



**TELSTRA CORPORATION LIMITED**

**Application for Exemption in respect to the Domestic  
Transmission Capacity Service**

**Response to Information Request dated 28 March 2008**

**PUBLIC VERSION**

**30 June 2008**

## Introduction

This response sets out Telstra's answers to the questions in the Australian Competition and Consumer Commission's ("**Commission**") request for information, under section 152AU of the *Trade Practices Act 1974* (Cth) ("**TPA**"), dated 28 March 2008 (as amended by the letter dated 21 April 2008) in relation to Telstra's applications for exemption from the standard access obligations applicable to Telstra in respect of the domestic transmission capacity service ("**DTCS**") dated 21 December 2007 ("**Exemption Applications**").

It should be read in conjunction with Telstra's submission in support of the Exemption Applications ("**Telstra Submission**") and Telstra's response to the Commission's Discussion Paper of February 2008. Capitalised terms used but not defined in this response have the meanings given in the Telstra Submission.

Telstra considers that the answers below constitute a substantive response to all of the questions asked by the Commission in the Information Request. However, in some cases, Telstra has been unable to provide the information at the level of detail requested by the Commission because:

- Telstra does not possess the information and is unable to acquire that information;
- Telstra is unable to disclose the information due to confidentiality obligations owed to its wholesale customers; or
- the third party retained by Telstra to provide the relevant information, Market Clarity, can only disclose aggregated data due to its confidentiality obligations owed to survey respondents.

These issues are outlined in more detail in the answers to each question. We would be pleased to meet with Commission staff to discuss the information provided, and any more general queries concerning Telstra's DTCS Exemption Applications.

Telstra recognises that it has taken a lengthy period of time to respond to the Commission's request. However this has been due, in large part, to the extensive amount of information sought by the Commission, much of which is not routinely collected by Telstra. The Commission's failure to fully explain the purpose behind a number of its information requests has also contributed significantly to the amount of time taken to respond to those requests.

While Telstra is keen to help the Commission satisfy itself that granting the Exemption

Applications will promote the LTIE, it requests that the Commission also have recourse to the industry information available to it from other sources including the recent CAN and Infrastructure RKR. This will enable the Commission to proceed more quickly and efficiently than might otherwise be the case.

## Response to Commission Questions

1. Telstra in its Supporting Submission defines the following geographic market:

- “i a cluster of contiguous ESAs, each of which contains inter-exchange fibre transmission infrastructure that includes a CBD ESA for that capital city; or*
- ii an ESA containing inter-exchange fibre transmission infrastructure 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.”*

**In relation to this market definition, please clarify, including by illustrating with maps or diagrams, the meaning of “a cluster of contiguous ESAs” and show how the definition was applied to derive the set of ESAs for which exemption is requested.**

The definition cited by the Commission in this question refers to the subset of the Exemption Applications, namely those relating to:

- inter-exchange transmission capacity in CBD areas (“**CBD IEN Application**”), which comprises 17 CBD exchange service areas (**ESAs**); and
- inter-exchange transmission capacity in metropolitan areas (“**Metropolitan IEN Application**”), which comprises 115 metropolitan and regional ESAs.

### ***Definition of inter-exchange transmission***

The Commission, in its report accompanying the declaration of DTCS,<sup>1</sup> (“**2004 Declaration**”) defines “inter-exchange local transmission” as transmission between transmission points located at or virtually co-located with an access provider’s local exchanges, that are within a single call charge area (2004 Declaration, p. 7).<sup>2</sup> Telstra’s approach has been similar.

### ***Geographic scope of inter-exchange and tail-end transmission markets***

While Telstra identifies four transmission markets (CBD tail, CBD IEN, metropolitan tail and metropolitan IEN) and seeks a geographically based exemption order in respect of each of those markets, Telstra does not claim that the geographic scope of the relevant markets is defined by the area for which exemption is sought.

Rather, Telstra concurs with the view expressed in Mike Smart’s statement in relation to

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1 ACCC, Transmission Capacity Service - Review of the declaration for the domestic transmission capacity service - Final Report, April 2004.  
2 2004 Declaration, p 7.

the Exemption Applications (“**Smart Statement**”)<sup>3</sup> that:<sup>4</sup>

- (a) for the purpose of tail-end transmission , each ESA is a distinct geographic market;  
and
- (b) for the purpose of IEN transmission in each capital city there are two separate geographic markets constituted by:
  - (i) the CBD IEN Market: defined as the CBD area of the relevant capital city<sup>5</sup>;  
and
  - (ii) the Metropolitan IEN Market: defined as the metropolitan area of the relevant capital city.<sup>6</sup>

In the case of the Metropolitan IEN Market, the geographic market could also include IEN in regional areas around the capital city.<sup>7</sup> Alternatively, each cluster of regional ESAs could itself constitute a “regional IEN market” that is geographically separate from the metropolitan IEN market. Either definition is consistent with Telstra’s Exemption Applications provided it is recognised that IEN transmission between:

- a transmission point in a regional IEN market; and
- a transmission point in the metropolitan IEN market of the capital city closest to the regional IEN market,

should be exempted if the transmission route between the IEN regional market and the closest capital city is either:

- not subject to standard access obligations; or
- the subject of an application for exemption from the standard access obligations based on the existence of workable competition on that route.

### ***Geographic scope of exemptions sought by Telstra***

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3 Statement of Michael Smart, Economic Considerations for Metro and CBD domestic transmission capacity service exemptions, 20 December 2007.

4 Smart Statement, paragraphs 28 to 30.

5 In practice, this corresponds to Telstra ESAs that are classified as Band 1 and which meet the criteria for exemption.

6 In practice, this corresponds to Telstra ESAs that are classified as Band 2 and which meet the criteria for exemption.

7 Telstra considers that it is not necessary to define the relevant market in precise terms for present purposes. (See *Re Vodafone Network Pty Ltd & Vodafone Australia Limited* [2007] ACompT 1, [31].)

For the purpose of the Exemption Applications, Telstra has conservatively assumed that all traffic (wherever it is originated) must be backhauled to the CBD of each capital city to ensure connectivity with the global Internet. Accordingly, exemption is only sought for areas that meet the “CBD contiguity criterion”. This criterion is conservative as backhaul to the CBD is not a necessary input to all services supplied in downstream markets. As a result, it is open to the Commission to dispense with “CBD contiguity criterion” by making a class exemption order in addition to the exemption order sought by Telstra.

In addition to the CBD contiguity criterion, the geographic scope of the exemptions sought by Telstra has been determined by only including ESAs which meet the following criteria:

- the ESA is contiguous with (in that it shares a border with) the inter-exchange network; and
- at least three competitive optical fibre networks were identified as being present in that ESA.

Physical contiguity: In his statement, Mike Smart observes that all exchanges in an inter-exchange network must be connected to each other. For this reason, an ESA that is physically isolated from the citywide inter-exchange network would not logically form part of that inter-exchange network.<sup>8</sup>

Presence of competitive optical fibre networks: In its 2004 Declaration decision, the Commission expressed the view that transmission services are capable of being supplied by fibre optic technology, while doubting that transmission over other technologies such as satellite or microwave were sufficiently close substitutes for fibre optic transmission.<sup>9</sup>

Telstra does not necessarily agree with the Commission’s doubts that transmission over other technologies are sufficiently close substitutes for fibre optic transmission.

Nevertheless, to avoid controversy, the Smart Statement adopts the Commission’s conservative assumption that fibre optic infrastructure is the only relevant infrastructure for transmission. It also adopts the threshold that three or more inter-exchange fibre infrastructure owners is sufficient evidence of effective competition. This is based in part on the Commission’s approach in its 2004 Declaration in relation to capital-regional transmission routes. In that Declaration the Commission found that where there are at least three optical fibre providers, this is sufficient evidence of effective competition to

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8 Smart Statement, paragraph 54.

9 2004 Declaration, p 19.

warrant the removal of declaration of the transmission service.<sup>10</sup> However, nothing in this submission should be taken as an acceptance by Telstra that the threshold of three or more inter-exchange infrastructure owners is necessary to establish sufficient competition in the supply of the declared transmission service. For the reasons mentioned in Telstra's previous submissions, Telstra believes this threshold may well be overly conservative.

***Telstra's Metropolitan IEN Application - the selection of the Metropolitan IEN Exemption Area***

The selection of the exemption area ESAs in the Metropolitan IEN Application ("**Metropolitan IEN Exemption Area**") was based on the analysis in the Smart Statement and Market Clarity data identifying Band 2 ESAs where the numbers of competitors (including Telstra) is 3 or more.

**2. Please identify any additional ESAs which would be captured by the definition of 'Inter-exchange DTCS' extracted below:**

- (a) two Transmission Points where both of those Transmission Points are located within the Adelaide CBD Area, the Brisbane CBD Area, the Melbourne CBD, the Perth CBD Area or the Sydney CBD Area; and***
- (b) a Transmission Point located within the Adelaide CBD Area, the Brisbane CBD Area, the Melbourne CBD, the Perth CBD Area or the Sydney CBD Area and a Transmission Point in an ESA adjoining that CBD Exemption Area,***

***but where neither Transmission Point is located at an end-user's premises'***

**on page 2 and 3 in Telstra's Application for exemption from supplying inter-exchange transmission capacity in CBD areas that are not listed in Attachment A to that application.**

No additional ESAs would be captured by this definition of "Inter-Exchange DTCS".

Rather, by using this definition, Telstra has sought to describe the service characteristics of inter-exchange transmission in a CBD area. From a service perspective, a CBD inter-exchange area is defined by:

- (a) the provision of transmission between one area within a CBD and another area within the same CBD; and**
- (b) the transmission between an area within a CBD and an adjoining area outside that**

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<sup>10</sup> 2004 Declaration, pp 48-49.

CBD.

### **Scope of Exemption Applications**

The definition of “Inter-Exchange DTCS” also needs to be considered in the context of the description of the exemption applied for. Telstra’s CBD IEN Application states:

“Telstra applies for an exemption from all of the standard access obligations in section 152AR of the TPA in respect of the supply of Inter-Exchange DTCS at All Designated Rates in the ***CBD Exemption Area...***” (***bold italics*** added)

Thus the CBD IEN Application comprises only ESAs within the CBD, and the ESAs within each CBD constitute the ‘CBD Exemption Area’ for that city (“**CBD IEN Exemption Area**”). For example, in relation to Adelaide, the CBD IEN Exemption Area only comprises Flinders and Waymouth ESAs (“Adelaide CBD IEN Exemption Area”).

Telstra acknowledges that there are some ESAs which adjoin a CBD IEN Exemption Area but do not form part of Telstra’s Metropolitan IEN Application. However, Telstra considers that this anomaly is largely attributable to a temporary gap in information about the level of IEN fibre competition in these ESAs. To the extent that it considers it material the Commission may be able to address this “gap” by way of its Infrastructure RKR as discussed below.

3. **In Appendix 5 to Telstra’s Supporting Submission, Market Clarity provides data regarding the number of access fibre owners in each ESA for which exemption is sought. Please provide the following further details in relation to this information for each ESA requested for exemption including any ESAs listed in response to Question 2:**
  - a. **the identity of the competing access fibre owner.**
  - b. **whether the competing access fibre owner owns infrastructure or leases capacity from Telstra or a third party and where the contract is with Telstra, the length of the lease contract.**
  - c. **whether the competing access fibre owner provides tail transmission or inter-exchange transmission or both, for states other than NSW, as defined in Mr Smart’s Statement.**
  - d. **the retail and wholesale services the competing access fibre owners provide; and to what extent, these services could be used as a substitute for the declared DTCS.**
  - e. **if a competing access fibre owner owns infrastructure:**



- i. **where and how this infrastructure connects to the Telstra network (in MapInfo TAB vector format using the GDA94 co-ordinate system).**
- ii. **the identify and location of each fibre owners point of presence (PoPs) in each of the ESAs in the form set out in Attachment 1, Table 1.**

**a Identity of the competing access fibre owner**

In the Telstra Submission, Telstra has already indicated to the Commission that the identity of the individual fibre owners in each ESA in the Exemption Area is information which is confidential to Market Clarity and the individual fibre owners. However, Market Clarity has provided the identity of all the fibre owners covered by the Commission's request, many of whom have responded to the Commission's Infrastructure RKR. This list is set out in Market Clarity's Access Fibre Availability Report. Specifically, table 1 (on page 11) lists the fibre owners for all states and Table 2 (on page 16) lists the fibre owners for NSW.

It is clearly open to the Commission to ask each carrier in that list whether it has optical fibre infrastructure in the areas for which Telstra seeks exemption from the standard access obligations.

It is also open to the Commission to refer to the infrastructure records submitted by carriers to the Commission pursuant to the *Audit of Telecommunications Infrastructure Assets - Record Keeping Rules 2007* ("**Infrastructure RKR**").

Telstra considers that the infrastructure records received by the Commission would likely enable the Commission to identify the existence of optical fibre belonging to carriers other than Telstra in any given area.

**b Whether the competing access fibre owner owns infrastructure or leases capacity from Telstra or a third party**

We confirm that the Market Clarity Access Fibre Availability data records fibre ownership, not merely leases.<sup>11</sup> This is because the terms of reference of Market Clarity's report required it to identify telecommunications carriers which own access fibre infrastructure.<sup>12</sup>

Market's Clarity also states at paragraph 3.17 of its report that it produced a matrix that documented "[t]he number of access fibre owners in the ESA", and states in paragraph 3.19 that "[t]he results of this analysis are provided in Appendix 4 of this document". Similarly

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11 Market Clarity, Research Report - Access Fibre Availability, Transmission Services, and Inter-Exchange Network Connectivity, 19 December 2007.

12 Market Clarity Access Fibre Availability report, paragraph 1.5.

for NSW ESAs, the results of Market Clarity's analysis are provided in Appendix 5 of its report.

Accordingly, the competing fibre counted by Market Clarity is owned by the competitors in question, and not leased from Telstra or a third party. Of course it is possible that the competing fibre owners may also lease capacity from Telstra or a third party. However, that leased additional capacity has not been counted by Market Clarity.

**c Whether the competing access fibre owner provides tail transmission or inter-exchange transmission or both, for states other than NSW**

We refer the Commission to the Smart Statement which reviewed the data on access fibre and inter-exchange fibre ownership provided by Market Clarity and noted that:<sup>13</sup>

- (a) counts of inter-exchange network fibre ownership are available for NSW ESAs; and
- (b) in relation to ESAs in states other than NSW, no direct data is available on counts of inter-exchange network fibre ownership.

Following analysis of the available Market Clarity data, Mike Smart applied the following inductive logic in counting inter-exchange transmission infrastructure ownership for ESAs in states other than NSW:<sup>14</sup>

- (i) The Market Clarity data for NSW ESAs reports:
  - (a) counts of inter-exchange fibre owners; and
  - (b) counts of access fibre owners;
- (ii) The Market Clarity data for ESAs in states other than NSW only reports counts of access fibre owners;
- (iii) Comparing:
  - (a) the number of NSW ESAs with 3 or more access fibre owners (i.e. 5 CBD ESAs and 92 metropolitan and regional ESAs); and
  - (b) the number of NSW ESAs with 3 or more inter-exchange owners for the NSW ESAs (i.e. 5 CBD ESAs and 80 metropolitan and regional ESAs),

there is a high degree of overlap between the ESAs with three or more access fibre

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13 Smart Statement, paragraph 50.

14 Smart Statement, paragraphs 51-55.

owners and the ESAs with three or more inter-exchange fibre owners;

- (iv) There would be no material barrier to entry for inter-exchange ownership in a given ESA by a competitor already owning access fibre in that ESA. The existence of access fibre indicates that carrier's ability to surmount entry barriers which should, if anything, be lower for inter-exchange fibre. In relation to entry barriers, inter-exchange fibre:
  - (a) is more likely to exploit economies of scale through higher utilisation as one would expect inter-exchange fibre would carry more traffic than tail transmission because of the concentrating effect nearer the network core; and
  - (ii) is not likely to be any more expensive to install than tail transmission fibre on average; and
- (v) Therefore the Smart Statement concludes that the Commission's rule of 3 or more inter-exchange transmission competitors is met in each ESA for which Market Clarity has reported three or more access fibre owners (subject to the geographic rule of physical contiguity referred above).

The Market Clarity report shows the number of access fibre owners in each ESA. Telstra relied on this data to determine the exemption area for tail-end DTCS in CBD and metropolitan areas.

Telstra also relied on the Market Clarity report for determining the exemption area for inter-exchange DTCS in CBD and metropolitan areas, and, in the case of states other than NSW, based on Mike Smart's conclusion that the number of inter-exchange fibre owners is likely to be equivalent to the number of access fibre owners.

***d The retail and wholesale services the competing access fibre owners provide; and the extent to which these services could be used as a substitute for the declared DTCS***

Market Clarity's Access Fibre Availability Report sets out the various fixed line services provided by competing access fibre owners. These services include leased line services, which are technical substitutes to Telstra's transmission capacity service.

Other services identified by Market Clarity include ATM, Frame Relay, Ethernet services, and Private Network IP services. Each of these are "transport products" and therefore capable of being used to support applications that are similar to Telstra's transmission capacity service, at least in a functional sense.

Apart from the data provided in the Market Clarity Report, there is also publicly available data about Telstra’s competitors who advertise retail and wholesale services which are substitutable for Telstra’s IEN and tail end transmission services in CBD and metropolitan areas. Some examples are set out in **Appendix 1**. These services are examples of wholesale products that constrain or are capable of constraining Telstra’s conduct, including in relation to pricing wholesale transmission services. We also refer the ACCC to PIPE Network’s submission where PIPE expresses the view that it is able to replicate tail-end and inter-exchange transmission in CBD areas and partially in metropolitan areas<sup>15</sup>. PIPE confirms that Ethernet, dark fibre technologies, ULL and LSS are effective substitutes for Telstra’s wholesale transmission service.

Telstra notes that competitor offerings are not confined to traditional “telcos”, but may be available from utility operators. Indeed, a number of “telco operators” (such as PowerTel and Uecomm) had their origins in the utility industry. See **Appendix 2** for a non-comprehensive list of “utility operators” and a brief description their optical fibre networks in CBD and metro areas.

**e        *Where and how competing fibre infrastructure connects to the Telstra network***

The statement of [c-i-c] regarding the manner in which competitors interconnect with Telstra is attached in **Appendix 3**. That statement contains several diagrams demonstrating the different types of interconnection that are possible. By way of example, competitor networks can interconnect with Telstra’s network either directly at Telstra exchanges, or through POPs located outside Telstra exchanges.

Telstra also observes the Market Clarity report data for NSW identifies the number of inter-exchange fibre owners which have inter-exchange fibre located in a Telstra exchange in each NSW ESA.

***Identity and location of each fibre owners point of presence (PoPs) in each of the ESAs***

Telstra does not have records of the PoP locations of other fibre owners. However this information may have been provided to the Commission by other fibre owners in their responses to the Commission’s Infrastructure RKR.

Telstra points out that the Market Clarity data for NSW identifies the number of inter-exchange fibre owners who have inter-exchange fibre in a Telstra exchange in each NSW ESA.

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<sup>15</sup> PIPE Networks (March 2008), submission on the ACCC February 2008 discussion paper on Telstra’s transmission exemption applications, p 2.

4. **Appendix 5 of Telstra’s Supporting Submission, the Market Clarity CBD Fibre Deployment Report (the Market Clarity CBD Fibre Report), on page 10 in Table 1, provides information which is identified as ‘an aggregate of the total number of buildings connected to fibre networks in each CBD’. This aggregated data does not provide sufficient detail to enable analysis by the ACCC.**

**Please provide the underlying data that was used to create Table 1 on page 10 of the Market Clarity CBD Fibre Report, being the results of the CBD fibred buildings research which provided Market Clarity with ‘an owner level view of the buildings connected in each city’, as described on page 5 of the Market Clarity CBD Fibre Report.**

In the Telstra Submissions, Telstra has already indicated to the Commission that the identity of the individual fibre owners with respect to each building is information which is confidential to Market Clarity and the individual fibre owners.<sup>16</sup> The information regarding CBD buildings connected by fibre was obtained by Market Clarity from the fibre owners on the condition that it remain confidential and only made available in an aggregated form. Accordingly, Market Clarity can identify the group of fibre owners who have responded to the survey and can name the members of that group, but Market Clarity cannot provide information setting out which entities own which specific connections to buildings.

It is clearly open to the Commission to ask each carrier in that list whether it has optical fibre infrastructure in the areas for which Telstra seeks exemption from the standard access obligations.

In addition, Telstra notes that the survey question posed by Market Clarity did not capture data at the level of specificity the Commission now requires. The question posed requested the respondents to provide the number of buildings accessed by fibre on an aggregated basis for each city. Therefore, a building-by-building analysis is not possible from the survey responses. For your reference, the Market Clarity survey question is attached at **Appendix 4.**

In respect of the Commission’s comment that the information in the Market Clarity CBD Fibre Report “*does not provide sufficient detail to enable analysis by the ACCC*”, we respectfully disagree. In particular, we refer the Commission to the analysis in paragraphs 58 to 62 of the Smart Statement where Mike Smart analyses this information and applies his findings to the historical data in the BIS Shrapnel report (2001) in forming his conclusions.

Nonetheless to assist the Commission to better understand the Market Clarity survey data, Telstra provides a report produced by RP Data Commercial on the number of buildings in

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16 Market Clarity, CBD Fibre Deployment Confidential Report, 19 December 2007.

each CBD in the survey in **Appendix 5**. Table 1 below which incorporates the results of that report shows:

- (a) the number of CBD buildings;
- (b) the number of Telstra fibre connections to CBD buildings;
- (c) the percentage of CBD buildings with Telstra fibre connections; and
- (d) the number of non-Telstra fibre connections to CBD buildings.

**[c-i-c]**

**Table 1: buildings with Telstra fibre connection and non-Telstra fibre connections**

Table 1 should be interpreted with care as it is based on the Market Clarity survey data which omits a number of non-Telstra operators that are known to be present but chose not to participate in the survey. In particular, Optus claims to connect around **[c-i-c]** of CBD buildings nationally.<sup>17</sup> This is comparable to the percentage of buildings connected to Telstra's optical fibre network which, as indicated in Table 1, varies between **[c-i-c]**.<sup>18</sup>

The data in Table 1 also indicates that there is a high number of non-Telstra fibre connections. (Again, this excludes a number of key operators, in particular, Optus.) It is possible that there is some (potentially significant) overlap among non-Telstra operators in terms of the buildings connected (i.e., the same building may have multiple connections)

Based on the data set out in Table 1, it is open to the Commission to conclude that:

- (a) Telstra's network is not connected to every building, in fact significantly less than half of CBD buildings; and
- (b) there is a significant level of non-Telstra activity in terms of CBD fibre building connections.

The overall conclusion is that Telstra's optical fibre network in CBD areas does not confer on Telstra the level of dominance claimed by Optus and Internode.

We also refer the Commission to Mike Smart's finding that new fibre installation is commercially viable in CBD areas based on the analysis of costs provided in the Craig

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17 Optus submission (April 2008), paragraph 4.19.

18 The data for Adelaide is excluded as an outlier.

Lordan statement.<sup>19</sup>

5. **Please provide a list, description and copy of a sample contract which sets out the specifications of the services provided for all Telstra's products that it considers are or constitute tail-end and/or inter-exchange services, as described by the ACCC in the *Transmission Capacity Service - Review of the declaration for the domestic transmission capacity service -Final Report, April 2004, page 7 (the 2004 Final Report)*.**
- a. **For each product list please provide:**
- i. **the average contract length for supply;**
  - ii. **the wholesale list price that applied for any part of 2004, 2005, 2006, 2007 and 2008.**

#### ***Telstra transmission products***

Telstra's standard transmission products constituting tail and/or inter-exchange services are:

- x162: Telstra Domestic Inter-exchange Transmission Capacity Service; and
- x163: Telstra Domestic Tail Transmission Capacity Service.

Sample service schedules which contain service descriptions for each product are attached in **Appendix 6**. Obviously these are not stand alone contracts but form part of broader interconnection arrangements with wholesale customers.

#### ***Average contract length***

While the term of Telstra's individual contracts with wholesale customers are confidential, as a general matter the average length of the service schedules relating to wholesale transmission is three years or less. There is also generally an option to review those terms at the end of that contract period. Telstra's terms of supply also provide for fixed term agreements for particular transmission services ranging from 12 to 36 months. Typically services are purchased for a 12 month minimum term.

#### ***Wholesale list prices***

Please see the price list set out in the service schedules referred to above. These prices

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19 Statement of Craig Lordan, Estimated optic fibre cable installation costs within CBD Areas, 20 December 2007.

(which are list prices only and do not necessarily reflect the actual prices charged by Telstra to access seekers) apply to the period specified by the Commission. Telstra also reminds the Commission that Telstra has provided industry price data from Telsyte for metropolitan transmission services in the period of 2003, 2004 and 2007.<sup>20</sup>

6. **For each ESA proposed for exemption, including those ESAs listed in Question 2, please provide the number of wholesale transmission SIOs and capacity for each of Telstra's transmission products listed in response for Question 5. Please provide the information broken down by:**
- **ESA**
  - **speed**
  - **whether the transmission product provided is tail-end, inter-exchange or a service that combines both and**
  - **whether the product is sold in isolation or in combination with another product which Telstra considers is or constitutes a transmission capacity service as described in the ACCC's 2004 Final Report, page 7 and what that product is.**
- a. **The above requested information as at 30 June 2005, 30 June 2006 and 30 June 2007.**
- b. **The information requested in this question should be provided in the format set out in Attachment 1, Table 2.**

Telstra provides information on an ESA-by-ESA basis for January 2004 and February 2008. Due to certain limitations in the RASS database for particular periods, Telstra cannot provide information on an ESA-by-ESA basis as at 30 June 2005, 30 June 2006 and 30 June 2007 without having recourse to confidential wholesale customer information. Telstra's answer is set out in **Appendix 7**.

A summary of the number of wholesale transmission services in the ESAs subject to the Exemption Applications for the respective dates is set out in Table 2 below.

**[c-i-c]**

**Table 2: Number of wholesale transmission services provided by Telstra in the ESAs subject to the Exemption Applications (January 2004, February 2008)**

While the number of wholesale transmission services has increased over the past four

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20 Telsyte, Historical Wholesale Metro Leased Line Prices 2003-2004 and Current Wholesale Metro Leased Line Prices 2007.



years, it does not follow that Telstra Wholesale's market share has increased.

7. **For each ESA proposed for exemption from the declared DTCS, including and ESAs listed in Question 2, please indicate whether there is space:**
- a. **to accommodate the installation of standard equipment in the Telstra exchange by a third party, which is necessary or convenient to use the DTCS provided by Telstra**
  - b. **in the Telstra exchange and/or ducts in and between each ESA, to install equipment and fibre which is necessary or convenient to provide transmission services equivalent to DTCS.**

**In the absence of space in the Telstra exchange and ducts, please identify how such equipment could be installed.**

- a. **Space to accommodate equipment in the Telstra exchange by a third party to use the DTCS provided by Telstra**

It is not necessary for a third party to install any equipment in a Telstra exchange in order for it to simply acquire DTCS from Telstra. If the access seeker is acquiring DTCS as a complement to its supply to its end-use customers of services based on ULLS or LSS, the access seeker may wish to obtain space in Telstra's exchanges to install its DSLAM equipment. However:

- (a) the DSLAM need not be based in the Telstra exchange but may be housed externally and connected via Telstra's EIC service; and
- (b) in any case, that the requirement to have a DSLAM properly relates to ULLS/LSS, not DTCS.

- b. **Space in the Telstra exchange and/or ducts in and between each ESA, to install equipment and fibre which is necessary or convenient to provide transmission services equivalent to DTCS**

- (i) Duct access

Given the very large number of ducts in Telstra's network within the Exemption Area, it is not feasible for Telstra to provide information to the Commission on the capacity for access seekers to install their own sub-duct equipment within any particular duct within the Exemption Area.<sup>21</sup> However Telstra notes that its general practice in relation to the

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21 As the Statement of [c-i-c] indicates at paragraph 11, a feasibility study is necessary to determine whether an application for duct space can be accommodated. This involves a physical inspection by Telstra personnel. Consequently Telstra is not in a position to indicate,

installation by access seekers of their cables inside Telstra ducts is outlined in the Statement of [c-i-c] of 20 December 2007, which was provided to the Commission as an attachment to Telstra's submission of 21 December 2007 on the Exemption Applications.

As [c-i-c] observes in his statement:

[c-i-c] <sup>22</sup>

Further information about duct access is also available from Telstra Wholesale's website at <http://telstrawholesale.com/products/facilities/duct-access.htm>.

(ii) Access to Telstra exchanges

The following discussion relates only to the CBD and Metropolitan areas for which exemption from the applicable SAOs in respect of tail-end transmission is sought ("**Tail-end Transmission Exemption Area**").

Telstra does not have, and therefore cannot provide to the Commission, precise percentage-level capacity data on the utilisation of exchange Telstra Equipment Building Access ("**TEBA**") or Main Distribution Frame ("**MDF**") space. The assessment of utilisation and spare capacity in an exchange is a complex process requiring a detailed case-by-case assessment by Telstra's planning staff. Given the nature of the assessment exercise, which involves visual inspection and engineering assessment on an exchange-by-exchange basis, and the unknown and uncertain factors involved, it is not possible for Telstra to determine with certainty the level of space and MDF utilisation within exchanges.

However, Telstra does produce and publish a list of sites that it considers to have reached capacity either in terms of their TEBA space, MDF space or both. This list, called the "capped exchange list", is published on the Telstra Wholesale website.<sup>23</sup> The capped exchange list is intended to be viewed by access seekers as a guide. It is possible that there are solutions which an access seeker can propose in order to serve its customers from a capped exchange.

If a site is classified as "Potential", this indicates that inspection of it has revealed that access to install additional TEBA-based equipment and/or MDF connections may be possible, albeit in some cases with some investment on the part of the access seeker. For example, access to the exchange might require upgrades to power or air-conditioning

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22 ex ante, how much space is available in Telstra ducts.  
Statement of [c-i-c], 20 December 2007 ("**[c-i-c]**"), p 5.  
23 See <http://telstrawholesale.com/products/facilities/teba-technical.htm>.

systems, or modifications to the internal structure of the exchange. Accordingly, access to these sites may not in all instances be feasible, may be expensive, may only free up limited space, and will require outlay on the part of the access seeker. However investments of this nature have been undertaken in the past by access seekers seeking to gain access to particular exchange sites.

If the exchange is classified as “Racks capped” (i.e. there is no space left in the exchange for an access seeker to install DSLAM equipment), then access seekers can still serve customers by installing DSLAM equipment in an external housing or nearby building and connecting to the MDF using an external interconnect cable (“EIC”).

Using an EIC, an access seeker may install their DSLAM equipment in a nearby building or roadside cabinet, provided that it is within 500 metres of the relevant local exchange (250 metres for LSS).

As of June 2008, three of the exchanges that are the subject of Telstra’s exemption application are also on the capped TEBA list. These are:

- Pitt Street (PITT) - listed as both MDF and Racks Capped
- Roma Street (RASH) - listed as both MDF and Racks Capped
- Nerang (NERG) - listed as potential.

Of these, the exchange at RASH is in the process of being decommissioned and moved to another building, while the exchange at PITT is capped only because the power sub-station serving the exchange is at the limit. A power upgrade by the local power utility is required before any more equipment can be installed at PITT.

**New “Question 8” - Further Information Request:**

- a. **Telstra’s estimate (in megabits or gigabits) of its own currently utilised and maximum capacity for providing tail-end and inter-exchange transmission services in each of the ESAs requested for exemption, including any ESA listed in response to Question 2 of the Information Request.**

**The response to this question should be based on existing technology in the respective ESA, and should provide information quantifying, out of the total capacity on cables in use in that ESA, the capacity used for wholesale services and capacity for Telstra’s own use. Where cables are present but not currently used, it is sufficient for Telstra to provide information on the number of unused cables.**

**b. which of the ESAs requested for exemption, including any ESA listed in response to Question 2 of the Information Request are scheduled for upgrades in relation to equipment which is necessary or convenient for the purpose of providing transmission services in the next 6, 12 and 24 months.**

**a. Estimate (in megabits or gigabits) of Telstra's own currently utilised and maximum capacity for providing transmission services in each ESA**

It is not feasible for Telstra to provide data on utilised and maximum capacity in megabits or gigabits (which in any event is not an appropriate metric for measuring capacity), whether for tail-end transmission or inter-exchange transmission, nor is it possible to do so by ESA. The reasons for this are that, from a network management perspective:

**[c-i-c]**

A further point is that transmission traffic is growing rapidly in metro areas, and due to the nature of fibre laying, it is practical to install large amounts of fibre even if these may not be fully utilised for some time to come. Accordingly, the level of spare capacity only really becomes an issue (and only needs to be monitored) when a certain trigger for augmenting the network is met.

While it may be technically possible to undertake, a full answer to the Commission's information request would likely require several individual with specialist technical knowledge to work continuously for several months. Even then, it is difficult to see how the data would prove useful to the Commission in assessing the Exemption Applications.

**b. ESAs which are scheduled for upgrades in relation to equipment which is necessary or convenient for the purpose of providing transmission services in the next 6, 12 and 24 months**

There are minimal planned NGSDH upgrades in the metropolitan exemption exchanges over the next 12 months. The vast majority of ESAs will accommodate future growth without requiring NGSDH equipment upgrades. Augmentation of interface cards and customer end equipment will continue as required on an operational and a case-by-case basis.

**Telstra Corporation Limited**

**30 June 2008**

## APPENDIX 1

### Examples of competitors' transmission services

For examples of competitive wholesale transmission services, see advertising for-

- Pipe: Dark Fibre (attached)
- Optus: Broadlink (attached)
- AAPT: services advertised at <http://aaptbusiness.com.au/business/carriers/atm.cfm> and at <http://aaptbusiness.com.au/business/carriers/clear.cfm>; and
- Nextgen Networks: services advertised at <http://www.nextgennetworks.com.au/sdh.htm>.
- Silk Telecom  
<http://www.silktelecom.com.au/sitefiles/File/Network/Silk%20telecom%20Australia%20network%20v1.pdf>

## **APPENDIX 2**

### **Information on utility operators' optical fibre network in CBD and metropolitan areas**

**APPENDIX 3**

**Statement of [c-i-c]**

**Confidential**

## APPENDIX 4

### Market Clarity survey question on CBD building fibre connections

**Confidential**



**APPENDIX 5**

**RP Data Commercial report**

**Confidential**

## APPENDIX 6

### Sample contracts

**Confidential**

#### **Contents**

1	CRA 162 - Domestic Inter-exchange Trunk Transmission Capacity Service
2	CRA 163 - Domestic Tail Transmission Capacity Service

## APPENDIX 7

### Service description and bandwidth

**Confidential**