



Telstra Corporation Limited

**Productivity Commission's
Draft Report on
Telecommunications Competition Regulation**

Further Submission

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1 Overview

At the end of June 2001, the Australian Competition and Consumer Commission (“ACCC”) submitted its response¹ to the Draft Report entitled *Telecommunications Competition Regulation* published by the Productivity Commission (the “Commission”) in March 2001. Many of the issues addressed by the ACCC in its submission were also examined by Telstra in its own submission to the Commission dated 19 July 2001.²

There are several issues of contention between Telstra and the ACCC—the need for more detailed legislated pricing principles, the case for changes to the declaration criteria and the benefits of awarding access holidays to certain types of risky investment.

However, the ACCC submission also includes a number of specific points which, taken together, tend to create the impression that the Commission is somehow mistaken in its belief that the ACCC may have set the prices of certain services below long-run costs. As the Commission will be aware from our earlier submissions, and from the fact that Telstra has appealed certain ACCC determinations as to the price payable for PSTN originating and terminating access, Telstra does not agree that the Commission is mistaken. Indeed, there are several parts of the ACCC’s submission that actually reinforce Telstra’s position that the ACCC’s application of Part XIC of the Trade Practices Act 1974 (Cth) (the “Act”) is inappropriate. These include:

- the somewhat strange assertion that an aggregate comparison of the costs and revenues associated with PSTN services can demonstrate that *individual* services have not been mispriced by the ACCC;
- the persistent reference to TSLRIC cost estimates that exclude the indirect costs of providing services and contributions to the access deficit, when the ACCC’s definition of ‘costs’ is clearly irrelevant to price setting under its *Access Pricing Principles for Telecommunications*;
- the refusal to accept the Commission’s suggested allocation of the access deficit, for no obvious reason other than the fact that the suggested approach tends to produce higher prices for regulated services than the ACCC’s own approach; and
- the erroneous argument that regulatory interventions have promoted greater investment in telecommunications infrastructure, when in fact there is overwhelming evidence that the most heavily regulated parts of the industry are receiving less investment than might otherwise be expected.

¹ Australian Competition and Consumer Commission, ‘Response to the Productivity Commission Draft Report: Telecommunications Competition Regulation’, June 2001.

² Telstra Corporation Ltd, ‘Draft Report on Telecommunications Competition Regulation: Final Submission’, July 2001.

Although these observations are somewhat technical in nature, Telstra believes that they help demonstrate again that the ACCC's interpretation of Part XIC of the Act has produced perverse outcomes that were not intended at the time the legislation was enacted. We would be happy to elaborate on any of these points should this be of assistance.

This submission also considers the use made by the ACCC of the BIS Shrapnel report entitled "Telecommunication Infrastructures in Australia 2001" commissioned by the ACCC. That use clearly indicates that the ACCC continues to fundamentally misunderstand the relationship between regulatory intervention and investment incentives.

2 The level of access prices

In support of its assertion that it has not sought to set PSTN access prices below the long-run costs of service provision, the ACCC notes that:

"It is clear that the totality of retail and wholesale revenues from the PSTN is well in excess of attributable costs, making a substantial contribution to indirect costs (unrelated to PSTN) and profits."³

Box 3.1 of the ACCC's submission, which is used to justify this position, goes on to suggest that Telstra currently earns a 27% mark-up on costs, or a so-called 'pure profit contribution', of \$1800m per annum.

- Telstra submits that this type of analysis is entirely inappropriate and sheds no light whatsoever on the relationship between the prices and costs of PSTN services that have been declared under Part XIC of the Act. In this regard: At no point do the ACCC's calculations consider what might be a reasonable level of profit. It appears that the ACCC is confusing *ex post* profitability, which is largely irrelevant, with profitability *ex ante*.
- The definition of 'costs' that the ACCC uses in its calculations excludes the costs of many of the activities that are necessary and fundamental to the provision of PSTN services. As we emphasise in section 3, the ACCC's preference for excluding indirect costs and contributions to the access deficit from calculations of service costs is unsustainable and highly misleading.
- More fundamentally still, examining the relationship between costs and prices at an aggregate level cannot demonstrate whether or not individual services have been mispriced. Furthermore, to suggest that revenues earned on non-regulated services can somehow compensate for pricing declared services below cost, is entirely inappropriate.

³ Australian Competition and Consumer Commission, 'Response to the Productivity Commission Draft Report: Telecommunications Competition Regulation, June 2001, page 23.

This final point is particularly important if the implication of the ACCC's approach is that the price of declared services should be set below long-run efficient costs in order to levy a profits 'tax' on profitable retail activities. Such an approach would have the following adverse consequences.

- Telstra's incentives and ability to commit to each incremental new investment depend on whether or not the price that Telstra can charge allows it to cover its operating costs and to earn a return of and on capital. If prices for the corresponding services (as a group) are set below a level that allows investors to maintain their financial capital intact, Telstra will find it impossible to raise finance for new investment in those services;
- Since demand for Telstra's retail services will be more elastic than demand for its wholesale services, profit taxes in the downstream market on only one supplier will be seriously distorting relative to a uniform mark-up in the upstream access charge.
- A further consequence of these distortions is that the tax being imposed falls solely on Telstra, while the benefits from the service flow to all those using it. A tax imposed on a narrow base is, under almost any normal circumstance, more distorting than a tax imposed on a wider base; the ACCC's approach will therefore, as a general matter, lead to a higher welfare loss

It is for precisely these reason that the existing *Access Pricing Principles for Telecommunications*, as well as the legislative changes that the Commission is considering as part of the present inquiry, seek to place a floor on the level of access charges. To imply that pricing below efficient costs may be appropriate because offsetting revenue can be earned elsewhere, is simply wrong.

3 Use of TSLRIC

The ACCC's submission reinforces Telstra's concerns regarding the uncertainty associated with the implementation of the access arrangements in Australia. In its 1997 *Access Pricing Principles for Telecommunications*, the ACCC proposed TSLRIC as the general pricing principle for services that are: well established in the market; necessary for competition downstream; and where prices don't constrain prices to efficient levels. The ACCC then used its TSLRIC pricing approach to assess both of Telstra's PSTN undertakings. In its pricing principles and its assessments of Telstra's undertakings, the ACCC defined and implemented TSLRIC as including a contribution to common costs not incremental to a particular service. In both assessments of Telstra's undertakings, the ACCC defined and implemented TSLRIC as including a contribution to the access deficit.

Since that time, the ACCC has introduced two new variants of TSLRIC:

- "pure TSLRIC", which the ACCC defines as TSLRIC exclusive of any contribution to indirect costs and exclusive of a contribution to the access deficit.

In its submission, the ACCC defines pure TSLRIC as excluding a contribution to indirect costs⁴ where it defines indirect costs as “a contribution to corporate overhead costs that lie totally outside the PSTN itself, and cannot sensibly be attributed to local call production *per se* (ie, such costs would still be largely incurred whether or not local calls are produced)”. In the final NERA report, indirect costs are defined as other capital costs and operating costs which are relevant to call conveyance and access but which do not form part of the direct “network” costs. NERA (and subsequently the ACCC) defines the following cost categories as indirect costs: land, motor vehicles, buildings, office equipment, general computers, legal, accounting and human resource expenses; and

- “TSLRIC+” which the ACCC defines as TSLRIC inclusive of indirect costs and exclusive of a contribution to the access deficit.

Further, the ACCC has renamed TSLRIC that is inclusive of both a contribution to corporate overheads and a contribution to the access deficit as “TSLRIC++”.

3.1 Inconsistency with legislative criteria

In Telstra’s view, the ACCC’s new variants of TSLRIC, introduced years after its initial pricing principles and well after its assessments of Telstra’s PSTN undertakings, creates substantial uncertainty over future access prices. For example, based on the ACCC’s original definition of TSLRIC used in assessing Telstra’s two PSTN Access Undertakings (which it now refers to as TSLRIC++), the ACCC’s prices determined for 00/01, when calculated on the basis of an average 8 minute local call, result in a TSLRIC price of 21.21 cents for every local call carried on Telstra’s network. The ACCC suggests that excluding indirect costs and an access deficit contribution to estimate “pure TSLRIC” reduces the costs allocated to local calls to 10.7 cents per call.

Telstra is extremely concerned that the ACCC has introduced these new variants of TSLRIC at this late stage in order to:

- justify its position in relation to excluding an access deficit contribution in the charges for unbundled local loop services;
- explain the blatant inconsistency between its own TSLRIC estimates and its LCS pricing decisions; and
- justify its TSLRIC estimate of Telstra’s PSTN costs. In particular, the ACCC suggests that, when the rate it determined for PSTN access is compared to this new variant of TSLRIC, pure TSLRIC, instead of the ACCC’s previous definition of TSLRIC, the rate appears extremely generous.

⁴ In its final pricing principles on local carriage services (“LCS”) in November 2000, the ACCC defines pure TSLRIC as excluding costs that are common to more than one service, and excluding a contribution to the access deficit.

In Telstra's view, a PSTN rate that fails to allow Telstra to fully recover its efficiently incurred costs should not be considered generous, but a minimum requirement. Telstra therefore takes issue with the impression the ACCC seeks to create that its new variants of TSLRIC (which fail to make a contribution to indirect costs and the access deficit contribution) are consistent with the legislative criteria to which the ACCC is required to have regard when determining access prices.

3.2 Pure TSLRIC

An access price for telecommunications services that fails to make a contribution to indirect costs would prevent the access provider from fully recovering its efficiently incurred costs and would therefore be inconsistent with the access provider's legitimate business interests. Such an approach would also discourage investment in competing infrastructure, as it would always be more attractive for entrants to provide services using access-based entry at the ACCC's pure TSLRIC cost level, rather than deploying their own infrastructure and incurring associated indirect costs. This is the case even when they can do so more efficiently than the access provider. In downstream markets, a price excluding a contribution to indirect costs would also allow inefficient access-based entry, as access seekers would face substantially lower total costs than the access provider and could compete successfully even with a higher cost structure.

It is for these reasons that the ACCC's 1997 *Access Pricing Principles for Telecommunications* explicitly allowed for the recovery of common costs not incremental to a particular service in access prices:

"The second type of common costs are not incremental to a particular service in the sense that they are not avoided if the firm does not produce the service. However, they are incremental in the sense that they would need to be incurred by an efficient firm if the service was provided on a stand-alone basis. An efficient multi-product firm would have the expectation of recovering, in some manner, these common costs. As a result one may expect the price of the firm's services (including pricing access) to incorporate some contribution to these costs."⁵

The ACCC's footnote to the above paragraph explicitly acknowledges the difficulties associated with setting an access price without a contribution to common costs:

"Failing to account for these common costs could violate the legitimate business interests of the access provider, reduce incentive to maintain and invest in infrastructure and distort the choice of technology towards technologies with low common costs."

In the long term, therefore, an access price that excludes a contribution to common costs, such as the indirect cost contribution to overheads excluded by the ACCC under pure TSLRIC, is unsustainable. It is for these reasons that, in estimating cost-based access prices for telecommunications services, it is widely accepted and general practice to include a contribution to indirect costs.

⁵ ACCC, *Access Pricing Principles for Telecommunications*, 1997.

Therefore, the ACCC's first variant on TSLRIC - pure TSLRIC (which excludes a contribution to indirect costs) - is inconsistent with the ACCC's own general *Access Pricing Principles for Telecommunications* and should not be considered as an appropriate approach for access pricing.

3.3 TSLRIC+

An access price that prevents Telstra from fully recovering the access deficit would be inconsistent with the legislative criteria.

The inter-operability of the CAN is vital to the statutory objective of "achieving any-to-any connectivity in relation to carriage services that involve communication between end-users" as specified in section 152AB(2)(d) of the Act.

All consumers of call services benefit from any-to-any connectivity, and therefore from the existence of the CAN. This is because, by enhancing the range of parties whom they may call and from whom they may receive calls, the value which they derive from connection to the network is increased. Therefore, economic efficiency considerations, including the principles of efficient "tax" recovery, dictate that all consumers that use Telstra's CAN should make a contribution to the access deficit. This is the case even if a customer uses another service provider to supply its local calls, so long as the service provider uses Telstra's CAN to provide service to end-users.

This is consistent with the approach taken by the ACCC in its assessment of Telstra's first PSTN undertaking. The ACCC concluded that the access deficit should be allocated equally across all PSTN traffic using the CAN, including local calls and PSTN access. The ACCC described this option for recovering the access deficit as follows:

"This means that domestic PSTN originating and terminating access contributes the same on a per end minute (or per call end) basis as all other calls that use the CAN. It is important to note that this serves as an allocation mechanism only. It need not mean that carriage service providers derive revenue from calls in a corresponding fashion to recover the charge."⁶

In order to recover the access deficit that has been allocated to PSTN traffic, Telstra must mark-up the retail price of its PSTN call services. When a customer uses a service provider other than Telstra to provide PSTN calls, it is impossible for Telstra to do this. Therefore, a contribution to the access deficit must be included in the access price for all PSTN services. This ensures that both Telstra and access seekers using Telstra's CAN mark-up the retail price of PSTN call services to the same degree to recover Telstra's access deficit. This is so, although they may spread that mark-up among the various services in differing ways.

Not allowing recovery of the access deficit would create inefficiencies similar to those that would arise from not allowing recovery of indirect costs. Without such a contribution to the access deficit in the PSTN charges, Telstra would not be able to fully recover the

⁶ ACCC, *Assessment of Telstra's Undertaking for Domestic PSTN Originating and Terminating Access*, Final Decision, 1999, page 59.

deficit and the access charges would be inconsistent with its legitimate business interests. In addition, Telstra would not be able to compete on its merits in the provision of PSTN services. This would encourage inefficient entry and discourage efficient investment. If Telstra were prevented from fully recovering the access deficit, then it would have no incentive to invest in the CAN to maintain or improve service quality, even if consumers valued this investment highly.

The importance of recovering the access deficit in access prices has been recognised on many occasions by the ACCC. For example, in April 1999, the ACCC released draft principles for calculating and recovering the access deficit. In considering whether there should be any contribution to any access deficit in charges for PSTN originating and terminating access, the ACCC said:

“As Telstra incurs a residential access deficit as a result of the retail price controls, it is important that there be scope for Telstra, operating efficiently, to recover the deficit in order to:

- Provide incentives for future investment in the CAN;
- Fund the maintenance of the CAN;
- Protect Telstra’s legitimate business interests by avoiding under recovery of costs; and
- Avoid inefficient build/buy decisions – if there is no or limited scope for Telstra, operating efficiently, to recover the costs of the CAN, there will similarly be limited scope for an efficient competing carrier to recover the costs of investing in an alternative CAN – this in turn will increase the incentive for other carriers to use Telstra’s CAN rather than to build alternative infrastructure, even if it is more efficient to do so.”⁷

4 Local call resale

The ACCC claims that Telstra’s calculation of local call costs, based on the ACCC’s own TSLRIC analysis, is incorrect because the access deficit and indirect costs are not part of the cost of producing a local call. Telstra has never claimed that its estimate of the ACCC’s local call cost is the production cost of a local call. Telstra has simply added up the costs that the ACCC has allocated to local calls in its TSLRIC analysis of Telstra’s most recent PSTN Undertaking (a price which Telstra believes is too low) and highlighted the large discrepancy between these costs and the costs the ACCC will likely only allow Telstra to recover through its local call resale pricing approach indicated in its November 2000 Pricing Principles for the LCS.

The ACCC itself stated in its final report on Telstra’s second PSTN undertaking that the call conveyance costs (that is, switching and transmission costs) associated with PSTN traffic are extremely insensitive to traffic volumes:

⁷ ACCC, *Principles for Determining Telstra’s Access Deficit and Contributions by Interconnecting Carriers and Carriage Service Providers*, 1999.

“The presence of fixed network costs such as trench and modularity of equipment means that traffic increases only slightly increase total network costs. This means that over a range of increases in traffic and call volumes, only a relatively small proportion of equipment is traffic sensitive (generally ports and switch processors). For example, a 10 per cent increase in the number of calls produces only approximately a 1 per cent increase in total conveyance costs. A 10 per cent increase in the number of call minutes (say under the assumption of greater call holding times) produces only approximately a 0.6 per cent increase in total conveyance costs. Generally this means that for a given increase in traffic, transport costs per minute of traffic will fall.”⁸

If the ACCC were correct, then its estimate of the production costs of a local call, which it defines as the directly attributable incremental cost of a call, as 10.7 cents would seem to be extremely high.

Rather, Telstra believes that the ACCC’s estimate of 10.7 cents per local call reflects the common switching and transmission costs that the ACCC allocates to local call traffic, based on the volume of local call minutes carried over this equipment. The ACCC uses the same process to allocate indirect costs and the access deficit to local calls. Therefore, the only difference between the ACCC’s “production cost” estimate and Telstra’s estimate of the ACCC’s local call costs is that the ACCC now excludes the indirect costs and the access deficit contribution that it allocated to local calls. For the reasons outlined in the previous section, Telstra does not believe that excluding these costs is consistent with full cost recovery or the legislative criteria.

The ACCC also suggests that the relationship between the length of a call and its cost is not proportionate because fixed call set-up costs are spread over more minutes and hence the average per minute cost would overstate the cost of these longer calls. The ACCC has stated that the cost-volume elasticity of a call is 0.0006 with respect to minutes and 0.001 with respect to calls. Hence, clearly, under the ACCC’s TSLRIC analysis, the incremental cost of a local call has little to do with its duration. However, this does not mean that the ACCC does not assign responsibility for recovery of common costs to local calls. In fact, the ACCC’s analysis assumes that local calls should recover some 70% of PSTN costs. On average, Telstra calculates that based on its decision on Telstra’s most recent PSTN Undertaking the ACCC assigns 21.21 cents of costs to every local call in 2000/01. If the ACCC is really referring to call set-up costs, it is difficult to understand how these costs make an important difference to the local call cost. According to the ACCC’s final report on Telstra’s second PSTN undertaking, only “approximately 5 per cent of conveyance costs relate to call set up”.⁹

⁸ ACCC (2000), *“A report on the assessment of Telstra’s undertaking for the Domestic PSTN Originating and Terminating Access services”* page 41

⁹ ACCC (2000), *“A report on the assessment of Telstra’s undertaking for the Domestic PSTN Originating and Terminating Access services”*, footnote 53.

Telstra is simply seeking to be permitted to recover the efficient costs associated with the provision of PSTN services. If the ACCC sets access prices to prevent Telstra recovering these costs, then Telstra should be entitled to know from where the ACCC expects Telstra to recover these costs.

5 Allocation of access deficit

The ACCC suggests that the Commission's approach to allocating the access deficit would fail to promote competition because it results in a much higher estimate than the ACCC's approach to allocating the access deficit.

This is the same response that Telstra often encounters from the ACCC when proposing an alternative approach to the one the ACCC has used. However, Telstra does not find the answer provided by the ACCC compelling. The ACCC does not even appear to consider the possibility that it has grossly underestimated the efficient access price and hence mistakenly set access prices too low and incorrectly rejected Telstra's PSTN undertakings. It appears that the ACCC may have some predetermined figure for the PSTN access charge and if an alternative approach, even correct on efficiency grounds, exceeds this, then it is simply determined to be too high and rejected on that ground alone.

The ACCC interestingly suggests that the retail price controls, together with a higher access charge, would place a two-way squeeze on rivals due to the retail price caps. Telstra finds this an extremely bizarre argument. Surely it is appropriate to set the access charges to allow the full recovery of efficient costs, even if it results in a charge higher than expected by the ACCC. If the retail price controls prevent these costs from being recovered, then perhaps it is necessary to revise the retail price control arrangements. Telstra notes that it was the ACCC that recommended the continuation of the price control arrangements to a wide basket of services including STD, IDD and fixed-to-mobile services.

The ACCC also expresses concern regarding Telstra's ability to strategically increase the local call deficit burden on other carriers. However, the Commission's approach does not include any variables that could be determined by Telstra. Rather, the Commission proposes the use of the local call price-cap as the basis for determining the local call deficit. If Telstra prices under this cap for commercial reasons, then this would not be reflected in the local call deficit. This is exactly the same concept as used by the ACCC itself to determine the access deficit, therefore, Telstra finds it puzzling why the ACCC would be reluctant to use the same approach to allow full cost recovery for local calls.

Finally, the ACCC suggests that, because there is no linkage between the access deficit contribution made by a customer and the cost of that customer's line, the Commission's approach to allocating the access deficit would increase investment distortions. Telstra recognises that the recovery of the access deficit gives rise to a distortion, however, it is unaware of any analysis undertaken by the ACCC that shows that this distortion is greater than that which results from preventing Telstra to recover a large proportion of the access deficit at all.

6 Investment in telecommunications infrastructure

Telstra notes the release of the BIS Shrapnel report entitled *Telecommunication Infrastructures in Australia 2001* referred to in the ACCC's submission and the claims by the ACCC that:

“Contrary to claims frequently made by Telstra, one of the key messages of the report is that increased competition in the industry has been accompanied by greater investment in telecommunications infrastructure.”¹⁰

The ACCC also appears to take credit for this investment:

“Infrastructure competition is growing across the Australian telecommunications market, with some of the highest levels of new investment occurring in the sectors where competition is *bolstered by regulation*.”¹¹

Telstra submits that the ACCC's response to the BIS Shrapnel report clearly indicates that it continues to fundamentally misunderstand the relationship between regulatory intervention and investment incentives.

As the Commission is aware, Telstra has never claimed that there is no investment in telecommunications infrastructure in Australia; rather, Telstra asserts, and has provided significant evidence to support its assertion, that the Australian telecommunications access regulatory regime has substantially *distorted* investment incentives.

Specifically, Telstra submits that the proclivity of the ACCC to determine access prices for declared services at below cost-reflective prices distorts the build-buy decision, particularly in high cost parts of the country. In particular, Telstra contends that the various published pricing decisions of the ACCC with respect to access to the local loop have undermined incentives for competitors to invest in alternative *access* infrastructure in rural and regional Australia.

Telstra supported this contention by providing the Commission with detailed geographical information on local number porting requests and payments for local termination minutes.¹² These constitute the best available indicators of the existence or otherwise of alternative access technologies, being far more reliable indicators of what is actually happening than surveys of investor intentions. The data clearly indicate that

¹⁰ Australian Competition and Consumer Commission, 'BIS Shrapnel Reports to ACCC on Growth of Investment and Competition in Telecommunications', Media Release, 1 August 2001, www.accc.gov.au.

¹¹ Australian Competition and Consumer Commission, 'BIS Shrapnel Reports to ACCC on Growth of Investment and Competition in Telecommunications', Media Release, 1 August 2001, www.accc.gov.au, (emphasis added).

¹² Telstra Corporation Limited, Submission to the Productivity Commission Inquiry into Telecommunications Specific Competition Regulation, 9 August 2000, pages 18-19.

competitive investment in alternative access technologies outside the major cities is negligible. Moreover, where such investment is apparent, it appears to be dominated by investment that is primarily aimed at capturing the arbitrage rents available as a result of regulatory anomalies with respect to the termination of internet call minutes.¹³

The data reported in the BIS Shrapnel report is consistent with Telstra's position. Overall, investment in alternative infrastructure is greatest where access regulation is least intrusive. For example, the report highlights the massive investments that are being made in the backbone network and in the various mobile networks – areas where the ACCC has largely refrained from trying to set access prices. Importantly, investment in backbone and mobiles network infrastructure is increasingly being undertaken outside the major urban areas.

In contrast, with respect to fixed and certain wireless access technologies¹⁴ where access regulation is most intrusive, the report concludes that the “most intensive deployment of networks by new carriers has been in the CBDs, mainly to provide bandwidth for corporate users of data and Internet services”.¹⁵ The driver behind this has primarily been to provide bandwidth for corporate users of data and Internet services, and pay TV, rather than voice services such as local calls (see pages 13-15 and page 17). The audit report shows that local access technologies such as DSL, fibre optic networks (including HFC) and broadband wireless systems like LMDS and MMDS¹⁶ are being launched by carriers in CBDs and major metropolitan areas to provide for the take-up of broadband services such as Internet, video on demand and pay TV. Whilst such technologies may well have voice capability, Telstra is of the view that investment in them is being driven primarily by their data capabilities.

¹³ Telstra Corporation Limited, Productivity Commission's Draft Report on Telecommunications Competition Regulation: Final Submission, July 2001, section 3.2.

¹⁴ A misleading aspect of the BIS Shrapnel report is the tendency to combine DSL investment with local access technologies. The provision of DSL services requires access to local access technologies, specifically access to the copper local loop. Investment in DSL (that is, the installation of equipment at customer premises and at the exchange) does not constitute investment in an alternative access technology.

¹⁵ BIS Shrapnel, *Telecommunication Infrastructures in Australia, A Research Report Prepared for the ACCC*, July 2001, www.pc.gov.au, page 17.

¹⁶ DSL, Digital subscriber Line, is the generic name for a technology that uses complex modulation schemes to extend wideband and broadband services over copper pairs. Fibre Optic networks consist of cables comprised of bundles of glass threads, each of which is capable of transmitting messages modulated onto light waves. HFC, a type of optic fibre technology, is Hybrid Fibre Coax which involves the distribution to customer premises via coaxial providing signals to and from customers. Broadband wireless networks consist of a radio transmitter which send signals on combination channels to numerous receivers. LMDS is a local multipoint distribution system and MMDS is a multi-channel multipoint distribution system. Both are broadband wireless networks which are used to offer service providers and ISPs last mile connectivity between their fixed networks and customer sites (see BS Shrapnel, *Telecommunications Infrastructures in Australia 2001*, July 2001).

Moreover, drawing on the ACCC's own analysis, the report is unable to point to more than a few disparate examples of investment outside the CBDs, let alone outside the major cities.¹⁷ Most of these examples remain in the deployment or planning stage with little guarantee that they will eventually come to fruition. Aside from some limited cable rollout, only the satellite providers (Austar and AirNet) appear to be currently providing functional services and they represent only a tiny fraction of the total market.

The report also indicates that where investment in rural and regional Australia is being undertaken, it is largely as part of a "cherry-picking" exercise designed to service larger corporate customers. With respect to the rollout of terrestrial wireless, for example, it appears that the provision of services in the corporate data market is the primary objective for most of the new investment.¹⁸ Originally, it was widely suggested by investors in these technologies that wireless local loop would provide the foundation for an alternative access network in regional Australia. Indeed, it was ostensibly for this very reason that Telstra and Cable & Wireless Optus were excluded from bidding in certain spectrum auctions in regional Australia.

A closer examination of the BIS Shrapnel report indicates that, for the overwhelming majority of Australians, especially those outside the major cities, Telstra is the only carrier that has invested significantly in "last mile" services. As Telstra has pointed out in previous submissions, this compares unfavourably with New Zealand, the United States, the United Kingdom and many European countries where very large proportions of the residential customer base now have a choice of alternative access platforms. Telstra reiterates that Australia is an outlier in terms of alternative investment in the local loop, primarily because of the regulatory regime that makes purchasing access to the Telstra network a far more commercially attractive option than taking the risks associated with investing in new infrastructure for regional Australia.

In the future, Telstra has very real concerns that it cannot responsibly continue to invest in these assets at historic levels, when those assets generate half the returns (and declining) of unregulated assets in Australia or offshore. Investors worldwide have become more conscious of the risks and associated returns when investing in telecommunications infrastructure. While there has not been a critical issue of investment in regulated assets to date, the tightening economic and competitive environment means that Telstra's Board faces an increasing tension in diverting capital to the CAN to bolster regulated service performance if the return on that capital is uneconomic. And while a substantial level of investment in the CAN will always be necessary, even if low returns prevail and the share price (and shareholders) are punished accordingly, discretionary investment will certainly be allocated elsewhere.

¹⁷ See BIS Shrapnel, *Telecommunication Infrastructures in Australia, A Research Report Prepared for the ACCC*, July 2001, www.pc.gov.au, pages 19-22 for a summary of the report's findings on metropolitan and regional investment in access networks.

¹⁸ See BIS Shrapnel, *Telecommunication Infrastructures in Australia, A Research Report Prepared for the ACCC*, July 2001, www.pc.gov.au, Chapter 9.

7 Line provisioning and trench sharing

The ACCC include an attachment to their submission which discusses three detailed aspects of assessing charges for PSTN originating and terminating access. We deal briefly with each of these issues in turn.

7.1 Line provisioning

The ACCC argues that current demand can be met with 1.3 copper pairs per telephone service. Whilst recognising that it may be efficient to provision for future demand, the ACCC assumes that an efficient operator would delay the recovery of the costs for provisioning for future demand to future periods. Currently, the ACCC assumes that there are no holding costs associated with delaying this recovery, but vaguely suggest that issues surrounding such a recovery may warrant further investigation.

Telstra believes that 2 pairs per telephone service is the minimum level of provisioning that should be used in a TSLRIC analysis because:

- 2 pairs per customer service is the minimum required to meet the Customer Service Guarantees (CSG) - any less would result in an unacceptable degradation of service; and
- provisioning assumptions used in US cost proxy models exceed 2 pairs per telephone service.

Even if 1.3 pairs per telephone service could meet current demands, the ACCC does not account for the costs of deferring the recovery to future periods. In particular, the ACCC:

- has made no provision for recovery of these deferred capacity costs in its calculation of the price path; and
- has not adjusted depreciation or the weighted average cost of capital to reflect the additional risk from further back-loading capital recovery.

7.2 Trench sharing

The ACCC allocates trench costs to the number of parties assumed to be sharing the trench on an equal basis. For example, if Telstra, Foxtel and Optus are using the trench, then they are allocated one third of the costs each.

Telstra believes that, in allocating trench costs, economic and commercial considerations must be taken into account. Most importantly, Telstra does not charge Optus or Foxtel the level of costs the ACCC allocates to these parties, as that allocation exceeds these parties' willingness to pay. For example, Foxtel will not accept trench costs in excess of alternative supply options such as satellite.