huge economies of scale through the new switches.

*At the moment we have about 250 odd nodes in our network switches, that is core switches, that actually deliver that capability to our customers. This network is a single application network in the sense that it is primarily there to deliver voice. Yes, we have a lot of voice products that are wrapped around that but that network is optimised for voice. It is not optimised for the sort of multi-services that we have been talking about there today.*

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<sup>5</sup> Bill Felix, Transcripts Telstra Technology Briefing 16 November, page 10.



*Within those the five city areas that we are looking at for the transformation, we have around 5.4 million services in operation. So as Jim picked up earlier, those services for the plain old telephony service will be transitioned over to the new softswitch infrastructure. That will take out 116 of those 250 odd class 5 and class 4 nodes that I spoke of earlier.*

*The transformed network is moving towards, as we have said, a common core... Key to that is the centralisation to a smaller number of softswitches so we will be looking at five mated pairs of softswitches. To give you an indication currently we have on most of our class 5 switches we would normally dimension to about 120,000 odd services in operation. These softswitches will take us up to a dimensions of about 2 million services in operation off each softswitch.*<sup>6</sup>

- 4.9 Further, these changes will reduce the level of support costs and overheads that are likely to be attributable to services using the common platform. Telstra indicated that in addition to the lower network costs, it expects to derive additional savings from having fewer systems, less space requirements with a smaller number of exchanges required and lower power requirements. Equally, the reductions in complexity of the network and the improved reliability will help to derive reductions in operating costs.

*“I can't emphasise enough what this is going to do to our cost structure and what we call bad volumes. Things like truck rolls, fault management, repeat reports, impacting our customer experience and all the associated costs, let alone the enablement of all the new technology and the services that go with it.”*<sup>7</sup>

*“We are not going to have to do the power builds, the UPS back ups, the generators, the fuel storage, all of this stuff that goes with growing these old networks gets collapsed to these new softswitch locations which by the way consume less power, require less cooling. Do the machines run hotter in today's world? For the most part, yes, but they are not as big, they are not multi-floors of equipment. We are going to recover a lot of space from a real estate standpoint, so our total cost of ownership going forward has dramatically changed. Everything from how many locations we have to have people in to surveillance and to work on it, to the utilisation of for the most part space that we own where we have our switches which we can convert to any kind of space we choose to do so. So it's going to again fundamentally change the cost structure”.*<sup>8</sup>

- 4.10 It is unambiguous that Telstra will drive significant cost savings from its planned migration to a core NGN. These changes will clearly have a significant impact on the unit cost of providing PSTN services. It is entirely possible that as the current IEN is replaced by a common IP core network the costs of PSTN services will be close to zero given the large capacity demands that other services will place on the common core network. Further, it is not at all clear that the current pricing structure of PSTN with per minute based charges remain appropriate.
- 4.11 The above comments are consistent with many of the findings set out in a recent report by econ for Ofcom which looked at the potential impact of BT's NGN plans on interconnect tariffs. In that report econ note that:

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<sup>6</sup> Jamie Chard, Transcripts Telstra Technology Briefing 16 November, page 13.

<sup>7</sup> Gregg Winn, Transcripts Telstra Technology Briefing 16 November, page 9.

<sup>8</sup> Gregg Winn, Transcripts Telstra Technology Briefing 16 November, page 16.

*The move towards NGN is expected to bring substantial cost savings for operators, by increasing usage and providing the opportunity to exploit scale economies further<sup>9</sup>.*

*Using IP technology allows for a more intensive use of links and for different services to be run over the same network, where before different core networks used different transmission protocols. Therefore, the move towards a common IP technology allows:*

- *increased usage on shared links, and*
- *increasing the proportion of shared links (thus reducing dedicated links).*

*The benefits of statistical capacity sharing are greater as the sources of traffic sharing the network become more various, which has the effect of reducing the variance of the total demand for capacity. In addition, sharing of network assets across services is expected to reduce both overall fixed network costs and the per traffic unit cost of equipment at network nodes, and provides flexibility in using capacity for different services, as less spare capacity required to meet potential demand shocks for individual services. In addition, consolidation of networks can substantially reduce costs<sup>10</sup>.*

- 4.12 It is also unambiguous that Telstra has not reflected its NGN migration plans within the PIE II Model for the purpose of this undertaking. It is reasonable to state, therefore, that PIE II represents a “backward looking” rather than a “forward looking” estimate of costs. To accept prices based on the output from a backward looking cost model would clearly not be reasonable or consistent with the neutral “build or buy” interpretation of the criteria under the Act.

#### *New costing approach required*

- 4.13 Given the above developments, there is clearly a need to develop a new cost model which takes account of the prospective technology changes that will be implemented in the next 2 to 3 years.
- 4.14 The challenge for the ACCC is to develop a new model in the absence of detailed cost information from Telstra on its NGN. Developing a model that is robust, transparent, with industry consensus that is fit for purpose for setting access prices will require time. Nevertheless, such a model should be developed.
- 4.15 In the interim it would be reasonable for the ACCC to set prices based upon its existing model terms and conditions. This suggests that a PSTN price of 0.7 c/min should apply for 2006-07. Whilst such a rate might not reflect Telstra’s views on volumes it equally does not take account of the significant unit costs savings expected from its NGN. In the absence of an alternative cost model this approach seems entirely reasonable.

## **5. Roll-forward of PIE II Model inflates costs**

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- 5.1 Optus submits that the methodology employed by Telstra to roll-forward the PIE II model amplifies the inefficiencies within the model such that the costs of PSTN services are significantly inflated.
- 5.2 Telstra’s approach is to use the PIE II model to dimension the network and calculate the IEN cost base. Telstra indicates that in estimating the updated cost base it has adjusted the WACC, various price indices and traffic volumes.

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<sup>9</sup> Econ, A Report for Ofcom: Assessing the impact of NGNs on interconnection tariffs’ distance gradients, page30

<sup>10</sup> *ibid* page 34

- 5.3 However, the way in which PIE II is rolled forward to 2006/07 and 2007/08 is very unclear. The version of the model supplied to Optus for those years was not capable of being run. It presented results that purported to be the results of a model run for those years.
- 5.4 Optus was also supplied with a version of the model which was capable of being run for the years 2002/03, 2003/04 and 2004/05(version 4.4.2).
- 5.5 Optus compared the results from a run of the model for 2004/05 with the model presenting results for the 2006/07 (the comparison of Physical Elements Summary and Total Costs by Network Category are attached). The WACC in the 2004/05 model was adjusted so it was equal to the low WACC claimed by Telstra in 2006/07. It should be noted that this was made difficult because there was no coding in the model for the 2006/07. It appears that some of the model coding and inputs for the 2004/05 year in that version of the model were related to 2006/07.
- 5.6 Comparing the results for 2004/05 and 2006/07 demonstrated some curious results. **Commercial-in-confidence** This suggests that the CAN layer was not re-run for the 2006/07. **Commercial-in-confidence** This raises a real concern that the roll-forward model overstates costs.
- 5.7 The Physical Elements Summary shows that the number of network elements provisioned by PIE II in other network categories has changed. **Commercial-in-confidence**
- 5.8 **Commercial-in-confidence**
- 5.9 This suggests that PIE II has been run for 2006-07 using lower volumes than in 2004/05 which has resulted in a smaller network being required to provide the forecast level of services. As a result the total cost is lower. However, the unit cost for PSTN OTA is higher for 2006/07 than in 2004/05. We note that Telstra has also claimed some amendments to asset price trends though it appears these have not been adjusted in the model.
- 5.10 Curiously, it also appears that for most of the switching and transmission asset categories (which make up the IEN) the number of network elements provisioned by PIE II in Rural areas in 2006/07 has increased from 2004/05.
- 5.11 This suggests that Telstra has forecast volumes to grow in rural areas, yet it appears that it has made no mention of this in its submission to the ACCC. Alternatively, Telstra has amended its traffic loading factors or its routing factors. This again is not clear from the model or Telstra's submissions.
- 5.12 The above commentary indicates that there are some significant gaps in Telstra's explanation for the roll-forward of the PIE II model. In summary, Optus considers that the methodology employed by Telstra has compounded the problems we have previously noted about the underlying costing principles and data inputs to the model, by driving further inefficiencies in prices.

## 6. WACC

*Having regard to the regulatory criteria in s152AH of the Act, are the costs of under estimating the WACC greater than those of over estimating the WACC (i.e. are there any asymmetric costs)?*

*Having regard to the regulatory criteria in s152AH of the Act, and to Telstra's supporting submissions, are there any reasons why the ACCC should alter its views on appropriate WACC?*

*Should different WACCs be set for network costs in different years or one WACC for the whole period of the undertakings?*

*If there are asymmetric costs to WACC estimation, is Telstra's proposed method of accounting for those asymmetries appropriate?*

*How should the WACC parameter point estimate be calculated?*

*How should the WACC parameter standard deviation be calculated?*

*Are there any other issues concerning the appropriate WACC, which the ACCC should consider?*

- 6.1 In its Final Determination for model price terms and conditions of the PSTN, ULL and LCS services, the ACCC stated that a post tax nominal WACC for Telstra's PSTN services of **c-i-c** would be appropriate.
- 6.2 In its current undertaking Telstra has applied a much higher post tax WACC, ranging from **c-i-c** to **c-i-c**. Optus submits that there have been no changes to the industry that would warrant an increase in the WACC from the time that the ACCC made its decision. Accordingly the WACC proposed by Telstra is not reasonable.
- 6.3 Optus' more detailed comments on Telstra's approach to setting the WACC will be provided in a separate submission.
- 6.4 This submission also deals with Telstra's assertion that there are costs associated with under estimating the WACC which are greater than the costs associated with over estimating the WACC. Optus submission in response to the Report of Professor Bowman addresses this assertion. It finds that for the customer access network and the PSTN more generally, the asymmetry asserted by Telstra is unlikely to exist. It may even be asymmetric in the opposite direction. This is because a higher WACC on fixed (and sunk) assets will further inflate prices above short run marginal cost. In this case a higher WACC will have no impact on investment (it is already sunk) but it will further reduce allocative efficiency from price above short run marginal cost.

## **7. Volume trends**

*Are Telstra's estimates of declining use of PSTN services appropriate?*

*Should alternative forecasts be used to calculate PSTN access charges?*

*To what extent should the PSTN asset base be commensurably adjusted to reflect the lower traffic volumes being assumed?*

*What services should be included in estimating traffic volumes on the IEN?*

*What costs and volumes will become relevant once core networks are fully upgraded to an IP basis and should these be taken into account in the pricing of future fixed access services?*

- 7.1 As at the date of this submission Optus has been unable to confirm to its satisfaction the volume trends Telstra has used in setting its undertaking prices. We have written to Telstra to seek clarification on a number of matters. In summary, our questions are directed at obtaining a like for like comparison between the volume data Telstra has provided in its submission and that used to calculate undertaking prices for prior periods.
- 7.2 Once we have received a response to these questions Optus will provide a more detailed response to the issues raised by the ACCC above. However, we can offer some preliminary comments on Telstra's assumptions.

7.3 As noted in section 4, Optus considers that the first best approach to setting PSTN prices is to model Telstra's network on the basis of forward looking efficient technology which will require account to be taken of its migration to an IP core network. The costs of such a core network should be allocated across all services using the network, such as voice traffic, broadband and other data services. It is entirely possible that existing cost drivers, such as busy hour, calls or minutes of use, are no longer the most appropriate means to allocate costs. It might be more appropriate to allocate costs on the basis of capacity demands. The need to re-think the current approach to setting prices has been recognised by recent commentators. In a report on Next-generation network technology Ovum has noted that:

*"NGNs will no doubt have fundamental implications for business models and pricing. The meaning of unit costs will have to be redefined and market participants will have to radically reconsider how to charge for services, both on a wholesale and resale level".*<sup>11</sup>

7.4 Similarly, Econ in its report for Ofcom, whilst not providing any determinative views on appropriate cost drivers it clearly identifies that there will be a need to re-examine the existing drivers of cost for PSTN services:

*"Other cost drivers may become unimportant faster than distance does... For example, there may be other metrics than become relatively better as measures of cost with an NGN, such as the number of nodes traversed by traffic. For instance, short run capacity constraints may become more relevant in an NGN than at present, with the physical distance over which the traffic is carried having a limited impact on short-run cost".*<sup>12</sup>

7.5 If it is not possible to develop such a model, then it is absolutely necessary to ensure that the asset base is appropriately dimensioned to the volume assumptions. This means that if it is reasonable to assume a decline in traffic volume, then the asset base should be reduced to reflect the lower demands. Failure to do so will mean that the IEN is over dimensioned, which in turn will result in PSTN OTA prices being set at inefficiently high levels.

7.6 Optus also believes that Telstra has understated traffic volumes for the purpose of calculating PSTN OTA prices. The following issues require further detailed explanation from Telstra:

- (a) It is not at all clear how dial-up internet traffic is treated within the PIE II model. Telstra's submission records **c-i-c** of internet traffic minutes (para 48). Since a large proportion of dial-up internet traffic will be handed over to non-Telstra ISPs this traffic will utilise both the local and tandem switching layers within Telstra's network. Even traffic to Telstra Bigpond will at least utilise the local switching layer within the PSTN to transit to its internet platform. As such this traffic will place significant demands on the PSTN and ought to be allocated a significant share of costs. It appears that no costs have been allocated to dial-up internet traffic.
- (b) As noted in section 3, Telstra has recently announced a number of new pricing plans which include lower priced local calls, untimed long distance calls and dollar caps. These are clearly aimed at stimulating traffic growth on Telstra's network. It is not at all clear whether these initiatives have been factored into Telstra's volume assumptions.

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<sup>11</sup> Ovum Comments: Next-generation networks: challenges ahead

<sup>12</sup> Econ, A Report for Ofcom: Assessing the impact of NGNs on interconnection tariffs' distance gradients, page 50.

- (c) Telstra appears to be forecasting a decline in Fixed to Mobile and Mobile to Fixed traffic (refer para 48 of Telstra submission). This does not appear reasonable and is it at odds with Telstra's own recent reported trends of growth in Fixed to Mobile and Mobile minutes of use. Telstra's Fixed to Mobile minutes grew by 1.3% and Mobile minutes grew by 6.1% in the half year ended December 2005 over the half year ended December 2004.

## 8. Packaging of PSTN and LCS prices

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*Is it appropriate to set prices for PSTN OTA and LCS as a package as proposed by Telstra?*

*If so what are the likely benefits to the industry and the end-user?*

*What are the likely impact of the proposed charges on future VoIP prices?*

- 8.1 It is common for telecommunications services to be offered as a bundled package, both in the retail and wholesale markets. When carriers offer services as a bundle it is usual practice to provide a benefit against taking the services on a standalone basis. Typically this involves the provision of a discount over the price of the stand alone service.
- 8.2 Telstra's undertaking, which bundles together LCS and PSTN OTA services provides no such benefit. Optus submits that Telstra's approach to packaging these services represents a calculated and cynical attempt to challenge the ACCC's longstanding approach to setting LCS and PSTN prices.
- 8.3 In developing this undertaking Telstra has clearly departed materially from the existing accepted approach to setting prices for LCS and PSTN OTA. It must have a low expectation of this undertaking being accepted by the ACCC. However, by packaging these services Telstra is clearly giving itself the scope to lodge a wide ranging ACT appeal should the ACCC, as it must, reject its undertaking.
- 8.4 Telstra has made no secret of its motives. In its submission it notes that the two prices are totally dependent upon each other such that if the price of one changes then the price of the other must be adjusted. Similarly, in correspondence and discussions with Optus it has refused to put forward a stand alone price for LCS noting that it has to achieve cost recovery across both services. These are clear signals that it rejects the ACCC's existing approach to pricing.
- 8.5 Further evidence of Telstra's cynical approach is provided by the following comment in its submission in support of its December 2005 undertaking:
- "In the event that Telstra's proposed prices for these other PSTN services are not accepted by the Commission, then Telstra reserves its right to increase the ULLS prices to allow for full cost recovery of long run efficient PSTN costs".<sup>13</sup>*
- 8.6 In conclusion Optus believes there are no benefits to be gained by the industry in having the undertaking services offered as a package. As outlined in section 3, if accepted this undertaking will have a material adverse impact on access seekers.

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<sup>13</sup> Telstra's submission in support of the ULLS Monthly charges undertaking dated December 2005.

## 9. Averaging of PSTN prices

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*Is it appropriate that Telstra set access charges on the basis of a partial de-averaged approach?*

*What is the implications of such an approach on LTIE objectives of promoting competition and sending appropriate price signals for the efficient use and investment in existing and new networks?*

- 9.1 As noted by the ACCC in its discussion paper Telstra's previous PSTN rates have been fully de-averaged. This pricing approach has prevailed for many years and it was an approach originally proposed by Telstra in its first PSTN undertaking.
- 9.2 For this undertaking, Telstra has implemented a partial averaging approach. It indicates that it has taken this step to avoid "extremely high prices in rural areas". Optus does not buy Telstra's argument. Optus submits that Telstra has now chosen to average prices for the following reasons:
- (a) To maintain consistency with its position on the averaging of ULLS prices.
  - (b) To raise the costs faced by access seekers. It is likely that access seekers will on average have proportionally more traffic in metropolitan areas than Telstra. Averaging of charges would, therefore raise the costs faced by access seekers in using PSTN services.
  - (c) As a revenue protection mechanism. With the growth of broadband services and the prospective migration of resale services to ULLS, Telstra faces the prospect of a diminishing revenue stream from PSTN services as its originating access revenue declines with the cancellation of preselected service. As much of this traffic will likely be lost in metro areas, one way to plug the gap is to maximise the price of PSTN terminating access through averaging.
  - (d) A related benefit from that noted in d) above is that higher PSTN terminating access charges in metropolitan areas will act as a brake on the successful development of VOIP services by competing providers. These services are more likely to available in metropolitan areas, at least initially.
- 9.3 Of additional concern with Telstra's approach is that the PIE II model significantly overstates the costs of services in rural areas, thus compounding the impact of price averaging. Optus has submitted a separate report that was prepared by n/e/r/a London, which indicates that Telstra's failure to adjust a number of design assumptions for rural conditions (such as the minimum spanning tree algorithms and the use of rectangular grid system) leads to a significant overestimation of costs within rural areas. This is over and above the other problems noted with the model.
- "from a qualitative point of view, one can say with confidence that Telstra has inflated their rural network costs through a sub optimal design of the RAU-LAS layer and through an inflated distance measure that is particularly unsuitable for longer distances".<sup>14</sup>*
- 9.4 In addition, Optus has previously noted that Telstra's choice of CMUX (or DSLAM) technology overstates the cost of conveyancing because the model fails to take into account data services for which that technology was chosen<sup>15</sup>. This problem will be exacerbated in rural areas because of the disproportionate number of RAUs required.
- 9.5 Optus notes that a recent report by Analysys for the ACCC identifies similar concerns with the cost estimates for rural areas. The Analysys report also notes that the PIE II

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<sup>14</sup> n/e/r/a "Comments on PSTN conveyance costs in PIE II", March 2004.

<sup>15</sup> Optus submission, Rural PSTN costs in Telstra's undertakings, March 2004, page 13-15.

model has taken insufficient account of the availability of lower cost alternative technologies such as WiMax and satellite.

- 9.6 Averaging of prices in the manner proposed by Telstra is not likely to be consistent with the LTIE provisions. Such a move is;
- (a) Contrary to the principles of cost causality;
  - (b) Is likely to distort investment signals; and
  - (c) Will likely encourage inefficient investment.
- 9.7 Further, Telstra's approach to averaging, whereby 50% of the cost pool is averaged, appears to be totally arbitrary and without any economic justification.

*High rural prices driven by Telstra's methodological choices*

- 9.8 Telstra's argument that averaging is required to limit the price impact on rural areas is disingenuous. These concerns would not arise if it had set prices consistent with the methodology approved by the ACCC in its model prices for PSTN, a methodology it adopted in previous undertakings. There has been no fundamental change in the cost structure between regions in the past 3 years.
- 9.9 A comparison of Telstra's new undertaking prices on a de-averaged basis, with those set out in its existing undertaking indicates that prices have doubled in all regions.

Existing undertaking

**Commercial –in-confidence**

New Undertaking – fully de-averaged

**Commercial –in-confidence**

- 9.10 What drives the higher rural prices are the material adjustments Telstra has made to the way prices are set, such as the LCS surcharge, increasing the WACC, changing the price indices and gaming the traffic volumes.

**10. Proposed structure between flagfall and conveyance charges**

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*Is Telstra's proposed pricing structure with respect to its flagfall and per minute charge elements appropriate?*

- 10.1 Optus does not support Telstra's proposed rate structure between flagfall and call conveyance. Telstra's rate structure in its proposed pricing tables transfers a disproportionate amount of the PSTN costs to flagfall, which is not reflective of cost causation. Optus believes this is inconsistent with the LTIE because it is inefficient and does not reflect true costs as they are actually incurred in setting up and carrying the call.
- 10.2 Simply, such a pricing structure, which is not reflective of cost places service providers with shorter call hold times in a competitively disadvantaged position. End-users will similarly face retail prices that are not economically optimal and allocative efficiency may be reduced because end-users consume a lower number of calls.
- 10.3 For the purpose of setting prices Telstra simply applies an arbitrary **c-i-c** allocation between flagfall and call conveyance. It notes that this allocation is justified since it is



reflective of Telstra's retail price structure. Optus submits that this allocation is not appropriate.

*Allocation of costs to flagfall in PIE II*

10.4 Firstly, it appears that the PIE II model allocates a much smaller proportion of costs to call set-up. Telstra's submission in support of its undertakings provides limited detail on how the flag-fall component of PSTN OTA is calculated. However, it appears that **c-i-c** of the cost pool associated with the following network elements is allocated to call set up;

- (a) RAU;
- (b) LAS;
- (c) TNS;
- (d) RAU to LAS transmission;
- (e) LAS to LAS and LAS to TNS transmission; and
- (f) TNS to TNS transmission.

10.5 Optus believes this allocation actually overstates the costs associated with call set-up since certain of the above components are not related to call set-up as they are incurred:

- (a) Remote access units (RAUs) are more appropriately allocated to CAN costs as they do not perform any low-level switching functions;
- (b) Whilst some elements of the LAS are sensitive to call set-up, certain components at the LAS are not. Interface trunks and subscriber lines are sensitive to the number of physical connections that the switch is required to terminate but are not sensitive to the call origination rate or average call duration;
- (c) Switched paths between lines and trunks are sensitive to call duration and not calls; and
- (d) Transmission costs are unrelated to call set up and should not be allocated to flagfall. There is a possible exception, which is LAS to TNS transmission, which might include some proportion of signalling costs.

10.6 Notwithstanding the above concerns about the overstatement of call set-up within PIE II, it is clear that Telstra's allocation of **c-i-c** of the cost pool to flagfall is fundamentally at odds with its own engineering rules and therefore its own cost causation principles.

*Telstra's approach inconsistent with international best practice*

10.7 Optus notes that in many jurisdictions interconnect charges include no flagfall component. Examples include, most US sates, the UK and Germany.

10.8 Given the small proportion of costs that actually relate to call set-up, as low as **c-i-c** on Telstra's estimate, it would be appropriate for Australia to follow international best practice and eliminate the flagfall component from interconnect. Such an approach will eliminate any distortions that will likely arise from Telstra's proposed pricing structure which include a significant flagfall component.

*Retail prices are not relevant to setting wholesale prices*

10.9 Finally, Optus submits that the way Telstra chooses to set its retail prices should have no bearing on the structure of wholesale interconnect prices. Wholesale interconnect prices

should be based on cost and the structure should reflect cost causality principles. Setting a flagfall based on Telstra's retail pricing structure is inconsistent with this approach.

- 10.10 This is a principle endorsed by Telstra Clear (Telstra's New Zealand subsidiary), which in a submission to the Commerce Commission by its consultant's Network Strategies argued that:

“ Interconnect pricing is cost-based, thus must reflect the underlying costs, and not be driven by retail tariffing strategies Retail operators are free to devise any pricing strategy they wish and may change the strategy at any time the main aim of a retail pricing”.

“ For optimal efficiency, interconnect prices must align with costs and then retail prices align with interconnect prices”.<sup>16</sup>

#### *Unsuccessful call ratio*

- 10.11 Optus also questions the reasonableness of the Telstra's unsuccessful call ratio assumption of **c-i-c** in its PIE II cost modelling. Optus believes this is too high. Optus has previously argued to the ACCC that its own data estimates show the proportion of unsuccessful calls to be closer to **c-i-c**. There is no reason why Telstra should have a higher proportion of unsuccessful calls.
- 10.12 Further, the growth of call messaging services and voice mail (relevant for the growth of fixed to mobile traffic) is likely to have reduced the proportion of unsuccessful calls in recent years. The ACCC should not accept Telstra's assumption without further evidence from Telstra as to its appropriateness.
- 10.13 A higher unsuccessful call ratio inflates the costs of the PSTN and leads to a particularly high flagfall cost in PIE II.

### **11. Telstra's proposed two-part tariff**

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*Will end-users benefit from the proposed PSTN OA two-part tariffs*

*What would the impact be on access seekers*

*Is a fixed monthly charge per customer on PSTN OA consistent with existing retail prices?*

*Is Telstra 50:50 allocation of fixed charges versus minute charges for preselected PSTN OA reasonable? If not, why not?*

*Are there any issues associated with charging different access prices for preselected PSTN OA versus PSTN OT and non-preselected PSTN OA.*

*Is the two-part tariff based on Ramsey pricing principles designed to maximise efficient outcomes?*

- 11.1 As noted elsewhere in this submission acceptance of this undertaking will have a significantly adverse impact on access seekers since it will result in PSTN OTA prices being set above cost. In this context Telstra's proposed two-part tariff for preselect PSTN OA prices is of little relevance.

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<sup>16</sup> Network Strategies presentation: “Analysis of one minute minimum and per second charging”.

- 11.2 At a theoretical level there may be merit in a two part tariff pricing structure. It may encourage more efficient use of the network and may provide carriers with opportunities to develop more innovative or differentiated pricing packages. However, such pricing would need to be developed on the basis of a properly constructed cost model (PIE II clearly being ruled out). Further, access seekers should be given the opportunity to choose between the existing per minute charging structure and a two part tariff approach.
- 11.3 As ever, Telstra's motives in putting forward this proposal should be treated with scepticism. Optus notes that Telstra has put forward no evidence or detailed justification to support the two part tariff. It is not at all clear that the approach proposed by Telstra will maximise efficiency. Optus suspects that Telstra's motives for proposing this price structure is to cap its revenue should, as it predicts, call volumes decline.

## 12. Local Call Service

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*Is the RMRC pricing principle an appropriate basis for setting the LCS undertaking charge?*

*Is an alternative cost-based approach viable for setting charges for the undertaking period?*

*Is Telstra's application of the RMRC pricing principle and its use of regulatory account data appropriate?*

### **RMRC approach to setting LCS prices**

- 12.1 Optus has a long expressed a number of concerns with the way the ACCC currently approaches the pricing of LCS. Whilst these issues are dealt with in some detail in our separate submissions the following section provides a summary of these concerns.

#### *Fails to address discriminatory pricing*

- 12.2 The current approach whereby the wholesale LCS price is determined by reference to Telstra's unbundled price gives Telstra the incentive and opportunity to act in a discriminatory manner. This is evidenced by the recent Competition Notice issued against Telstra in respect of the increase in wholesale basic access prices.

#### *Fails to deal with Telstra's Regulatory gaming*

- 12.3 Telstra has consistently gamed the LCS regulatory framework since it was introduced. For example, the wholesale LCS rate proposed by the ACCC in April 2002 was approximately 12.35 cents per call (reflecting the mix of local and neighbourhood calls). This increased to 13.61 cents in 2003. One reason for the increase was Telstra was allowed to game the starting price under the retail minus framework, by removing the cheaper neighbourhood calls from its unbundled Homeline Part packages with the result that the starting prices for these packages was higher than that for its bundled retail packages. In addition, Telstra claimed that its retail costs avoided had reduced.
- 12.4 The latest example of Telstra's cynical gaming of LCS pricing is the current undertaking. Remarkably, Telstra finds it has been in error all these years, and in fact the true LCS price, calculated on a retail minus basis, is much lower than it once was. However, true to form there is an unobvious twist, since Telstra claims that the amount by which LCS is reduced must now be recovered from PSTN originating and terminating charges. Either Telstra is wrong now – or it was wrong in the past.

#### *Fails to deal with pricing imbalance*

- 12.5 Further, Optus remains troubled that the current RMRC approach also leaves resellers facing higher costs than those faced by Telstra Retail. In its briefing pack of 11 August “Telstra: The Path Forward”, Telstra indicated that it currently enjoys EBITDA margins of 54.3% on Local Calls and 55% on Basic Access services. These margins appear totally at odds with an access pricing regime that applies no discount to Basic Access and only a 32% discount to Local calls. There is a clear need for a fresh examination of Telstra’s costs.
- 12.6 As noted above, further details on the above concerns are set out in Optus’ separate submissions to the ACCC in respect of its current consultation on the LCS declaration<sup>17</sup>.

#### *Way forward*

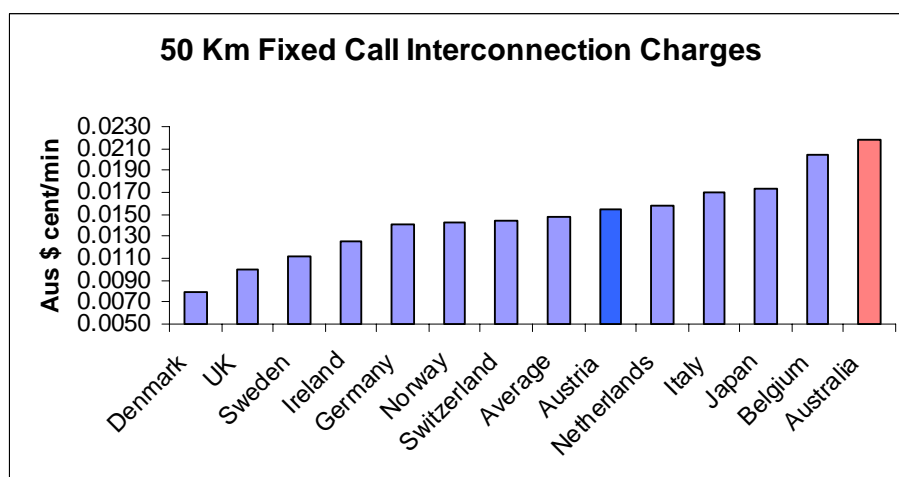
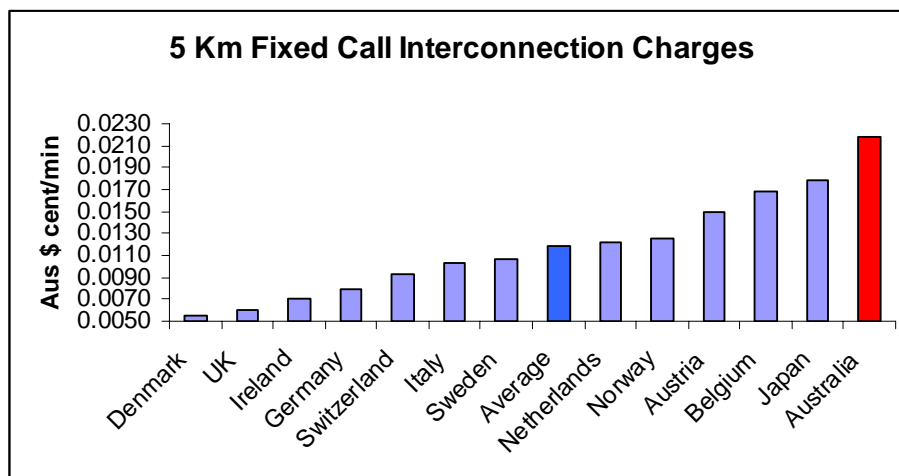
- 12.7 Optus considers that most of these concerns can be addressed by setting wholesale line rental and LCS prices on a TSLRIC basis where this is found to result in a price below that produced by the current Retail Minus Retail Cost approach. However, the key to this is the development of a sufficiently robust and transparent model that is capable of producing a reasonable estimate of efficient forward looking TSLRIC costs. Such a model would clearly need to take account of the expected cost savings that are likely to be derived from the move to an efficient NGN as outlined above.
- 12.8 Until such a model has been developed it might be more appropriate to continue to set LCS prices on the basis of RMRC. However, as proposed by the ACCC any retailing discount related to line rental should be allocated to the wholesale line rental service and not local calls.
- 12.9 Further, Optus submits that for the purpose of assessing Telstra’s undertaking the ACCC should undertake a detailed examination of Telstra’s applied RMRC, including an examination of the underlying RAF data.
- 12.10 Optus has a number of concerns with respect to the use of data from Telstra’s RAF data for setting LCS prices.
- (a) This data has not been made available to independent scrutiny or comment by access seekers. Telstra has simply provided high-level totals for the retailing costs, without providing any context for these. For example, it is not possible to determine whether all appropriate costs have been deducted, nor whether the allocation of costs to basic access and local calls appears reasonable.
  - (b) It appears that the allocations have changed significantly over-time. In previous undertakings Telstra had sought to minimise the level of retailing costs, claiming that these had reduced from previous ACCC estimates. However, now that it wishes to shift costs onto PSTN it claims these retailing costs have increased quite significantly.
- 12.11 To address these concerns Optus recommends that Telstra be required to make available its RAF data to support its RMRC calculation. This should be made available for the past four accounting periods with explanations for key changes in costs allocations across those periods. Without this information it is not possible for access seekers to make useful comments on Telstra’s proposed RMRC calculation nor can we have any confidence that Telstra is not once again gaming the process.

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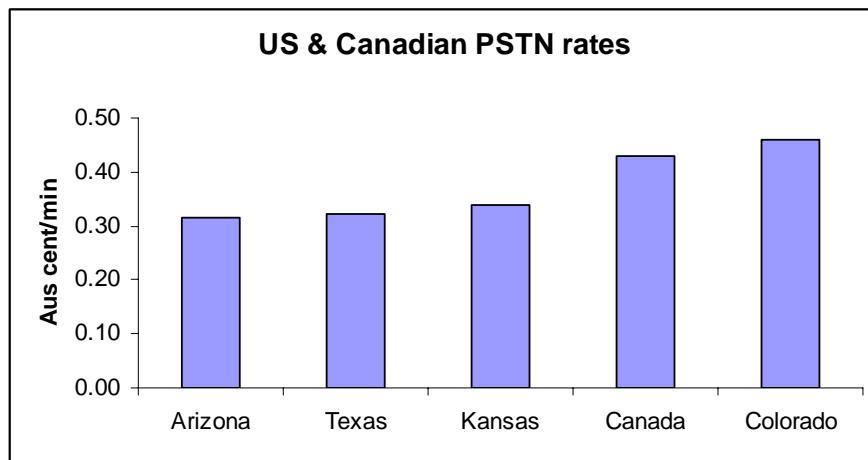
<sup>17</sup> Optus Submission Local Calling service regulation, July 2005 and Optus comments on ACCC’s draft decision on Local Carriage Services review, 30 May 2006.

### 13. International benchmarking

- 13.1 Optus submits that Telstra's proposed undertaking will result in Australia having the dubious honour of having almost the highest interconnect prices in the World. The charts below highlight the prevailing PSTN terminating interconnect charges levied by a number of incumbent carriers.



- 13.2 The above data was sourced from NERA and is based on PSTN terminating access prices rates prevailing in 2004/05.
- 13.3 We fully expect that Telstra will argue that the above rates are not particularly relevant given the geographic differences between Australia and the above countries. However, Optus notes that an examination of Canada together with various US states that have significant rural geographies confirms the view that Telstra's proposed prices are high by International standards.



13.4 It is clear from the above tables that Telstra's proposed prices for PSTN access are inconsistent with comparable benchmark prices of incumbent carriers around the world.