



TELSTRA CORPORATION LIMITED

Submission to the Australian Competition and Consumer
Commission

Response to ACCC Pricing Principles for Declared
Transmission Capacity Services

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1 Introduction and overview

Telstra welcomes the opportunity to make this submission to the ACCC ('the Commission') regarding its 'Draft Pricing Principles for Declared Transmission Capacity Services – a guide' ("Transmission Pricing Principles").

When it released its Transmission Pricing Principles, the Commission explained that:

"The issuing of pricing principles is designed to increase certainty about the ACCC's approach to determining appropriate prices for regulated access to the transmission capacity service. It should also assist industry in reaching commercial agreements on the price of the transmission capacity service, which is something the ACCC encourages."¹

The Commission considers that there are two possible pricing methodologies that may be appropriate for developing pricing principles for transmission capacity services. These pricing methodologies are:

- total service long-run incremental cost (TSLRIC); and
- benchmarking of access prices.²

The Commission's preliminary view is that transmission prices should ideally be based on the TSLRIC of providing these services. In support of this view, the Commission refers to earlier Access Pricing Principles and claims that such an approach would usually promote the long term interest of end-users and would be consistent with the reasonableness criteria under section 152AH of Part XIC of the Trade Practices Act 1974.

Commenting on the benchmarking approach, the Commission considers that there are a number of practical impediments to its use in transmission pricing. According to the Commission these are the significant differences in terms of geography, population density and traffic volumes between Australian and overseas transmission markets, which would need to be taken into consideration.

Telstra notes that, even if the Commission states clearly its preference for a TSLRIC methodology over a benchmarking alternative, its conclusion on benchmarking-based transmission capacity pricing is still ambiguous. For example, when considering the difficulty in comparing international prices, the Commission simply states that it should be mindful of the differences in market conditions. The Commission also argues that the benchmarking methodology may be useful for sanity checking any cost-based estimates.

¹ See *ACCC Media Release*, 30th June 2004, available at: <http://www.accc.gov.au/content/index.phtml/itemId/520384/fromItemId/2332>.

² The Commission considers that a retail-minus approach may not be suitable, in this instance, as the majority of transmission capacity is unlikely to be sold as a retail service, with the possible exception of leased lines. As such, there often will not be retail prices to rely on for price setting purposes. Telstra agrees on this point.

These comments seem to indicate that the Commission may refer to benchmarking results in an arbitral process.

Finally, the Commission considers it useful to articulate in more detail how it proposes to apply TSLRIC to determine transmission access prices. Accordingly, the Commission briefly defines the procedures that it would likely follow to determine transmission prices in an arbitral context.

While Telstra welcomes the definition of general pricing principles as a move toward more certainty about the ACCC's approach, Telstra wishes to submit the following:

- Telstra believes that benchmarking is not an appropriate pricing principle for a service such as the transmission capacity service and the Commission should ignore it when TSLRIC estimates are available; and
- The description of TSLRIC procedures is too general to reduce the uncertainty; Telstra would welcome more details on the implementation that the Commission would likely apply in an arbitral context.

The remainder of the submission is structured as follows:

- we first set out the reasons why we believe that the Commission should not employ benchmarking as a Transmission Pricing Principle (Section 2);
- we then comment on some elements of the TSLRIC procedure that would need careful consideration for the Transmission Pricing Principles to effectively increase certainty about the ACCC's approach to determining appropriate prices (Section 3);
- we conclude with a brief discussion of Optus' comment regarding the USO funding of transmission capacity infrastructure³ (Appendix 1).

³ See Optus, 2003, Submission to Australian Competition and Consumer Commission on Transmission Capacity Service, October 2003, at page 14.

2 Benchmarking

2.1 Introduction

Benchmarking offers a means by which regulators can gain an indication of the cost of supplying a particular service while avoiding the resource cost and delays associated with complex cost modelling exercises. The Commission explains that ‘in the absence of readily available TSLRIC information, the Commission considers that benchmarking approaches may be appropriate for determining interim or, in some cases, final prices for the declared transmission capacity service in an arbitral or undertaking context’.

As a matter of principle, Telstra believes that benchmarking may provide some valuable information to the assessment of the relative performances of telecommunications markets. That said, international price comparisons are always plagued with difficult challenges. For example, in its International Benchmarking of Australian telecommunications services⁴, the Productivity Commission reported the following factors as providing possible explanations for some of the observed differences in prices:

- measurement errors;
- external factors outside the control of industry – technological change, input prices, taxes, geography and other factors affecting the physical operating environment and the characteristics of the network;
- government involvement and interventions – including ownership, structural separation, social policies, retail price controls and competition policy – that affect the market environment and incentives for efficient outcomes, and
- internal factors – such as governance structures, corporate culture and managerial performance – that contribute to variation in productivity, profitability and prices.

In its Transmission Pricing Principles, the Commission recognises, at least partially, the difficulties involved in the benchmarking exercise. However, Telstra submits that there is a major difference between:

- duly recognising the difficulties involved in international benchmarking exercise for transmission capacity pricing, and
- correcting for these factors to form robust policy recommendations or to set regulated prices.

The Commission presents two examples of international benchmarking; one based on the performance indicators for telecommunications services published in the OECD Communication Outlook⁵ and the other on a Teligen study⁶ into the tail-end transmission

⁴ Productivity Commission, 1999, International Benchmarking of Australian Telecommunications Services, available at <http://www.pc.gov.au/research/benchmrk/telecoms/>

⁵ OECD, 2003, *Communications Outlook*, (‘OECD Study’).

⁶ Teligen, 2003, ‘Local Access Circuit Price Benchmarking for Key Asia – Pacific Countries vs. Each Other, the European Union & OECD Countries’ (‘Teligen Study’).

prices. If the benchmarking approach were to be based on the methodologies such as those described in the Draft Transmission Pricing Principles, the resource cost and delays associated with complex cost modelling exercises would indeed be avoided. That said, a benchmarking analysis would only be useful if:

- sufficiently close comparators exist, or
- 'reasonable' adjustments can be made to the comparators to take into account any significant differences between country-specific market conditions.

In the next sub-sections, we shall argue that neither condition is likely to be met in the context of transmission capacity services.

2.2 Drawbacks of international benchmarking

Even if Telstra understands that the benchmarking examples set out in the Draft Pricing Principles are only preliminary, they nonetheless illustrate the likely problems that the Commission would face if it were to choose this approach (even as a complement to a TSLRIC methodology).

2.2.1 Differences in market conditions

Transmission has a high proportion of fixed costs (trenching, fibre, remote powering etc), and lower variable costs (repeaters, amplifiers, OLT, MUX etc) with respect to traffic. This means that countries/routes with higher traffic demand will have lower unit costs and prices. The Commission correctly notes that there are a number of differences between Australian and overseas transmission markets, such as, geography, population density and traffic volumes that would need to be taken into consideration. Telstra submits that these differences would be significant enough to cause considerable estimation error. The following examples illustrate the importance of the difference in market conditions:

- in Australia, the proportion of the total population that live in the seven largest cities is about 80 per cent; in the United States, this proportion is 6 per cent; and
- the population of the United States is fifteen times larger than the Australian population and the annual GDP of the US is twenty times the Australia GDP. In spite of these differences, Australia and the United States have comparable land areas that must be served by telecommunications providers ⁷

Even though the Commission is aware of these differences, Telstra stresses that the difficulties involved with international benchmarking of transmission capacity prices cannot be minimised:

- population density is only one element of population dispersion. As such, comparisons of population density in whole countries are rarely satisfactory because they compare total populations with total land areas, irrespective of whether or not particular tracts of land are occupied. Other factors influencing

⁷ (Australia: 7.69 million km²; USA: 9.16 million km² (Continental USA) or 7.46 million km² (contiguous 48 states)).

telecommunications costs include the level of urbanisation, population distribution as well as densities within cities and towns and average distances between dwellings. In addition, topographic features (eg. mountains, waterways) and climate can cause considerable variation in costs.

- Telstra is not aware of any robust methodology that would be available to adjust for such differences in the demand and supply conditions of transmission capacity services. The following attempts to illustrate the issues associated with such adjustment methodologies:

- a) Ovum identified Australia as having a very low countrywide line density but also being highly urbanised relative to the UK and US. Ovum intended to use the results of their analysis to make adjustments, if required, to their comparisons of UK, US and Australian access charges. However, the results proved inconclusive:

“We cannot tell which has the greater effect [urbanisation or average line density] because the statistical evidence is not robust enough and, in any case, Australia falls so far outside the European/US range on access line density that there’s no way to translate our analysis between the two domains. We believe it would be unadvisable to try to adapt the main benchmark model on the basis of the Australian condition analysis ... because the uncertainties introduced are likely to undermine rather than strengthen the base case”.⁸

- b) Alger and Leung aimed at estimating the relative differences in telephony costs (the basic local service) that could be attributed solely to cross-country differences in the distributions of line densities⁹. The cost regressions scored poorly and also appeared to have an upward bias. The authors did not identify or address the issues related to the level of data aggregation used. As demonstrated by the next study, this omission is likely to have compromised the accuracy of their comparisons, in that aggregation issues and the way they are addressed can have a substantial influence on the results obtained.
- c) Cribbett analysed the differences in population distribution between Australia and several other countries (New Zealand, Finland and the US States of Alaska, California, Oregon and Washington), and estimated their impact on average telecommunication line costs¹⁰. Whilst the results are broadly satisfying in terms of country ranking, the author admits that significant variation in the magnitude of relative cost differences was apparent. Also, the study examines only the cost differences attributable to

⁸ Ovum 1998, *An assessment of Telstra’s access undertakings*, Report for the ACCC, mimeo, at page 29.

⁹ Alger, D. and Leung, J. 1999, *The relative costs of local telephony across five countries*, New Zealand Institute for the Study of Competition and Regulation, Wellington.

¹⁰ Cribbett P. 2000, *Population Distribution and Telecommunication Costs*, Productivity Commission Staff Research Paper, AusInfo, Canberra, August.

differences in line density, which, whilst already a formidable task, does not encompass the entire set of variables influencing telecommunications costs.

Telstra is concerned with the possible temptation to simply ignore the complexities involved in the necessary adjustments. In practice, the Commission would face immense challenges to adjust benchmarking prices and may have to resort to simplistic or erroneous assumptions. For example, in Table 2 of the Draft Pricing Principles, the Commission compares the EU recommended ceiling price and the Australian price for structured 45Mbit/s services. The Commission explains that the EU figure corresponds to 34Mbit/s services and suggests that a crude estimate for 45Mbit/s services can be derived by factoring-up the price by 45/34, which is probably incorrect¹¹. Whilst Telstra understands the Commission's constraints (e.g. it does not have access to the relevant price, nor to the necessary information to adjust appropriately), Telstra submits that such simplifications are likely to be prevalent in any benchmarking of transmission capacity prices.

2.2.2 Robustness of benchmarking results

Whilst benchmarking studies may offer some valuable high-level comparison of price levels, a detailed analysis illustrates the limit of simple comparisons. For example, Teligen acknowledges the existence of data deficiencies and explains that there are large variations in the prices charged by the same operator. Teligen explains that 'it is clear that data for Australia [...] may show too much variation to be trusted'¹².

The OECD study shows that Australian prices for 2Mbit/s leased lines were 29 per cent above the OECD average, 8 per cent above Canadian prices and 108 per cent above prices in the United States. The Commission contends that these percentages could be used to adjust Australian prices. However, Telstra notes that the price indices for the 2Mbit/s service in OECD countries ranges from 17 to 256. Not only does this range illustrate the importance of country-specific market conditions and their impacts of transmission capacity prices, but also, and more importantly, it makes the benchmarking results a poor measure for sanity-checking any cost model.

More fundamentally, price benchmarking implicitly assumes that the observed price levels are consistent with a sustainable long-term equilibrium. The price fluctuations observed in the recent past indicate that large adjustments have taken place. For example, in the United States following the 'technological boom', overinvestment was so great that the cost of renting an intercity data line dropped at a rate of 67 per cent per year between 2000 and 2002, but despite the stimulus to demand from these lower prices, the growth of demand fell so far behind the growth of supply that, in 2002, 97 per cent of fibre-optic capacity

¹¹ This is further explained in the next section. Furthermore, the specifications of transmission services often involve many variables, such as redundancy and route diversity, which makes 'apples for apples' comparisons difficult.

¹² Teligen Study, at page 25. Also, international benchmarking requires the translation of domestic prices, expressed in local currencies, into a common currency. While the Commission does not comment on this issue in its Transmission Pricing Principles, Telstra submits that it adds to the difficulty involved in comparing international prices.

remained unutilised¹³. Inferring a reasonable transmission capacity access price based on such instable market conditions appears to be an impossible task.

2.2.3 Use of benchmarking results

Telstra is unclear as to how the Commission would use the results from a benchmarking study of transmission capacity prices. For example, even if Australian prices for a given service were found to be 10 per cent higher on average than the prices in a 'comparable' country, there is no reason to believe that uniformly reducing Australian prices would necessarily be consistent with the Section 152AH of the Trade Practices Act.

Telstra notes that the Commission seems to consider that prices would need to be determined on a service, route **and** market basis. Telstra strongly agrees with this principle and submits that the reference to average price differences between countries would have little value to set access prices.¹⁴

2.3 Domestic benchmarking

The second benchmarking methodology identified by the Commission is the use of domestic transmission capacity service prices on competitive routes to set prices for similar services on non-competitive routes. This approach would seek to translate the price reductions or unit prices observed on competitive routes by mandating similar unit prices or price reductions on non-competitive routes.

2.3.1 Differences in market conditions

The Commission considers that it would need to be mindful of the differences that exist between domestic transmission routes. These differences are similar to those identified in the context of international benchmarking and include route length, geography, population density and traffic volumes.

Telstra submits that, as for the international benchmarking methodology, the Commission would likely face an impossible task if it were to attempt to identify and then correct for all the relevant differences between competitive and declared routes.

¹³ See Robert J. Gordon, 2003, 'High-Tech Innovation and Future Productivity Growth: Does Supply Create Its Own Demand?' in *The Global Competitiveness Report 2002-2003*, World Economic Forum, edited by Peter Cornelius, Klaus Schwab and Michael E. Porter.

¹⁴ The robustness of averaging was recently considered by the Tribunal in its review of the Commission's approval of its own access arrangement for the Moomba to Sydney Pipeline ('MPS,'). One of the issues considered in the Tribunal's review was the manner in which the Commission determined a benchmark credit rating for MPS' owner, East Australian Pipeline Limited ('EAPL'). To determine the benchmark the Commission took a simple average of the ratings of four other gas related companies, three of which had a rating of BBB (which was the rating also proposed by EAPL) and one of which, AGL, had a rating of A. The Tribunal found that: 'The effect of the decision of the ACCC was to distribute part of the A rating of AGL to the other three members of the class in a crude averaging exercise. There is no logic or reason to that approach and there is no material to suggest it has any support in the theory or practice of statistics. If attention is directed to the chosen class the only rational conclusion is that AGL was an "outrider" out of line with the other members of the class and should properly be ignored.'

A related, more fundamental point, is that in reaching its decision on the declaration of certain routes, the Commission essentially determined that the demand and supply conditions on those routes were different from the characteristics of non-declared routes. In other words, the economics of those routes are deemed to be fundamentally different. As such, Telstra submits that the necessary adjustments are likely to be prohibitive.

Furthermore, the differences between the characteristics of the market demand on competitive routes and that of declared routes, may be such that the efficient recovery of common costs involves different relative contributions. There is no a priori reason why the optimal price structure would correspond to the outcomes of a domestic benchmarking approach.

2.3.2 Tying competitive routes and declared services

Telstra submits that the domestic benchmarking approach may have undesirable effects on the pricing decisions for transmission capacity.

Telstra notes that the Commission has commented on similar arrangements in other contexts. For example, in its Review of Price Control Arrangements, the Commission explains that 'to the extent that entry occurs in metropolitan areas, the requirement to pass price declines to users in other areas may prevent Telstra from competing on price in metropolitan areas. The entrant may, as a result, gain market share even though Telstra has lower costs of serving those customers.'¹⁵

Also, in its Final Decision on Mobile Terminating Access Service, the Commission explained that it now has further reasons to doubt the theoretical basis of the retail benchmarking pricing principle. In particular, the Commission was concerned that 'mobile operators have limited incentive to reduce the price of retail mobile services if they will be required to decrease mobile termination charges as well.'¹⁶

Telstra submits that the Commission should equally be concerned about tying the pricing of competitive transmission routes to the pricing of declared transmission services.

2.4 Conclusion

Telstra shares the Commission's concerns regarding the impediments of a benchmarking approach.

We do not believe that sufficiently close comparators exist or that reasonable adjustments can be made to the comparators to take into account the significant differences between country-specific market conditions for transmission capacity. Also, a decision based on benchmarking would be too generic to be applicable to the transmission capacity services which are predominantly route specific.

¹⁵ See ACCC, 2004, 'Review of Price Control Arrangements' at page 24.

¹⁶ See ACCC, 2004, 'Mobile Services Review – Mobile Terminating Access Service' at page 197.

An efficient adjustment of the benchmarked prices would necessitate an analysis of all the factors that would affect transmission capacity prices, which would be equivalent to performing major costing exercises encompassing all these facets, not only for Australia but also for the countries used in the benchmarking study. Therefore, Telstra submits that a robust benchmarking methodology would not deliver any benefits in terms of avoiding the resource cost and delays associated with complex cost modelling exercises.

Finally, Telstra submits that the difficulties involved in the implementation of a benchmarking methodology for the transmission service are such that the simple reference to such an approach reduces the certainty about the Commission's method to determine appropriate prices for regulated access to the transmission capacity service. The scope for judgement and arbitrary adjustments appear too broad for the benchmarking methodology to be useful and Telstra strongly believes that a unique, robust methodology would be more appropriate.¹⁷

3 TSLRIC

3.1 Introduction

The Commission considers that prices based on the TSLRIC approach are consistent with those that would prevail if the access provider faced effective competition. The use of TSLRIC would encourage competition in telecommunications markets by promoting efficient entry and exit in dependent markets as well as encouraging economically efficient investment in infrastructure. In addition, the use of TSLRIC would encourage the efficient use of existing infrastructure and provides incentives for access providers to minimise the costs of providing access over time through efficient investment. Finally, the Commission considers that TSLRIC promotes the legitimate business interests of the access provider by allowing them to fully recover the efficient costs of producing the service.

¹⁷ In its decision on the Moomba Adelaide Pipeline System, the Australian Competition Tribunal was critical of the Commission's decision to determine the cost of line pipes based on the lowest internationally available price at a particular point in time. The Tribunal noted the uncertainty over the values to be adopted, and also highlighted the asymmetric consequences of the errors involved in adopting this value. It noted 'For planning purposes, however, this price cannot be known with any certainty and a prudent operator would likely find it to be commercially unwise to plan a pipeline project based on the lowest known line pipe cost, or even the average line pipe cost of suppliers in the lowest-cost producing country. The risk here is highly asymmetric, all on the upside. Thus a prudent operator, in the absence of perfect information, would factor into its estimates the expected value of line pipe costs, based on its estimation of the range of likely future prices and the assessed probability of occurrence of each possible price. In the absence of knowledge of such a probability distribution at the planning stage, an operator might therefore obtain some indicative estimates based on less-than full information being available, compared with a specific tender to job specifications, and take either a simple arithmetic average, a modified arithmetic average, or the median of these prices as the indicative planning parameter value. It would be a highly risky commercial action to take the lowest figure found in any such non-detailed price-seeking activity'. See Australian Competition Tribunal, *Application by Epic Energy South Australia Pty Ltd* [2003] ACompT 5, paragraphs 63-64.

Telstra believes that a TSLRIC methodology may have these properties. However, Telstra submits that, for the access prices to be consistent with the reasonableness criteria, there are a number of implementation issues that need to be addressed. Addressing these questions would also reduce the uncertainty about the Commission's approach. In what follows, Telstra wishes to suggest some of the areas that would require careful consideration.

3.2 Implementation issues

3.2.1 Relevant service

The Commission defines the first step of the TSLRIC procedure as the specification of the relevant market, service or route into which the transmission element falls (e.g. regional-regional, CBD tails or Melbourne-Morwell), reflecting common functional or volume characteristics.

Telstra believes that the Commission should clarify at least two points.

First, the Commission should define explicitly what it considers as the relevant 'increment'.

An increment defined in terms of services supplied to access seekers (only) will provide a very different cost (and access price) compared to an increment defined in terms of the services supplied both to access seekers **and** by Telstra to itself.¹⁸

Telstra believes that it is reasonable that the increment be defined in terms of the total volume of the service, including both sales to competitors and Telstra's supply to itself. Such an approach would be consistent with the Commission's previous application of the TSLTRIC methodology.¹⁹

Second, the Commission should define the degree of aggregation or commonality between different routes. Telstra submits that the Commission should address the following questions:

- would the regulated price be set in terms of bandwidth and distance only? or
- would the Commission estimate different costs, and set different prices, for specific routes (eg: Sydney-Albury and Melbourne-Geelong)?

Telstra believes that, in principle, common prices could be determined for routes with similar distances, traffic volumes and build requirements. However, the task of categorising such common routes is likely to be a resource intensive exercise and be subject to a degree of subjectivity. As explained in the previous section, this is because the cost of providing transmission capacity service is highly specific to particular demand and supply conditions on a given route.

¹⁸ The "access seeker only" approach imputes to the access seekers all of the scale economies involved in the service's provision, which would harm both Telstra's legitimate business interests and discourage economically efficient levels of investment.

¹⁹ For example see ACCC, 2000, "A report on the assessment of Telstra's undertaking for the Domestic PSTN Originating and Terminating Access services".

Telstra would welcome some clarification from the Commission on this point and submits that a robust pricing methodology should be based on a cost estimation at the route level.

3.2.2 Network configuration

To estimate the cost of providing transmission capacity services, the Commission will have to determine which network configuration should be used. In particular, the Commission will have to address the following questions:

- what should be the technology used to cost the transmission capacity services?
and
- should the cost be based on the actual capacity (installed) or on the actual demand plus a level of excess capacity?

Regarding the first question, rather than using the “best available technology”, Telstra submits that the cost modelling should be based on the “best technology in widespread use”. This reflects, at least, two considerations:

- unless the depreciation methodology and cost of capital correctly reflect the effect of technological progress, modelling “best available technology” would penalise the access provider for not constantly adopting the most recent breakthrough. That is, a TSRLIC that envisions a firm that instantly and **costlessly** reinvents itself in response to technical progress would result in prices that do not grant even an efficient firm an opportunity to recoup its investment. Such a standard seems unreasonable in that it would generate access prices almost constantly harming the legitimate business interests of the access provider, and
- no less importantly, the cost properties of recently developed technologies are typically poorly known, and the optimisation tools available for modelling their application are often experimental. As a result, cost estimates for networks embodying such technologies would be highly sensitive to the precise assumptions made and would have very wide confidence intervals.

A strict application of the ‘forward looking’ standard should be such that, in any time period in which investment occurs, the net present value of present and future revenue provided by competitive equilibrium prices must equal the net present value of present and future costs of the investment.

When there is technical progress (e.g. when the cost of providing transmission capacity services falls over time), the equilibrium price must be higher initially in order to compensate for the fact that it will be lower later. This is the only way that market-clearing prices will allow the firm to recoup its investment costs over the economic life of the asset. The higher initial price reflects the economic benefits of delaying installation in anticipation of technical progress.²⁰

²⁰ Mandy D, 2002, ‘TELRIC Pricing with Vintage Capital’ *Journal of Regulatory Economics*, 22: 215-249.

On the dimensioning question, Telstra agrees with the Commission that the allowance for efficient excess capacity should reflect industry norms. That said, Telstra submits that the actual (installed) transmission capacity would provide an uncontroversial indication of the efficient capacity, unless some strong evidence to the contrary can be found. Such an approach would reduce the need for arbitrary assumptions.

3.2.3 Cost allocation and recovery of common costs

Telstra would welcome a more detailed explanation on the Commission's proposed methodology to allocate costs between different services. In particular, Telstra submits that the question of cost sharing between different transmission bandwidths needs to be addressed.

3.2.4 Network cost sharing between different transmission bandwidths

Whilst this cost allocation is not discussed in the Commission's guide, Telstra submits that it is a relevant parameter of the TSLRIC methodology. Most of the network costs of transmission capacity are common to the different bandwidths provided on a given route. However, the relative costs of providing these services are not a simple function of the ratio of their bandwidths.

For example, one STM-1 transmission container is used to provide a 140/155Mbit/s service. However, one STM-1 container can accommodate only three 34/45Mbit/s services. Further, the bandwidth used to provide a 34/45Mbit/s service could be used to provide twenty-one 2Mbit/s. In other words, only sixty-three 2Mbit/s services are available in a STM-1, which could otherwise be used for a 140/155Mbit/s service.

Telstra submits that the Commission should take into account such technical constraints in its cost allocation between different bandwidths.

3.2.5 Non-network cost sharing between different transmission bandwidths

Telstra submits that it may not be appropriate to allocate some non-network costs (such as billing and customer relation costs), between different transmission capacity services based only on their bandwidth. For example, a large proportion of the costs associated with serving a customer using a 2Mbit/s service may be the same as the costs of serving a customer using a 155Mbit/s service.

Telstra would also welcome some details on the Commission's proposed approach on this matter.

3.2.6 Cost of capital and annualisation

The Commission explains that the capital would need to be annualised, taking into account asset lives and a cost of capital component.

First, the Commission's preliminary view is that a suitable cost of capital would be that calculated for Telstra's PSTN. Telstra believes that there is no a priori reason why the same WACC would be efficient for the PSTN originating and terminating services **and** for

the transmission capacity service. In particular, Telstra submits that the risk taken by an investor in transmission capacity may well be different from the risk involved in an investment in a PSTN. Such a difference would translate into a different beta parameter and ultimately in a different cost of capital.

Second, the Commission does not specify the methodology it would likely use for determining the relevant asset lives. Telstra would welcome the Commission's view on the methodology it intends to apply to make the relevant assumptions on the economic lives of the assets used to provide the transmission capacity services. In particular, Telstra submits that there may be a significant difference between the physical and economic asset lives. For example, the 'physical life' of software used to manage transmission traffic is virtually infinite. On the other hand, its economic life is limited by technological obsolescence.

Third, the Commission does not comment on the relevant depreciation schedule to be used in the annualisation of the capital costs. Telstra notes that the Commission used a tilted annuity approach in its PSTN modelling, with the tilt factor depending on the expected price trends of assets. Telstra would welcome the Commission's view on the approach it would use in an arbitral context.

3.3 Conclusion

Telstra values the issuing of pricing principles. Telstra also understands that the Commission considers that it would be more suitable to determine prices on a case-by-case basis as required in an arbitral context.

However, Telstra would welcome more specific details about the TSLRIC procedures the Commission is likely to follow to determine transmission capacity prices. This is because, even if the principles are well-documented, the practical implementation of an effective pro-competitive access regime typically involves some debates over the many parameters needed to estimate a TSLRIC.

Telstra believes that, for the regulatory uncertainty to be reduced, the Final Pricing Principles Guide should clarify the Commission's position on the steps described in section 6.1 of the Draft Pricing Principles. In particular, Telstra would welcome the Commission's views on the following:

- the relevant service and the degree of route aggregation;
- the network configuration and dimension;
- the cost allocation methodology; and
- the cost of capital and annualisation.

Appendix 1: USO funding

The Commission refers to Optus' submission, in which the following comments are made:

“Assuming that the ACCC decides to adopt TSLRIC as a pricing principle, when attempting to estimate the TSLRIC the ACCC must bear in mind that a large portion of the costs of transmission have been funded not by Telstra per se, but by the USO.

To elaborate, because the USO provides for the provision of certain telephony services to net cost areas (NCAs), it has necessitated the building of network infrastructure to NCAs. Therefore, the costs of the USO reflect the costs of building and maintaining that infrastructure.

To the extent that many of Telstra's monopoly transmission routes fall within NCAs, the network costs of transmission over those routes should not be recoverable by Telstra.”²¹

Optus suggests that a large portion of the costs of transmission have been funded not by Telstra per se, but by the USO.

This comment is misleading and, more importantly, based on incorrect premises.

First, Optus seems to overlook that Telstra only recovers the net avoidable cost of providing USO services. Contrary to Optus' claim, even if a transmission route falls within a Net Cost Area (NCA), the costs may not be avoidable absent the USO and hence would not be recovered through any USO funding. For example, if there were profitable areas further along the transmission route (i.e. further along from a recognised USO area), then intermediate transmission capacity investment would not be completely avoided, as it would be needed to serve the profitable areas further out. In addition, a transmission network may traverse a NCA without providing any services to that area, for example, an intercapital transmission link may pass through a NCA, but not be configured to pick up traffic from the local exchange, which could be served by a separate transmission network.

Therefore, just because a transmission network component falls within a USO area does not mean it will be included in the USO costing and hence recovered (partly) via the USO regime. In other words, any USO funding of transmission services would be incidental and the bulk of it would have come from Telstra in any case.

Second, for the purposes of calculating indicative charges for domestic PSTN origination and termination, the Commission has subtracted the entire USO revenue contributions (ie including a small portion notionally related to avoidable transmission costs) of all carriers (including Telstra) from line costs for the purposes of calculating the access deficit contribution. Therefore, the USO is treated fully as funding source for basic access, so that

²¹ Optus, 2003, Submission to Australian Competition and Consumer Commission on Transmission Capacity Service, October 2003, at page 14.

it need not be taken into account again for transmission services. Indeed, to count it towards the cost of transmission services would amount to double counting.

Finally, Telstra submits that, if Optus' comment were based on correct premises and if the USO funded a large portion of the costs of transmission, the efficiency of a TSLRIC-based access price would be greatly harmed.

This is because the total USO net costs are shared among participating persons (i.e. carriers)²² and the amount contributed by each carrier is based on its share of total eligible revenue. In simple terms, eligible revenue is calculated as the gross sales revenue of the carrier across all its operations less a series of revenue and expense deductions.²³

Assume, for the sake of argument, that the full costs of transmission capacity were recouped through USO funding. According to Optus' proposed methodology, the access price for transmission capacity services to be equal to zero.

Whist transmission costs would be recouped, such an access price would distort the incentive to use transmission capacity assets. Each carrier would have an incentive to apply for (declared) transmission capacity without bearing the true incremental cost of such a demand.

Telstra submits that, because USO funding is essentially based on a lump-sum payment based on carriers' total revenues, it does not provide the correct incentive to use, and invest in, telecommunications assets.

²² Any entity that holds a telecommunications carrier licence for any time throughout a financial year is a participating person under the USO regime.

²³ For more information on the calculation of eligible revenue, see ACA, *Telecommunications Universal Service Obligation (Eligible Revenue) Determination 2003.*, available at http://www.aca.gov.au/aca_home/legislation/radcomm/determinations/telecom/USO_2003.pdf