



TELSTRA CORPORATION LIMITED

Submission to the Australian Competition  
and Consumer Commission

Telstra Response to Questions from  
ACCC Discussion Paper of February 2008

PUBLIC VERSION

March 2008

## Introduction

In this submission Telstra responds to issues raised by the ACCC's Discussion Paper ("**Discussion Paper**") of February 2008 in relation to Telstra's four applications for exemption (collectively the "**Exemption Applications**") from the standard access obligations applicable to Telstra in respect of the domestic transmission capacity service ("**DTCS**") dated 21 December 2007. Terms used in this submission have the meanings defined by Telstra in its earlier submission in support of the Exemption Applications.

In responding to these questions, Telstra relies on the material it has already lodged in support of its Exemption Applications. In particular, Telstra relies on the following documents which have been provided to the Commission in support of the Exemption Applications:

- (i) Telstra Supporting Submission on Domestic Transmission Capacity Service Exemption Applications ("**Telstra Supporting Submission**");
- (ii) Statement of Mike Smart of CRA International on the economic considerations for Metro and CBD domestic transmission capacity service exemptions ("**Smart Report**");
- (iii) Statement of Craig Lordon from Evans & Peck Engineering Consultants ("**Lordan Statement**");
- (iv) Report from Market Clarity on CBD Fibre Deployment ("**Market Clarity CBD Fibre Deployment Report**");
- (v) Report from Market Clarity on Access Fibre Availability, Transmission Services and Inter-exchange Network ("**Market Clarity Access Fibre Availability Report**");
- (vi) witness statement of [c-i-c];
- (vii) witness statement of [c-i-c];
- (viii) witness statement of [c-i-c];
- (ix) witness statement of [c-i-c]; and
- (x) witness statement of [c-i-c].

Telstra's Exemption Applications seek an exemption from the standard access obligations under Part XIC of the *Trade Practices Act 1974* in relation to:

- (a) inter-exchange DTCS in 17 nominated Exchange Service Areas (ESAs) in the CBD areas of Sydney, Melbourne, Brisbane, Perth and Adelaide ("**Capital Cities**");
- (b) tail-end transmission DTCS in 17 nominated ESAs in the CBD areas of the Capital Cities;
- (c) inter-exchange DTCS in 115 nominated ESAs in metropolitan areas and certain

- regional centres; and
- (d) tail-end transmission DTCS in 128 nominated ESAs in metropolitan areas and certain regional centres at bandwidths of up to 2 Mbps.

In (a), (b) and (c) above, these areas were selected on the basis that effective competition exists in the supply of DTCS in those areas as demonstrated by their having at least three suppliers supplying, or capable of supplying, the service using their own optical fibre. In (d) above, these areas were selected on the basis that (i) declared ULLS is available for connecting end-customer points and ample competition exists in the supply of DSLAMS in Telstra's exchanges to enable the provision of substitutes for DTCS for bandwidths up to 2 Mbps and (ii) there is evidence of replicability of DTCS as there are at least three optical fibre suppliers in those areas which can potentially supply DTCS using their existing fibre or by installing new fibre to end-customer points.

Where appropriate and to ensure succinctness, Telstra refers to responses it has made to other sections of the document in instances where the Commission has requested substantially similar information in multiple questions. In addition, the Commission's numbering of the questions in the Discussion Paper has been retained for ease of reference.

## Response to Commission Questions

### 5.1 Enduring Bottlenecks

**1. *Is Telstra's methodology appropriate to determine the presence of competing fibre optic owners and providers and owners with "access fibre infrastructure" in the relevant exchange areas?***

Telstra has based the Exemption Applications on independent, robust and up-to-date information. As an example of this, the Market Clarity reports represent a rigorous attempt to identify the existence of competing fibre infrastructure using the best available information at the time.

Market Clarity's data was compiled from a range of public and confidential sources, including by means of direct questioning of fibre owners (Market Clarity Access Fibre Availability Report paragraph 2.3).

The methodology adopted by Market Clarity is a systematic process. Details of the methodology are set out in detail in the Market Clarity Access Fibre Availability Report as indicated below:

- (a) Methodology for identifying data transmission services delivered over access fibre in ESAs for all states: refer to Chapter 3 (pp.12-15).

Market Clarity's 'access fibre' classification includes fibre optical cable which could be used to provide tail transmission or inter-exchange transmission, or both; and

- (b) Methodology for detection of inter-exchange network connections in ESAs for NSW only: refer to Chapter 4 (pp.16-28).

In addition, by exercising its record keeping powers, the Commission (including via an infrastructure audit for 22 specified carriers initiated in December 2007) has compiled extensive records in relation to the infrastructure holdings of carriers. It is open to the Commission to use that data to corroborate Market Clarity's findings.

It is also important to recognise that the findings of Market Clarity are likely to constitute a conservative assessment of the existence of fibre as Market Clarity was not able to gain the full participation of all carriers in verifying the existence of inter-exchange and access fibre.

2. **Are competing fibre optic owners and providers who are present in the relevant exchange areas able to replicate DTCS services with respect to:**
- **CBD inter-exchange transmission services**
  - **CBD tail-end transmission services**
  - **metropolitan inter-exchange transmission services and**
  - **metropolitan and regional tail-end transmission services?**

The findings of Market Clarity demonstrate that competing fibre infrastructure is present in all of the ESAs covered by the Exemption Applications.

This means that DTCS should be replicable by alternative service providers.

Evidence of replicability in CBD and metropolitan areas is considered further below.

- **CBD inter-exchange transmission services and CBD tail-end transmission services**

There is strong evidence of replicability of DTCS in each of the 17 CBD ESAs.

First, the Market Clarity CBD Fibre Deployment Report determined the building count for each fibre owner in the CBDs of each Capital City. This report shows the extremely high level of non-Telstra fibre connections.

Table 1: Telstra and non-Telstra fibre building connections - December 2007

<b>Sum of Building Connections for All Carriers</b>					
	<b>Sydney</b>	<b>Melbourne</b>	<b>Brisbane</b>	<b>Perth</b>	<b>Adelaide</b>
All carriers	925	745	523	925	538
Telstra	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]
All non-Telstra	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]	[c-i-c]

Source: Market Clarity CBD Fibre Deployment Report

This is despite the fact that one carrier, [c-i-c], elected not to participate in the Market Clarity survey. This means that the count of non-Telstra fibre connections is inevitably significantly understated.

The large number of non-Telstra building connections is also evidence that non-Telstra carriers are able to obtain access to building premises and to install the requisite equipment to supply DTCS or equivalent services.

Second, the Market Clarity Access Fibre Availability Report shows the presence of at least three access fibre owners in 14 of the 17 CBD ESAs.

Table 2: Number of Access Fibre Owners in CBD ESAs

City	ESA Name	Number of Access Fibre Owners
Sydney	CITY SOUTH	8
Sydney	DALLEY	6
Sydney	HAYMARKET	5
Sydney	KENT	8
Sydney	PITT	9
Average for Sydney		7.2

Melbourne	BATMAN	12
Melbourne	EXHIBITION	5
Melbourne	LONSDALE	4
Average for Melbourne		7

Brisbane	CHARLOTTE	1	Area: 1 sq km Population: 2,146 No. of households: 786
Brisbane	EDISON	3	
Brisbane	ROMA STREET	2	Area: 0.8 sq km Population: 1,503 No. of households: 518
Brisbane	SPRING HILL	9	
Average for Brisbane		3.75	

Adelaide	FLINDERS	3
Adelaide	WAYMOUTH	9
Average for Adelaide		6

Perth	BULWER	3	
Perth	PIER	2	Area: 4.2 sq km Population: 6,204 No. of households: 2,419
Perth	WELLINGTON	7	
Average for Perth		4	

Source: Market Clarity Access Fibre Availability Report, Appendix 4

The remaining 3 CBD ESAs (namely Charlotte, Roma Street and Pier, for which Market

Clarity data indicates that there are fewer than three optical fibre owners) are each small enough (in terms of area, population and number of households served) to be traversed or serviced by fibre spurs connected to inter-exchange fibre located in the neighbouring Band 1 or Band 2 ESAs.

Third, Market Clarity separately identified the presence of numerous inter-exchange transmission fibre links in the NSW CBD ESAs (Chapter 4).

Table 3: Number of Inter-exchange transmission fibre in NSW CBD ESAs

City	ESA Name	Known IEN Fibre	Likely IEN Fibre (in addition to Known IEN Fibre)
Sydney	CITY SOUTH	[c-i-c]	[c-i-c]
Sydney	DALLEY	[c-i-c]	[c-i-c]
Sydney	HAYMARKET	[c-i-c]	[c-i-c]
Sydney	KENT	[c-i-c]	[c-i-c]
Sydney	PITT	[c-i-c]	[c-i-c]

Source: Market Clarity Access Fibre Availability Report, Appendix 5 - Table 4

Although Market Clarity did not directly survey the CBD ESAs in other capital cities for the presence of inter-exchange fibre, Telstra considers that the correlation between the counts of inter-exchange fibre (Table 3) and access fibre (Table 2) for the Sydney CBD ESAs indicates a high level of inter-exchange fibre in those ESAs as well (see Telstra Supporting Submission p. 11, Smart Report paragraphs 51-53).

Fourth, there are low barriers to entry for installing fibre optic cable for the purposes of CBD tail-end transmission services. The Smart Report concludes that installing fibre optic cable is commercially feasible in CBD ESAs. Drawing upon the cost estimates in the Lordan Statement and industry pricing in the Telsyte Report, the Smart Report concluded that fibre installation costs were relatively low compared to likely revenue because:

- (a) typically, a leased duct scenario for 34 Mbps or 45 Mbps services would provide payback of less than 1.4 years in all five CBDs, while a new duct build scenario would have a payback period of less than 3.5 years for Sydney and Brisbane and less than 4 years for Melbourne; and
- (b) typically, a new duct scenario for 155 Mbps services would provide payback of less than one year for Sydney and Brisbane, less than two years for Melbourne and Adelaide and 2.4 years for Perth.

(see Smart Report, paragraph 70)

Finally, as the [c-i-c] Statement demonstrates, Telstra has arrangements for providing access to third parties for use of Telstra's ducts in CBD areas for the purposes of installing its own fibre optic cable, allowing competing providers to avoid many of the upfront costs in providing DTCS services.

- ***metropolitan and regional tail-end transmission services***

There is also strong evidence of replicability of infrastructure capable of providing tail-end DTCS in the metropolitan and regional ESAs covered by the Exemption Applications.

Specifically, based on Market Clarity's research, Telstra has identified 128 metropolitan and regional ESAs for which there are three or more optical fibre owners with access fibre infrastructure (see Annex 1).

Nevertheless, in the Exemption Applications, Telstra has elected to limit the scope of the proposed Exemption as metropolitan and regional ESAs to DTCS at bandwidths to 2 Mbps.

As discussed in response to question 6 below, Telstra does not consider that fibre optic cable is required to provide for tail-end DTCS in metropolitan and regional tail-end transmission services in competition with Telstra. Rather it concurs with Mike Smart's conclusion in the Smart Report that ULLS would enable symmetric 2 Mbps transmission tail service to be provided by an access seeker in competition with tail-end transmission services provided by Telstra.

- ***metropolitan inter-exchange transmission services***

Telstra has provided compelling evidence of replicability of DTCS in 115 metropolitan and regional ESAs where it considers that, based on the Market Clarity reports, there are three or more optical fibre owners with inter-exchange fibre infrastructure.

In the Smart Report, Mike Smart compared the counts of access fibre and inter-exchange fibre in NSW metropolitan ESAs and identified a very high degree of overlap between metropolitan exchange service areas that have three or more access fibre owners and those that have three or more inter-exchange fibre owners (Smart Report paragraph 53).

These 115 metropolitan and regional ESAs:

- (a) have at least 3 owners, or 3 likely owners, of inter-exchange fibre; and
- (b) are connected to a citywide inter-exchange network.



Connection to a citywide inter-exchange network is established because:

- (i) *for the metropolitan ESAs:* they are contiguous with other ESAs which have 3 owners, or 3 likely owners, of inter-exchange fibre, to form a cluster that adjoins the CBD of a Capital City; and
- (ii) *for the regional ESAs:* they are contiguous with other ESAs which have 3 owners, or 3 likely owners, of inter-exchange fibre, to form a cluster in which at least one of those ESAs is connected to the CBD of the nearest Capital City-
  - A by a regional transmission route that is already exempt under the existing DTCS declaration; or
  - B by a regional transmission route that is subject to a current exemption application by Telstra.

(see Smart Report paragraphs 54-55)

**3. Should DTCSs with respect to:**

- ***CBD inter-exchange transmission services***
- ***CBD tail-end transmission services***
- ***metropolitan inter-exchange transmission services and***
- ***metropolitan and regional tail-end transmission services***

***be considered as enduring bottlenecks?***

The DTCS cannot be considered an enduring bottleneck in ESAs where there are at least 3 optical fibre operators (i.e. Telstra plus two competitors) because the existence of 3 competing infrastructure owners is sufficient to ensure workable competition, or in CBD ESAs which can easily be served by fibre infrastructure in neighbouring ESAs where there are 3 or more competing operators.

It is also questionable whether DTCS is an “enduring bottleneck” in ESAs where there are less than 3 optical fibre operators. For example, the existence of just two optical fibre operators on a route (i.e. Telstra plus a competitor) indicates that optical fibre based transmission is technically feasible and commercially viable to duplicate in that ESA. To that extent it is hard to see how it can properly be called a “bottleneck” in any competitive sense, especially when alternatives such as microwave and fixed wireless transmissions are taken into account.

Not even in relation to metropolitan and regional tail-end DTCS can Telstra’s customer access network be regarded as an enduring bottleneck for the purposes of assessing the

Exemption Applications for DTCS. The right to use the Telstra customer access network is regulated by means of the declaration of ULLS under Part XIC of the *Trade Practices Act 1974*. Declaration corrects any market power bottleneck characteristics of ULLS, by requiring Telstra to make ULLS available in accordance with the standard access obligations under Part XIC. This ex ante regulation means that ULLS (i.e. the use of unconditioned copper lines from Telstra exchanges to end-customer premises) is available to any service provider in the market at any time on non-discriminatory terms and pricing, provided that the service provider has authorisation of the customer at the end-user location. Telstra's metropolitan and regional tail-end transmission services can be replicated by other service providers using declared ULLS, coupled with DSLAM or other network equipment (which are not enduring bottlenecks) that can readily be co-located in a Telstra exchange, to provide tail-end DTCS up to 2 Mbps.

## 5.2 Market Definition

For the purpose of the Exemption Applications, Telstra generally adopts the Commission's own criterion for sufficient competition in respect of the supply of DTCS on a particular route, adopted in its 2004 Final Report (see Telstra Supporting Submission, pp.1-2; 2004 Final Report, p.27). The Commission did not consider it necessary to adopt any definitive view on the market. On that basis (and without expressly endorsing the Commission's views on the matter), Telstra considers that the views on markets expressed by the Commission in its 2004 Final Report are satisfactory for the purposes of this enquiry, and are consistent with the Commission's criterion for sufficient competition.

### **4. What are the relevant markets that would be affected by the granting of the exemption?**

The markets that would be directly affected by the granting of the Exemption Applications include the markets for the wholesale supply and acquisition of:

- CBD inter-exchange transmission services;
- CBD tail-end transmission services;
- metropolitan inter-exchange transmission services; and
- metropolitan and regional tail-end transmission services.

With respect to downstream markets, in its 2004 Final Report, the Commission considered that (see 2004 Final Report, p.22):

*“the relevant downstream markets for the transmission capacity service are national long distance, international call, data and IP-related markets, mobile and local call markets”*

Telstra does not consider it necessary to form a definitive view on the issue for the reasons set out above. Indeed, Telstra considers that downstream markets may well be broader. However, it is willing to adopt the Commission’s view for the purposes of the current inquiry.

**5. Is it appropriate for an exemption to be granted for the provision of tail-end transmission capacity services only of a certain bandwidth?**

Telstra has provided evidence that ULLS can be used to provide tail-end transmission in metropolitan and regional ESAs at bandwidths of up to 2 Mbps. That evidence includes the [c-i-c] Statement regarding the percentage of Telstra’s copper loops capable of deployment within ULLS deployment class 9f for symmetrical 2 Mbps service in the ESAs covered by the Exemption Applications. On that basis alone, it should be open for the Commission to grant exemption for tail-end transmission up to 2 Mbps in those metropolitan and regional ESAs. Of course nothing in Telstra’s submission precludes the Commission from granting exemption for tail-end transmission in those metropolitan and regional ESAs for higher bandwidths as well, bearing in mind that competitors could potentially use ULLS to supply symmetric transmission at higher bandwidths than 2 Mbps of copper pairs through the bonding of two pairs together to increase the effective transmission capacity provided to the end-customer.

**6. What are the substitutes for DTCS?**

- **Can ULLS be considered an adequate substitute for DTCS with respect to tail-end transmission services at 2 Mbps bandwidth in metropolitan and regional exchange service areas?**

The Smart Report finds that there are currently close substitutes to the DTCS in each of the four market areas covered by the Exemption Applications. These are set out in the following table.

Table 4: Substitutes for DTCS

Substitutes for Telstra declared DTCS service	CBD	Metro
Inter-exchange transmission	Competitor fibre connecting own equipment in Telstra exchange to competitor own fibre network	Competitor fibre connecting own equipment in Telstra exchange to competitor own fibre network
Tail-end transmission	Competitor fibre loops in addition to 2 Mbps tails via ULLS and microwave links to	2 Mbps tail via ULLS (higher bandwidth tail not widely

	customers	available)
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Source: Smart Report, paragraph 10

For the purposes of his report Mike Smart adopts the conservative assumption that only fibre optic cable is part of the product dimension of these transmission markets. Alternative technologies such as satellite and microwave are disregarded for the purpose of that report. However, Telstra considers that, in many cases, transmission supplied over a microwave, satellite and fixed wireless infrastructure is substitutable for DTCS supplied over fibre.

ULLS can be considered an adequate substitute for DTCS with respect to tail-end transmission services at 2 Mbps bandwidth in metropolitan and regional exchange service areas since:

- (a) the vast majority of the demand for tail-end DTCS market in those areas are addressable by 2 Mbps service (see Smart Report paragraph 38 and in the Statement of [c-i-c] that 2 Mbps services represented [c-i-c]% of all Metro/CBD x163 wholesale transmission SIOs) sold by Telstra in 2007. As set out in Telstra's Supporting Submission at p.6, all Telstra x163 services include a tail-end component;
- (b) the use of ULLS permits DTCS at 2 Mbps to be provided via a symmetrical DSL service using a DSLAM. Furthermore, at least one DSLAM is installed by a competitive service provider in each of the metropolitan and regional ESAs identified in the Exemption Applications (see [c-i-c] Statement).

**7. Is Telstra's approach to defining its exemption area an appropriate one?**

- **What are the appropriate geographic dimensions of the relevant markets?**

**8. Is there a discrete inter-exchange transmission service market in CBD and metropolitan exchange service areas?**

**9. Please comment on Telstra's approach to defining the exemption areas for each of its applications.**

With respect to inter-exchange transmission, the Smart Report concludes that it is appropriate to treat the CBD ESAs in each Capital City as comprising a single inter-exchange transmission market. Moreover, it is suggested that the broader metropolitan area of each Capital City comprises a single inter-exchange transmission market. The inter-exchange transmission market at each Capital City is defined by:

- (a) a cluster of contiguous ESAs which each contain inter-exchange fibre that includes a CBD ESA for that Capital City; or
- (b) an ESA containing inter-exchange fibre that is, or is contiguous with, an ESA that is connected to the CBD of the closest Capital City by a fibre optic regional transmission route that is either:
  - (i) exempt; or
  - (ii) the subject of Telstra's exemption application dated 24 August 2007 concerning regional transmission routes.

(Smart Report paragraphs 29-31)

The contiguity and connectivity requirements outlined above ensure that fibre-based inter-exchange transmission can take place between any two exchanges within the relevant inter-exchange market at a Capital City. This condition is both necessary and sufficient for demand and supply-side substitution within the geographic extent of the market.

### 5.3 Promotion of Competition

#### *Nature of competition*

**10. What aspects of the nature of competition should be taken into account in reviewing the declaration for DTCS services with respect to:**

- **CBD inter-exchange transmission services**
- **CBD tail-end transmission services**
- **metropolitan inter-exchange transmission services and**
- **metropolitan and regional tail-end transmission services?**

As Mike Smart states (at paragraph 44), the matters to consider in assessing the nature of competition in respect of the DTCS, include, but are not limited to:

- (a) the existence of alternative infrastructure;
- (b) the feasibility of installing alternative infrastructure;
- (c) the downward price trends;
- (d) the low number of access disputes; and
- (e) the superiority of facilities-based competition over access-based competition.

Mike Smart (at paragraph 46) concludes that competitors do not need to rely on declaration of DTCS due to:

- (i) the low entry barriers, as evidenced by empirical data of competitor facilities, the

economics of constructing new CBD fibre and the suitability of declared ULLS for 2 Mbps tail transmission; and

- (ii) the level of competitor activity, as evidenced by empirical data of competitor facilities, the downward trends in transmission pricing and the price and availability of services that rely on transmission as an input.

Exemption will encourage facilities-based competition where it is economically efficient, because exemption will give the incumbent network owner more certainty over returns on new infrastructure investment. Importantly, exemption will give competitors greater incentive to invest in their own facilities because they would be less able to exploit regulatory errors in access prices for the incumbent's infrastructure. (Smart Report paragraphs 101-103)

**11. *Are Telstra's submissions about the level of competition in the nominated exchange service areas accurate?***

Telstra's submissions on the level of competition in the ESAs covered by the Exemption Applications are based on the reports by Mike Smart and Market Clarity. Mike Smart is a well respected economist and data collection is a core business of Market Clarity.

**12. *What level of competition is there in the relevant markets identified in Question 4?***

Telstra considers there to be effective competition in all of the relevant markets for all the reasons given in the Smart Report, including:

- (a) the compelling evidence of replicability in each ESA covered by the Exemption Applications, and in particular, the demonstrated existence of 3 or more fibre infrastructure owners in the vast majority of those ESAs;
- (b) irrespective of the existence of actual infrastructure it is commercially viable to install fibre infrastructure in CBDs and in other areas covered by the Exemption Applications;
- (c) there are marked downward price trends for DTCS, which are indicative of competitive pricing pressures where suppliers are price takers; and
- (d) there is a notably low number of access disputes for DTCS, which is consistent with the existence of an effectively competitive market where suppliers have no ability to enforce harsh and unreasonable terms on service acquirers.

The Smart Report highlighted the downward price trend in industry DTCS prices and Telstra's DTCS prices (at pp.27-32). The analysis of list prices for CBD and metropolitan transmission contained in the Telsyte Reports show that:

- (i) the industry median price levels have progressively declined;
- (ii) maximum industry prices have declined strongly, clustering around the minimum prices;
- (iii) price differentials between cities have narrowed significantly; and
- (iv) Telstra's own prices were formerly in the low range of industry prices but now are in the middle-high range of prices.

(See Smart Report, paragraphs 84-88)

### *Market concentration*

**13. *What indicators of market concentration are relevant for the provision of DTCS services with respect to:***

- ***CBD inter-exchange transmission services***
- ***CBD tail-end transmission services***
- ***metropolitan inter-exchange transmission services and***
- ***metropolitan and regional tail-end transmission services?***

Both Telstra's Supporting Submission and the Smart Report refer to many indicators of market concentration including the number of fibre owners in CBD and metropolitan/regional ESAs, the number of buildings connected in CBDs and the number of DSLAMS in Telstra's exchanges. These indicators all show multiple potential suppliers of DTCS, indicating a relatively low level of market concentration. Furthermore, the Market Clarity CBD Fibre Deployment Report indicates that the level of market concentration is likely to have declined over time in CBD areas.

### *Potential for competition and barriers to entry*

**14. *In the absence of a declared DTCS in the exemption areas, would competition in downstream retail markets for relevant services be effective?***

- ***Is competition in downstream markets currently effective?***

While, like Mike Smart, Telstra agrees with the Commission's 2004 Final Report by stating that it is not vital to this type of enquiry that the boundaries of downstream markets be defined categorically, it considers downstream markets will be largely unaffected by the grant of the Exemption Applications because competition in the wholesale transmission markets is already effective. Given the existence of effective competition in the markets in which DTCS is supplied, prices in the downstream market should not increase post exemption.

In any case, the Smart Report (at paragraphs 89-92) reveals that downstream markets that rely on DTCS as an input have experienced steadily declining prices over the past years.

This trend is suggestive that greater competition in the supply of transmission services would be expected to be passed on to end-users in the form of lower retail prices.

**15. What alternative DTCS providers (of inter-exchange and tail-end transmission services) to Telstra currently operate in the nominated exchange service areas?**

**16. What technologies do these alternative providers use?**

- **Do these providers offer any significant competitive constraint on the pricing of the DTCS operated by Telstra? Please provide evidence of competition, such as price movements in the exemption areas.**

The Market Clarity Access Fibre Availability Report lists the number of optical fibre based competitors that operate in (or have the potential to operate in) the nominated ESAs covered by the Exemption Applications. These competitors are also listed below.



(a) List of Access Fibre Owners with infrastructure in the Exemption Area in all states:

[c-i-c]

Source: Market Clarity Access Fibre Availability Report (Table 1, page 11)

(b) List of Inter-exchange Network Fibre Owners with infrastructure in NSW Exemption Area ESAs:

[c-i-c]

Source: Market Clarity Access Fibre Availability Report (Table 2, page 16)

However, as the Market Clarity Access Fibre Availability Report is confined to optical fibre networks, there will almost certainly be additional suppliers of transmission in the Exemption Areas ESAs, using microwave links, or satellite technology. The existence of this infrastructure will only further enhance the case for exemption.

Finally, the Statement of [c-i-c] demonstrates that a 2 Mbps transmission tail service could be delivered over ULLS deployment class 9f to:

(i) [c-i-c]% of end users in the nominated 17 CBD ESAs; and

(ii) [c-i-c]% of end users in the nominated 128 metropolitan and regional ESAs,

that have a copper loop connection to a Telstra exchange.

As the Smart Report (at paragraph 76) emphasises, these figures represent the lower bound of what can be achieved via a ULLS because:

A the Comms Alliance Code definition of ULLS deployment classes such as class 9f adopts a conservative approach to attenuation limits; and

B they do not take into account the possibility of bonding two pairs of copper together and running ULLS deployment class 9d over each to obtain 2 Mbps symmetric service overall.

Based on the Statement of [c-i-c], and subject to the availability of two or more copper pairs, in metro areas, a ULLS deployment class 9d service is capable of being delivered to [c-i-c]% of end users in the 128 metropolitan and regional ESAs.

The [c-i-c] Statement further confirms that spare pairs are generally available if required.

**17. In the absence of access to a declared DTCS for inter-exchange or tail-end transmission in the proposed exemption area, would any alternate providers provide a meaningful constraint on the pricing of the DTCS or equivalent services?**

Telstra considers that the competing firms it has identified in the ESAs in the Exemption Applications would constrain pricing of DTCS or equivalent services in the absence of declaration.

For each of the ESAs for which Telstra seeks exemption (other than the 3 CBD ESAs referred to in the answer to question 2 above which can be readily serviced by neighbouring ESAs), there will be at least two other optical fibre operators. As set out page 10 to 15 of Telstra's Supporting Submission, the presence of at least three optical fibre operators is a sufficient (but not necessary) condition for effective competition - i.e., competition that ensures "a meaningful constraint" on the pricing of transmission over the relevant routes. Consequently, if Telstra sought to raise its DTCS prices, then customers could and would shift to these alternative providers.

**18. Would Telstra be likely to continue to supply the DTCS for inter-exchange or tail-end transmission if the exemption applications were granted?**

The presence of at least two competitors to Telstra in each ESA in the Exemption Applications, and the significant sunk investment, scalable capacity and low incremental costs associated with optical fibre networks constrain Telstra from discontinuing the supply of DTCS. Consequently, Telstra would be likely to continue to supply the DTCS if the Exemption Applications were granted.

**19. What infrastructure do alternative wholesale providers use to supply inter-exchange or tail-end transmission services?**

Alternative wholesalers clearly use optical fibre networks (see the Market Clarity Access Fibre Availability Report). Other substitutes such as microwave and copper may also be used. For tail-end transmission in metropolitan and regional areas, there is potential to utilise declared ULLS from Telstra in order to provide 2 Mbps symmetric service.

**20. Are there any investments planned by alternative providers for the exemption area to enable the provision of inter-exchange or tail-end transmission services?**

- **How cautiously should the ACCC regard these planned deployments?**

Telstra is generally not privy to the investment plans of other carriers and carriage service providers.

Annex 2 lists several transmission provider websites providing public information on optical fibre transmission networks.

**21. *Would all new DTCS infrastructure have the capacity to provide competitive constraints on existing infrastructure in relation to the provision of inter-exchange or tail-end transmission services?***

Optical fibre infrastructure is typically built with large capacity. The built capacity will usually be sufficient to support not just current demand for transmission traffic, but future growth in demand for transmission traffic. Recent developments in transmission technology (e.g., digital compression and wave multiplexing) have also facilitated exponential growth in the capacity of new transmission infrastructure.

With respect to tail-end transmission in metropolitan and regional areas, Telstra's Supporting Submission (p. 14-15) refers to evidence that overall consumer demand for high bandwidth services is very low. Consequently, the capacity requirements for metropolitan and regional areas tail-end transmission services are relatively low and are well within the capacity of existing ULLS infrastructure.

#### 5.4 Any-to-any connectivity

**22. *Would granting the exemption applications have any effect on any-to-any connectivity?***

Given the extent of available alternative infrastructure and declared services, which provide, or are readily capable of providing, similar services to the DTCS, granting the Exemptions will not affect the any-to-any connectivity of end-users. This view is consistent with the view expressed by the Commission in its 2004 Final Report (see Telstra Supporting Submission, p.21-22; 2004 Final Report, p.47).

#### 5.5 Efficient use of and investment in infrastructure

##### *Economically efficient use of infrastructure*

**23. *Would granting the exemption applications have any effect on the efficient use of infrastructure by which DTCS (and other listed services) are provided?***

**24. *What impact would granting the exemptions have on the efficient use of infrastructure in the supply of upstream products such as the ULLS?***

Granting the Exemptions will promote facilities-based competition through encouraging greater investment in competing infrastructure. By contrast, preserving access regulation where workable competition exists is likely to discourage efficient infrastructure investment and use (see Telstra Supporting Submission, pp.19-22). Manifestations of this include: the truncation of returns from investment; the potential for regulatory dependence; the potential for arbitrage based on regulated access; and the asymmetry of the costs of regulation.

Importantly, the granting of the Exemptions would remove the potential for regulatory error in the appropriate pricing. Regulatory mis-pricing is a very real risk for any regulator and this would continue to be a risk if declaration were to continue. If regulatory mis-pricing occurs, it would have a detrimental effect on investment incentives for both access providers and access seekers in a demonstrably competitive market. (Smart Report paragraph 112)

Furthermore, competition in the relevant ESAs will remain effective due to the presence of at least 3 optical fibre operators and the demonstrated replicability of the underlying infrastructure. As a consequence, each operator will have strong incentives to maximise the use of their respective optical fibre infrastructure over the relevant capital-regional routes.

Finally, granting the Exemption Applications would not prevent an optical fibre operator from obtaining a ULLS service from Telstra for the purpose of delivering tail-end transmission to a particular point within an ESA.

### *Economically efficient investment in infrastructure*

#### **25. *Would granting the exemptions significantly affect Telstra's incentives to invest in its infrastructure?***

In general, ex ante regulation has the effect of discouraging investment in infrastructure (see Telstra Supporting Submission, p.21). This is because ex ante regulation has an asymmetric effect on returns. An investor is prevented from earning above normal returns during "good years", but not compensated for below normal returns during "bad years".

Granting the Exemptions would help minimise this effect in respect of the ESAs in the Exemption Applications.

Since an exemption order would not harm the existing competition from optical fibre networks, but would also reduce the incidence of regulatory error; it would promote efficient investment in infrastructure, including Telstra's investment in its own infrastructure. Thus, granting the Exemption Applications can be expected to improve Telstra's incentives to invest in its own infrastructure.

#### **26. *Would granting the exemptions affect Telstra's plans to invest in maintenance, improvement and expansion of its fixed network infrastructure?***

Granting the Exemption Applications would for Telstra remove several disincentives to invest, such as the truncation of returns and the asymmetric impact of regulated prices. As a result, Telstra would be likely to face enhanced incentives to maintain, improve and

expand its fixed network infrastructure.

More broadly, a clear signal by the Commission that it will roll back access regulation where it no longer promotes the LTIE would be likely to enhance access providers' (including Telstra's) incentives to upgrade and invest in their infrastructure.

**27. *Has declaration of the DTCS for inter-exchange and tail-end transmission services discouraged investment in alternative infrastructure by access seekers?***

The question the Commission must consider is whether continued declaration of the DTCS will lead to regulatory dependence.

In general, ex ante regulation has the effect of discouraging investment in infrastructure (see Telstra Supporting Submission, pp.19-21). This is because ex ante regulation has an asymmetric effect on returns. An investor is prevented from earning above normal returns during "good years", but not compensated for below normal returns during "bad years".

The asymmetric effect on returns applies not just to investments in infrastructure that are directly regulated, but also investments in alternative infrastructure that deliver services that are substitutes. Returns on services that are substitutes will be affected asymmetrically if one of the substitutes is subject to ex ante regulation.

Continued declaration of the DTCS will therefore discourage investment in alternative infrastructure by access seekers. (Smart Report paragraphs 105-112)

**28. *Would granting the exemption applications be likely to encourage efficient investment in alternative infrastructure by removing the scope for reliance on the declared DTCS for inter-exchange and tail-end transmission services?***

**29. *What implications would Telstra's exemption applications have on investment by access seekers in DTCS infrastructure for provision of inter-exchange and tail-end transmission services?***

- ***Would an alternative rule be preferable as a result?***

Granting the Exemption Applications will promote facilities-based competition by encouraging greater investment in competing infrastructure. Competition for DTCS in the relevant ESAs is already effective for the reasons set out above. Given this workable competition, the Exemption will ensure that competitors rely less on regulated prices for DTCS in the ESAs, and will face greater incentives to develop more efficient technologies to compete with incumbent operators. This will facilitate a movement away from access-based competition towards facilities-based competition, which will in turn drive out inefficiency and arbitrage throughout the supply chains, delivering lower prices and greater choice to consumers in the long-run.

By contrast, preserving access regulation where workable competition exists is likely to discourage efficient infrastructure investment and use. Manifestations of this include: the truncation of returns from investment; the potential for regulatory dependence; the potential for arbitrage based on regulated access; and the asymmetry of the costs of regulation. Granting the Exemption Applications would remove these regulatory costs.

### *Legitimate commercial interests of access provider*

**30. *Would granting the exemption applications be likely to allow Telstra to recover more than is in its legitimate commercial interests?***

The Commission should not interpret the phrase “legitimate commercial interests of the supplier or suppliers of the services” to connote that the subsection may be relied upon to place an upper bound on the returns earned by the service provider from the service. In this question, the Commission is suggesting a construction of section 152AB(6) that finds little support from the plain meaning of the words of this subsection, or any other part of section 152AB. The Commission appears to be advocating a “novel” or “idiosyncratic” interpretation of the words of section 152AB(6), of precisely the kind that recently received strong criticism from the High Court in *EAPL v ACCC* [2007] HCA 44. The Court in this case overturned a regulatory decision of the Commission, on the basis that the Commission had failed to confine itself to the “primary and natural significance” of the words of section 8.10 of the Gas Code, but rather had based its decision on an “idiosyncratic” construction of the words of the section.

The proper construction of this subsection is to ask whether the service provider will be able to earn an appropriate commercial return from providing the service.

In any case, as demonstrated in the Smart Report, workably competitive conditions prevail over the ESAs in the Exemption Applications for DTCS. Accordingly, market forces would prevent Telstra from obtaining more than a reasonable risk-adjusted return on its efficient costs.

### *Exemption terms*

**31. *In the event that the ACCC is minded to grant any of the exemption applications, what conditions (if any) should be placed on a granting of the exemption application(s)?***

Telstra does not consider that any conditions need be placed on any of the Exemption Applications.

**Telstra Corporation Limited**

**19 March 2008**

## Annex 1

## Access Fibre presence in metropolitan and regional ESAs under the Exemption Applications

	Contiguous Exemption Area	ESA Names	Number of Access Fibre Owners
1	SYDNEY	ASHFIELD	[c-i-c]
2	SYDNEY	BALGOWLAH	[c-i-c]
3	SYDNEY	BALMAIN	[c-i-c]
4	SYDNEY	BANKSTOWN	[c-i-c]
5	SYDNEY	BAULKHAM HILLS	[c-i-c]
6	SYDNEY	BLACKTOWN	[c-i-c]
7	SYDNEY	BLAKEHURST	[c-i-c]
8	SYDNEY	BOTANY	[c-i-c]
9	SYDNEY	BURWOOD	[c-i-c]
10	SYDNEY	CAMPSIE	[c-i-c]
11	SYDNEY	CARLINGFORD	[c-i-c]
12	SYDNEY	CARRAMAR	[c-i-c]
13	SYDNEY	CASTLE HILL	[c-i-c]
14	SYDNEY	CHATSWOOD	[c-i-c]
15	SYDNEY	CONCORD	[c-i-c]
16	SYDNEY	COOGEE	[c-i-c]
17	SYDNEY	CREMORNE	[c-i-c]
18	SYDNEY	CRONULLA	[c-i-c]
19	SYDNEY	DEE WHY	[c-i-c]
20	SYDNEY	DRUMMOYNE	[c-i-c]
21	SYDNEY	EAST	[c-i-c]
22	SYDNEY	EDGECLIFF	[c-i-c]
23	SYDNEY	EPPING	[c-i-c]
24	SYDNEY	EDENSOR PARK	[c-i-c]
25	SYDNEY	EASTWOOD	[c-i-c]
26	SYDNEY	FIVE DOCK	[c-i-c]
27	SYDNEY	FRENCHS FOREST	[c-i-c]
28	SYDNEY	GLEBE	[c-i-c]
29	SYDNEY	GRANVILLE	[c-i-c]
30	SYDNEY	HARBORD	[c-i-c]
31	SYDNEY	Homebush	[c-i-c]
32	SYDNEY	HORNSBY	[c-i-c]
33	SYDNEY	HUNTERS HILL	[c-i-c]
34	SYDNEY	HURSTVILLE	[c-i-c]
35	SYDNEY	KELLYVILLE	[c-i-c]
36	SYDNEY	KENSINGTON	[c-i-c]
37	SYDNEY	KILLARA	[c-i-c]
38	SYDNEY	KINGSGROVE	[c-i-c]
39	SYDNEY	KOGARAH	[c-i-c]
40	SYDNEY	LAKEMBA	[c-i-c]
41	SYDNEY	LANE COVE	[c-i-c]
42	SYDNEY	LIDCOMBE	[c-i-c]
43	SYDNEY	LINDFIELD	[c-i-c]
44	SYDNEY	LIVERPOOL	[c-i-c]
45	SYDNEY	MASCOT	[c-i-c]
46	SYDNEY	MATRAVILLE	[c-i-c]
47	SYDNEY	MIRANDA	[c-i-c]
48	SYDNEY	MOSMAN	[c-i-c]
49	SYDNEY	NORTHBRIDGE	[c-i-c]
50	SYDNEY	NEWTOWN	[c-i-c]
51	SYDNEY	NORTH PARRAMATTA	[c-i-c]
52	SYDNEY	NORTH RYDE	[c-i-c]



	Contiguous Exemption Area	ESA Names	Number of Access Fibre Owners
53	SYDNEY	NORTH SYDNEY	[c-i-c]
54	SYDNEY	PARRAMATTA	[c-i-c]
55	SYDNEY	PEAKHURST	[c-i-c]
56	SYDNEY	PENDLE HILL	[c-i-c]
57	SYDNEY	PENNANT HILLS	[c-i-c]
58	SYDNEY	PETERSHAM	[c-i-c]
59	SYDNEY	RAMSGATE	[c-i-c]
60	SYDNEY	RANDWICK	[c-i-c]
61	SYDNEY	REDFERN	[c-i-c]
62	SYDNEY	REVESBY	[c-i-c]
63	SYDNEY	ROCKDALE	[c-i-c]
64	SYDNEY	ROOTY HILL	[c-i-c]
65	SYDNEY	ROSE BAY	[c-i-c]
66	SYDNEY	RYDALMERE	[c-i-c]
67	SYDNEY	RYDE	[c-i-c]
68	SYDNEY	SEVEN HILLS	[c-i-c]
69	SYDNEY	SILVERWATER	[c-i-c]
70	SYDNEY	SOUTH STRATHFIELD	[c-i-c]
71	SYDNEY	ST LEONARDS	[c-i-c]
72	SYDNEY	ST MARYS	[c-i-c]
73	SYDNEY	UNDERCLIFFE	[c-i-c]
74	SYDNEY	VAUCLUSE	[c-i-c]
75	SYDNEY	WAHROONGA	[c-i-c]
76	SYDNEY	WAVERLEY	[c-i-c]
77	SYDNEY	WILLOUGHBY	[c-i-c]
78	ALBURY	ALBURY	[c-i-c]
79	CAMPBELLTOWN	CAMPBELLTOWN	[c-i-c]
80	COFFS HARBOUR	COFFS HARBOUR	[c-i-c]
81	GOSFORD	GOSFORD	[c-i-c]
82	LISMORE	LISMORE	[c-i-c]
83	NEWCASTLE	WOLFE	[c-i-c]
84	PENRITH	PENRITH	[c-i-c]
85	WAGGA WAGGA	WAGGA WAGGA	[c-i-c]
86	WOLLONGONG	WOLLONGONG	[c-i-c]
87	MELBOURNE	ASCOT	[c-i-c]
88	MELBOURNE	BRUNSWICK	[c-i-c]
89	MELBOURNE	CAULFIELD	[c-i-c]
90	MELBOURNE	COBURG	[c-i-c]
91	MELBOURNE	ELSTERNWICK	[c-i-c]
92	MELBOURNE	FOOTSCRAY	[c-i-c]
93	MELBOURNE	HEIDELBERG	[c-i-c]
94	MELBOURNE	MALVERN	[c-i-c]
95	MELBOURNE	MORELAND	[c-i-c]
96	MELBOURNE	NORTH MELBOURNE	[c-i-c]
97	MELBOURNE	NEWPORT	[c-i-c]
98	MELBOURNE	PORT MELBOURNE	[c-i-c]
99	MELBOURNE	PRESTON	[c-i-c]
100	MELBOURNE	RICHMOND	[c-i-c]
101	MELBOURNE	SOUTH MELBOURNE	[c-i-c]
102	MELBOURNE	ST KILDA	[c-i-c]
103	MELBOURNE	TOORAK	[c-i-c]
104	BALLARAT	BALLARAT	[c-i-c]
105	BENDIGO	BENDIGO	[c-i-c]

	Contiguous Exemption Area	ESA Names	Number of Access Fibre Owners
106	GEELONG	GEELONG	[c-i-c]
107	SHEPPARTON	SHEPPARTON	[c-i-c]
108	BRISBANE	PADDINGTON	[c-i-c]
109	BRISBANE	SOUTH BRISBANE	[c-i-c]
110	BRISBANE	TOOWONG	[c-i-c]
111	BRISBANE	VALLEY	[c-i-c]
112	BRISBANE	WOOLLOONGABBA	[c-i-c]
113	BEAUDESERT	NERANG	[c-i-c]
114	BEAUDESERT	ASHMORE	[c-i-c]
115	BEAUDESERT	SOUTHPORT	[c-i-c]
116	ADELAIDE	GEPPS CROSS	[c-i-c]
117	ADELAIDE	GLENUNGA	[c-i-c]
118	ADELAIDE	HAMPSTEAD	[c-i-c]
119	ADELAIDE	NORWOOD	[c-i-c]
120	ADELAIDE	PROSPECT	[c-i-c]
121	ADELAIDE	ST PETERS	[c-i-c]
122	ADELAIDE	UNLEY	[c-i-c]
123	ADELAIDE	WEST ADELAIDE	[c-i-c]
124	CANBERRA	DEAKIN	[c-i-c]
125	CANBERRA	MAWSON	[c-i-c]
126	PERTH	MANNING	[c-i-c]
127	PERTH	SOUTH PERTH	[c-i-c]
128	PERTH	SUBIACO	[c-i-c]

Source: Market Clarity Access Fibre Availability Report

For NSW ESAs, data in Appendix 5 takes precedence over corresponding data otherwise found in Appendix 4.

There are 128 ESAs in the Metro tail-end transmission Exemption Applications.

There are 115 ESA in the Metro inter-exchange transmission Exemption Applications (i.e. all of the above excluding 9 ESAs in NSW (Albury, Campbelltown, Coffs Harbour, Gosford, Lismore, Newcastle, Penrith, Wagga Wagga) and excluding 4 ESAs in Victoria (Ballarat, Bendigo, Geelong and Shepparton).

## Annex 2

### Weblinks for Examples of Optical Fibre Transmission Networks

#### Optus Infrastructure Network

[http://www.optus.com.au/dafiles/OCA/Wholesale/ProductAndServices/DataSolutions/TransmissionSolutions/StaticFiles/Documents/optus\\_network.pdf](http://www.optus.com.au/dafiles/OCA/Wholesale/ProductAndServices/DataSolutions/TransmissionSolutions/StaticFiles/Documents/optus_network.pdf)

#### OPEL Proposed Transmission Build

<http://www.broadbandnow.gov.au/opel-map.htm>

#### SILK TELECOM

<http://www.silktelecom.com.au/sitefiles/File/Network/Silk%20telecom%20Australia%20network%20v1.pdf>

#### POWERTEL

[http://www.powertel.com.au/html5/the\\_network.htm](http://www.powertel.com.au/html5/the_network.htm)

#### NEXTGEN

[http://www.nextgennetworks.com.au/NN\\_longhaul\\_map.pdf](http://www.nextgennetworks.com.au/NN_longhaul_map.pdf)

#### ACCESS PROVIDERS IN VICTORIA

<http://www.mmv.vic.gov.au/broadband/Backhaulregionbyregion>