Optus Submission to

Australian Competition and Consumer Commission

on

Telstra's December 2007 Exemption Applications for Tail End and Inter-Exchange Transmission Capacity Services

(Public version)

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1. Introduction

1.1 Telstra has proposed an exemption for the supply of tail-end and inter-exchange (IEN) domestic transmission capacity services (DTCS) in a number of capital city, metropolitan and regional centre exchange service areas (ESAs). Telstra contends that the supply of the relevant services is competitive and the proposed exemptions would benefit competition and promote efficient investment.

1.2 This submission contains Optus' response to Telstra's applications. The applications for tail-end and IEN DTCS are considered separately.

1.3 Optus notes that while it wishes to assist the Commission to the best of its ability, it has been prevented from responding fully by Telstra's ongoing refusal to allow Optus' internal experts to assess its confidential supporting evidence. This issue was raised in our letters of 1 February, 8 February and 3 April 2008. It should be a matter of grave concern to the Commission that Telstra has been able to frustrate the ability of its competitors to participate properly in this consultation. Accordingly, Optus strongly recommends that less weight should be given to this material.

Executive summary

Tail-end DTCS

1.4 Optus opposes Telstra's applications for exemption of tail-end DTCS, and rejects its arguments in support of that application.

1.5 Telstra's proposed market definitions ignore the reality that transmission capacity services are provided from one point to another. Telstra counts infrastructure that is incapable of effectively constraining its own price-setting as "competing" infrastructure when in fact it is nothing of the sort. The level of infrastructure-based competition in transmission capacity is likely to be lower than Telstra claims, due to Telstra's overly broad geographical market definition, limitations in the evidence which may overestimate the number of relevant fibre competitors and its attempts to rely on non-fibre infrastructure.

1.6 The high cost of building access fibre infrastructure is a significant barrier to entry in tail-end transmission capacity and there are many buildings to which it will never be economically feasible for multiple operators to build access fibre. Telstra's apparent belief that exemption will stimulate new investment which will render regulated access redundant is based on flawed commercial analysis which fails to establish the economic feasibility of such investment. The Commission cannot be satisfied that the proposed exemptions will stimulate significant investment in fibre access infrastructure. Further, even if some investment in tail-end transmission was stimulated, such investment would represent inefficient, costly duplication of natural monopoly infrastructure.

1.7 The proposed exemptions would cause severe and lasting damage to competition in downstream markets by removing regulated access to tail-end transmission capacity. In CBDs the proposed exemption would stifle competition and return the vast majority of buildings to monopoly service provision. In metropolitan areas, the availability of ULLS is affected by issues of bandwidth, quality and availability, and thus cannot be a viable substitute for the DTCS. As a result the proposed exemption would damage competition in downstream markets in metropolitan areas, impacting the supply of wholesale services, mobile services and the supply of services to business customers.

1.8 The proposed exemptions with regard to tail-end transmission capacity are not in the long term interests of end users, and should be rejected.

IEN DTCS

1.9 Optus does not oppose Telstra's applications with regard to IEN DTCS. While Telstra's proposed market definition is incorrect, and its assertions about the stimulation of new investment are questionable, it is nevertheless possible that there is sufficient inter-exchange transmission infrastructure in the proposed exemption areas to preserve competition in the absence of declaration. Optus would also submit, however, that Telstra's approach would need to be carefully scrutinised if it were to be applied more widely.

Timing matters

1.10 Optus submits that if any of the applications are granted, there should be a phase-in period, such that any exemptions granted would not come into effect until at least 24 months after the ACCC's final decision. Optus submits that the initial period for any exemptions granted should be no longer than two years.

2. Geographical market definition

2.1 In this section we first set out the uses of the DTCS as an input into various downstream fixed line services provided to the end user's home or business premises. We then set out Optus' submissions on the geographical aspect of Telstra's proposed definition of the markets for the DTCS. Optus considers Telstra's definitions to be too broad, since they ignore the point to point nature of transmission capacity services and incorrectly treat infrastructure that is incapable of effectively constraining Telstra's own price-setting as "competing" infrastructure.

Downstream markets

2.2 Telstra has proposed an exemption from the declaration for the supply of domestic transmission capacity services (DTCS) in relation to;

(a) inter-exchange transmission in 17 capital city areas (the CBD inter-exchange exemption area) for all declared bandwidths;

(b) tail-end transmission in 17 capital city areas (the CBD tail-end exemption area) for all declared bandwidths;

(c) inter-exchange transmission in 115 metropolitan areas or regional centres (the metropolitan inter-exchange exemption area) for all bandwidths; and

(d) tail-end transmission in 128 metropolitan areas (the metropolitan tail-end exemption area) for bandwidths up to 2Mbps.

2.3 Optus uses the DTCS as an input into its supply of downstream fixed line services to business, wholesale and mobile customers. A key Telstra product in this regard is the "AN lease". Optus uses the AN lease product to provide a transmission link between its POI and the end user's home or business premises. If the Optus POI is in the same ESA as the end user's premises, the AN lease product would correspond to tail-end DTCS. If not, then the AN lease would include both IEN and tail-end DTCS.

2.4 Optus is currently using (as at March 2008) a total of **CiC** AN leases. The majority are being used as an input to services supplied to business customers. The breakdown of Optus' main uses for AN leases is as follows:

(a) business customers (approximately **CiC**). In respect of some business customers, Optus purchases the DTCS for purposes of redundancy only. Businesses frequently require redundant paths for transmission capacity, to ensure continuity of service;

(b) wholesale customers (approximately **CiC**); and

(c) backhaul for Optus mobile network (approximately **CiC**), the demand for which is expected to increase with the expansion of Optus' 3G network (for which approximately **CiC** additional AN leases are required).

2.5 It follows that the proposed exemption for tail-end DTCS would impact on the markets in which telecommunications services are supplied to large corporate and government customers, on mobile services and also (by affecting wholesale) on mass market telecommunications services.

2.6 Optus also purchases IEN leases from Telstra where the volume of traffic is not sufficient to make construction of Optus inter-exchange infrastructure economic.

Market for the service

2.7 Telstra has proposed that in respect of the tail-end DTCS, it is appropriate to treat each ESA as a geographic market.[1] In respect of the IEN, Telstra proposes that each CBD and each metropolitan area of each capital city is a geographic market.[2]

2.8 Optus submits that these geographical market definitions are overly broad, since they count infrastructure that is incapable of constraining Telstra's price-setting as "competing" infrastructure.

The purpose of market definition

2.9 To properly assess Telstra's proposed market definition, we first consider the purpose of this analysis, which is to assess the competitive state of the market[3] in the event that regulation was withdrawn.

2.10 The aim of market definition in this context is to identify those competitors that currently represent the most important competitive constraints on Telstra's supply of transmission capacity services in the event that regulation was withdrawn. According to the Federal Court, we should try to include in the relevant market only those suppliers –of the same or related product in the same or related geographic area –whose existence significantly restrains the defendant's power.[4]

2.11 It is relevant to consider the available substitution possibilities in the event that the exemption is granted. According to the Federal Court, from the buyer's point of view, a market represents a range of goods or services which are good substitutes for one another in satisfying the buyer's requirements.[5] Both demand side substitution and supply side substitution should be considered.

2.12 Supply side substitution occurs when firms endowed with assets that can be easily adjusted to produce substitute goods are able to respond to a price increase by switching their production facilities to produce the goods or services subject to such price increase.[6] The 'hypothetical monopolist' test, which employs a SSNIP analysis, is used to determine the possibilities for supply side substitution.

1 Smart statement, para 28.

2 Smart statement, para 29, 30.

3 According to S4E of the TPA, "market" includes "…a market for those goods or services and other goods or services that are substitutable for, or otherwise competitive with, the first-mentioned goods or services."

4 Singapore Airlines Ltd v Taprobane Tours WA Pty Ltd (1991) 33 FCR 158 at 178, 104 ALR 633 (1992) ATPR 41-159.

5 Re Howard Smith Industries Pty Ltd (1977) 28 FLR 385

6 Dr. Atilano Jorge Padilla (NERA), 2001, The Role Of Supply-Side Substitution In The Definition Of The Relevant Market In Merger Control, A Report for DG Enterprise A/4, European Commission, page 19.

2.13 A key distinction made at this stage is that between supply side substitution and new entry into the market by competitors. The chief distinction is that with supply side substitution, a firm can promptly redeploy existing assets to serve the market, whereas new entry involves significant, irreversible new investments (i.e. sunk costs) which take time to construct. This distinction has been noted by NERA in a paper on supply side substitution:

> *"A necessary condition for two products to be considered supply-side substitutes is that the supplier of one of them already owns all the assets needed to produce the other… However, possession of all relevant assets is not enough. It is also necessary that redeploying these assets involve no additional investments, in particular no sunk costs…"* [7]

2.14 A firm that cannot currently serve the market without making significant, irreversible new investments is defined as being outside the boundaries of the market. Due to the sunk costs involved and the time taken to enter the market, a potential entrant cannot be counted as a competitor that currently exercises an important constraint on the regulated firm in the event that regulation was withdrawn.

Tail-end

2.15 We now consider the geographical aspect of market definition for tail-end DTCS.

2.16 Transmission capacity is a point-to-point service. To use the Commission's words, tail-end transmission refers to transmission between a point at a customer location and some point on the access seeker's network (such as a point of interconnection or "POI").

2.17 The narrowest reasonable geographical market for tail-end DTCS is the market for supply of tail-end DTCS between a POI and a single end user address. We now consider whether the geographical range of the market may be expanded to include other suppliers, in particular, suppliers with infrastructure capable of supplying services equivalent to the DTCS to other nearby addresses in the same ESA (but not to the address in question). Applying the logic set out in the previous section, such infrastructure should be included in the market if its owner would be able to provide services equivalent to the DTCS to the end-user premises in question without making substantial, irreversible new investments.

2.18 To supply a given building with transmission capacity services requires construction of access fibre infrastructure. This construction is a sunk cost, and is typically both costly and time-consuming. Optus notes that in a costing exercise it has carried out recently, the cost of construction of access fibre infrastructure to buildings in the Melbourne CBD was in the range of **CiC**, and the time required for the construction in these cases was in the range of **CiC**.[8]

7 Dr. Atilano Jorge Padilla (NERA), 2001, The Role Of Supply-Side Substitution In The Definition Of The Relevant Market In Merger Control, A Report for DG Enterprise A/4, European Commission, pages 4 & 5.

8 The results of this costing exercise are set out in Appendix A.

2.19 It follows that the geographical market for the supply of tail-end DTCS between a POI and a single end user address *cannot* be expanded to include suppliers with infrastructure capable of supplying services equivalent to the DTCS to other nearby addresses in the same ESA, since such infrastructure is not capable of supplying to the premises in question, and cannot be made capable of doing so without substantial, costly and time-consuming investment.[9] Such suppliers cannot constrain Telstra's pricing of the DTCS as supplied to the end user premises in question within the commercial timeframe relevant for market definition. Such suppliers may or may not enter the market in future, but they cannot be regarded as within the market currently.

2.20 Telstra's market definition is too broad, since it ignores the reality that transmission capacity services are provided from one point to another. The choice of the ESA to define the geographical boundaries of the market is arbitrary. Optus submits that each market for tail-end transmission capacity must be limited (geographically) to a single route between two points on the network (eg a POI to a single end user's home or business premises). Each route is assessed on its individual merits.

IEN

2.21 For similar reasons, Optus submits that each market for IEN transmission capacity must be limited (geographically) to a single route between two exchanges.

9 Given that this logic applies to infrastructure capable of serving nearby addresses in the same ESA, it applies more forcefully to infrastructure which is some distance away within the same ESA.

3. Suggested alternatives to the DTCS

In this section we set out Optus' views on the characteristics required for a substitute transmission capacity service and on the level of infrastructure-based competition in the exemption areas including the alternatives to the DTCS suggested by Telstra. Optus considers that the level of infrastructure-based competition is likely to be lower than Telstra claims, due to Telstra's overly broad geographical market definition, limitations in the evidence which may overestimate the number of relevant fibre competitors and its attempts to rely on non-fibre infrastructure. Further, the ULLS is not an adequate substitute for the DTCS due to bandwidth, quality and availability issues.

Characteristics required for a substitute transmission capacity service

3.1 Optus submits that in assessing whether a proposed alternative is a viable substitute for the DTCS in the context of Telstra's exemptions, the following parameters should be taken into account:

1. **Bandwidth of service.** The DTCS provides a guaranteed speed of at least 2 Mbps[10].

2. **Quality of service.** For a product to be reasonably considered a substitute it must be comparable in terms of quality of service attributes such as;

   i) Reliability of service;

   ii) Uniformity of quality and freedom from interference. The DTCS is a dedicated line and traffic is not shared with anyone else;

   iii) Network architecture (e.g. available POIs);

   iv) Fault restoration and support. Business customers would typically expect a 12 hour (or lower) standard restoration time in the event of a fault regardless if it is a complete loss of service or service difficulties; and

   v) Provisioning time. Business customers would typically expect to be provided with reasonable provisioning times once they have placed an order.

3. **Reasonable cost** –Both set up and maintenance costs.

4. **National coverage**. This is a particularly important factor for business customers because of the "whole of business" service requirements typical of large corporate customers.

5. **Flexibility** as to location of service. The DTCS allows service provision to sites that are not buildings, for example a mobile base station (BTS).

10 Service description under the Access Agreement

Further, the DTCS allows business customers to extend the reach of their premises/office within a short distance.

6. **Availability at wholesale.** The DTCS is a wholesale input which allows an access seeker to provide services in downstream markets (such as long distance calling). Accordingly, a viable substitute network must offer transmission services in the wholesale market. If Telstra's application is to be granted, the ACCC must be satisfied that Telstra's conduct would be constrained by competition in the wholesale market in which the DTCS is supplied.

3.2 Optus submits that potential substitutes will not provide sufficient competitive constraint on Telstra to discipline its pricing of transmission capacity services unless they possess all of the above attributes.

Existing fibre infrastructure

3.3 In determining concentration levels in the nominated ESAs, Telstra has relied on evidence provided by Market Clarity to the effect that there are three or more access fibre owners present in the ESAs in the exemption application.[11]

3.4 Optus notes that even if this claim were correct, the presence of three or more fibre operators somewhere in a given ESA is not necessarily sufficient to constrain the price of DTCS on a route between two points (as discussed in previous section).

3.5 However, Optus further submits that the ACCC cannot rely on Telstra's claim since there are limitations in the methodology used for determining the extent of infrastructure in an ESA. Optus considers that the evidence relied on by Telstra is unreliable and may overestimate the amount of relevant fibre infrastructure in a given ESA since it;

(a) is based on an unverifiable survey of carriers. Given that the report did not disclose details such as addresses for each fibred building it is difficult to verify the robustness of the results and the statistical reliability of its methodology. As we note in the previous section each route should be considered individually so sampling is not appropriate;

(b) does not demonstrate that the fibre infrastructure reported in the survey is capable of providing tail-end or inter-exchange transmission services;

(c) does not establish that the fibre infrastructure reported in the survey is capable of providing services equivalent to the DTCS, ie sufficient capacity and QoS. For example, an RTA fibre optic camera link would not be provisioned for telecommunications grade products;

(d) does not show whether the fibre infrastructure reported in the survey is capable of being interconnected with carrier networks (for example at a

11 "A metropolitan exchange service area associated with a capital city should be included in the exemption application if and only if: …the exchange service area has 3 or more access fibre owners" Smart, p19

Telstra exchange). The fact that a fibre route passes in close proximity to a potential POI does not necessarily mean that the fibre is accessible. There must be a 'drop-in point' where the access seeker is able interconnect with the existing fibre. This is not always possible due to technical or physical limitations (e.g. no pit space). Further as the ACCC is aware there are significant limitations on TEBA space for interconnection;

(e) does not set out whether the fibre infrastructure reported in the survey is available for use in providing wholesale services. Access to buildings by a given carrier does not necessarily mean that access is available to third parties (either on that carrier's fibre or on third party fibre). To use such infrastructure third parties would need to get to the access provider's POI by having network and/or a POI nearby, or pay for a further connection (between POIs of the access provider) to allow interconnection at a suitable POI; and

(f) relates to fibre infrastructure in ESAs located in NSW only in the December report (clause 4.3). Given the nation-wide nature of Telstra's exemption application, Optus submits that this evidence is wholly insufficient.

3.6 Further, Optus notes that Telstra's approach on the level of competition in the nominated ESAs appears to be inconsistent with the findings Telstra has relied on in the Market Clarity report. In many of the nominated ESAs, Market Clarity appears to have reported that there is only one access fibre infrastructure owner,[12] which appears to be at odds with Telstra's contention that there are three or more access fibre owners present in the ESAs in the exemption application.[13]

3.7 Optus notes that it has been prevented from making a more specific assessment of the evidence contained in the Market Clarity reports by Telstra's ongoing refusal to allow Optus' internal network experts to have access to this evidence. This denial of an opportunity to consider and properly understand the evidence was raised in our letters of 1 February, 8 February and 3 April 2008.

Alternative platforms

3.8 Telstra contends that there are currently close substitutes (microwave, satellite and the ULLS) to the declared DTCS available in the exemption areas. However, the alternative platforms suggested by Telstra are not direct substitutes for the DTCS. These platforms were not built for the purpose of providing transmission capacity services and are not capable of meeting the typical requirements of Optus' customers (particularly its business customers) with respect to the parameters noted earlier in this section.

Microwave

12 Appendix 4, Table 1: To name a few: Ashfield NSW, Bankstown NSW, Baulkham Hills NSW, Blakehurst NSW, Botany NSW, Carlingford NSW, Castle Hill NSW, Concord NSW, Coogee NSW, Cremorne NSW, Cronulla NSW, Dee Why NSW, Five Dock NSW (and a number of other ESAs).

13 "A metropolitan exchange service area associated with a capital city should be included in the exemption application if and only if: …the exchange service area has 3 or more access fibre owners" Smart, p19

3.9 Optus submits microwave is not a direct substitute for Telstra's tail-end transmission service.

CiC

Satellite

3.10 Optus submits satellite is not a direct substitute for Telstra's tail-end transmission service.

CiC

3.11 In conclusion, there is not effective infrastructure-based competition in tail-end DTCS in the proposed exemption area.

ULLS

3.12 Telstra has suggested that the proposed tail-end exemption would not harm competition in metro areas since the ULLS is a good substitute for the DTCS at levels up to 2MB.

3.13 Optus notes that it has not been using ULLS to substitute for Telstra AN leases. Both the total number of ULLS customers and Telstra AN leases have grown significantly over the years. The number of Telstra AN leases as at September 2006 was **CiC** and in September 2007, it had grown to **CiC** and **CiC** in March 2008. Similarly, the number of ULLS customers has grown from **CiC** in FY 05/06 to **CiC** in February 2008.

3.14 Optus submits the ULLS is not a viable substitute for the DTCS due to issues around its quality of service and availability. Further, Optus notes that at least insofar as it is concerned, Telstra has sought to remove Optus' ability to access ULLS in many overlapping ESAs in accordance with its application for exemption in Dec 2007.

ULLS quality of service

3.15 The ULLS cannot provide a quality of service equivalent to the DTCS due to differences in the available levels of service assurance and provisioning time, and crucially, the fact that bandwidth is limited by distance from the exchange.

3.16 The ULLS cannot necessarily provide equivalent bandwidth to the DTCS, which provides a guaranteed speed of at least 2 Mbps. This is because ULLS quality/speed of service for data deteriorates as the copper line travels further from the exchange. Only 60% of Band 2 services are close enough to the exchange to receive a 2Mbps service (and this is assuming away issues with copper pairs, copper quality, exchange capacity and pair gain). The remaining 40% of Band 2 services are restricted by distance limitation from receiving a service with DTCS-equivalent bandwidth.

3.17 **CiC**

3.18 Further, Optus faces address verification problems when placing an order for ULLS:

1. The address that Optus supplies must be 100% correct to be verified by Telstra's automated provisioning system;

2. The address used in Telstra's billing system (and therefore copied and used by Optus when ordering may not match the address in the provisioning system); and

3. Rejections are not qualified with reasons (or further information on how they can be resolved).

ULLS availability

3.19 There are also a number of problems restricting the availability of the ULLS which restrict its ability to act as a viable substitute for the DTCS.

3.20 For example, the ULLS cannot be delivered to a base transceiver station (BTS) / "pole". Due to the definition of the declared service the ULLS cannot be delivered to a base transceiver station (BTS) / "pole"; it can only be delivered to an "address". Consequently the ULLS is not a substitute for the DTCS with regard to transmission for mobile network backhaul purposes.

3.21 Further, the termination point of the ULLS cannot be extended physically. The exact location to which the ULLS is delivered cannot be extended physically, if the end user required such a change (for example, moving the termination point up a driveway or a site). AN leases on the other hand are more flexible, and it is possible to extend the spur in this way.

3.22 Optus also notes that there are both physical and operational constraints placed on ULLS which mean it is not viable as a substitute for the DTCS, including:

(a) The presence of pair gain systems or RIMs on a copper line mean that a line cannot be DSL enabled.[14] We note that RIMs are particularly prevalent in business parks and near office buildings, which means that these issues are proportionately greater for business services.

(b) ULLS cannot be supported where the copper is of poor quality. Also, spare copper pairs are difficult to order and often they are simply not available or of insufficient quality. Also the database of spare copper pairs is not user friendly as Optus frequently faces address verification problems when placing an order on the provisioning system.

(c) Telstra has imposed certain restrictions on the ULLS service which are significantly limiting its availability. One such restriction is that a number of the exchanges in the proposed exemption area are subject to claimed physical constraints, which means that access seekers may not be able to

14 Optus submitted evidence on pair gain affected ESAs in its March 2008 submission on Telstra's exemption application in respect of Optus' HFC area including a map illustrating the extent of pair gain affected premises in the Miller ESA. Optus refers the Commission to this material.

deploy sufficient rack capacity in those exchanges to meet future ULLS interconnection requirements. These issues were discussed with at length in Optus' November 2007 submission on Telstra WLR/LCS exemption.

(d) The ULLS is subject to impact by Telstra's network upgrade plans. Since the ULLS was declared Telstra has repeatedly raised issues concerning its plans to upgrade or augment its network.[15]

15 In a meeting at the Comms Alliance in June 2006, Telstra representatives tabled a presentation titled "Access Network Upgrade Notification Process Briefing to the ULLS/FTTN Think Tank". This presentation indicated that Telstra had well developed plans to upgrade its network to meet a number of its business or regulatory imperatives. In its presentation it indicated that some of these initiatives would impact the use of ULLS, including plans to remove the copper in some areas. Telstra's initial indications were that 20% of Distribution Areas might be adversely impacted.

4. Impact of proposed exemption on investment

4.1 In this section we set out Optus' view that the high cost of building access fibre infrastructure is a significant barrier to entry in tail-end transmission capacity. We then set out our view that even if the proposed exemption did motivate additional investment, any impact of the proposed exemption in promoting such investment would not be efficient.

Barriers to entry

4.2 Telstra contends that the cost of laying fibre in the CBD exemption areas is relatively inexpensive compared to the likely revenue return. In doing so it relies on cost estimates provided by Craig Lordan and analysis provided by Michael Smart. Further, Telstra says an inference of ease of entry can be made from the increase in the number of CBD buildings connected to its competitors by optical fibre, as shown in the Smart Statement.

4.3 Optus submits that the high cost of building access fibre infrastructure is a significant barrier to entry in tail-end transmission capacity. Optus considers that Telstra's conclusions are based on flawed analysis which fails to establish the economic feasibility of investment in access infrastructure. Further, the capital costs required to build access fibre to CBD buildings are highly variable, as are projected revenues. As a result there are many buildings to which it will not be economically feasible for multiple operators to build access fibre.

4.4 In this section Optus makes the following points:

(a) the cost estimates provided in the Craig Lordan statement should not be relied upon;

(b) the analysis provided in the Smart report should not be relied upon; and

(c) it will not always be economically feasible to build access fibre to CBD buildings, since capital costs are substantial and variable, and revenue projections can be variable.

Craig Lordan statement

4.5 Optus considers that the cost estimates provided in the Craig Lordan statement are likely to substantially underestimate the cost of building access infrastructure, based on a comparison with recent Optus estimates.

4.6 Optus routinely carries out estimates of the cost of building fibre infrastructure. Four sites in the Melbourne CBD for which estimates were calculated in 2007 have been selected at random. In order to assess the accuracy of the cost estimates from the Lordan report, Optus has extracted from the report costs comparable to its own four sites in terms of the build mix, and expressed the costs

from both sources in terms of cost per metre.[16] Further detail of this comparison has been set out in Appendix A.

4.7 In summary, on a per metre basis the costs estimated at Optus' four Melbourne sites were substantially higher than the comparable cost estimates from the Lordan report, as noted below: **CiC**

4.8 Optus' estimates were randomly selected and should be taken as representative of the build costs of access fibre in the Melbourne CBD.[17]

4.9 Consequently, Optus submits that the cost estimates provided in the Craig Lordan statement are likely to substantially underestimate the cost of building access infrastructure in CBDs and should not be relied upon.

4.10 Optus notes that it has been prevented from making a more complete assessment of the evidence contained in the Lordan report by Telstra's ongoing refusal to allow Optus' internal network experts to have access to this evidence. For example, the build distances used in Optus' estimates had to be "reverse engineered" based on information provided in the public version of the report. This denial of an opportunity to consider and properly understand the evidence was raised in our letters of 1 February, 8 February and 3 April 2008.

4.11 Further, Optus considers that the estimates in the Lordan statement should not be relied upon for the following reasons:

(a) Lack of information about build distance between the selected end points, the route taken and unit cost for fibre, subducts, pits, joints etc.

(b) Lordan's cost model for building in lease duct does not appear to allow for break out pits or duct.

(c) Optus considers that Lordan underestimated the number of pits/joints between end points required for the CBD build; it should be one for every 200m rather than one for every 1000m (p7).

(d) Lordan did not take into account the importance of restoration cost (restore paving and building fore courts).

(e) Optus disagrees with Lordan with regards to Directional Boring. Optus experience suggests that Directional Boring is not appropriate for 99% of CBD builds because city authorities and police traffic management do not allow boring machines to be set up and left in place during business normal hours.

(f) Lordan does not take into account of business customers' requirement for redundancy of network infrastructure (to guarantee continuity of service).

16 Note that the build distances used in these estimates were "reverse engineered" based on information provided in the public version of the report.

17 It is also worth noting that the cost estimates provided by Optus are underestimates since they do not take into account the design and planning upfront costs included in the Lordan study. If Optus was to take this into account then this would increase the cost by between 4 to 6 percentage points.

Smart analysis

4.12 Optus submits that the commercial analysis of payback periods provided in the Smart report should not be relied upon to establish the feasibility of building access infrastructure for the following reasons:

(a) Smart relies on cost data from the Lordan report, which Optus considers should not be relied on for reasons set out above.

(b) Smart does not take into account forecasts of demand and forecast revenue and operating expenditure. Optus suggests that it is important to acquire these data because investment is future oriented and high risk.

(c) Smart did not take into account certain costs other than access fibre costs such as POP establishment and transmission termination equipment costs.

(d) Smart takes transmission revenues as given by the Telsyte survey data. However Optus notes that:

i) transmission prices in respect of a particular building cannot be taken as given, since Telstra might reduce its prices after entry as a response to a competitor building access infrastructure. Such a response might make the investment unprofitable and strand the entrant's assets. Indeed for many buildings two competitors may not both be viable. This scenario would naturally be taken into account by a potential entrant considering making a substantial, irreversible new investment; and

ii) in many CBD buildings Telstra can deploy low bandwidth services over existing copper infrastructure at considerably less cost than the cost of delivery over fibre.

(e) Smart does not take into account the various non-price issues that can hinder carriers' investment in infrastructure, including difficulties in;

i) obtaining planning approvals;

ii) getting access to suitable space within road or footpath for the deployment of duct and pits;

iii) getting access to utility ducts;

iv) getting access to suitable space within customer buildings for cable termination and electronics deployment. A carrier can only access the building for cable termination if a customer in the building wants a service from a particular carrier. Even then there can be difficulties with the building owner/manager;

v) getting access to cost effective space in CBD for the establishment of POP sites; and

vi) getting access to Telstra ducts (even when Optus has its own fibre).

Economic feasibility of investment in tail-end infrastructure

4.13 Economic conditions vary between one building and another within an exemption area. Optus submits that it will often not be economically feasible to build access fibre to CBD buildings, since capital costs are substantial and variable, and revenue projections can be variable.

4.14 As noted above, Optus has calculated estimates of access fibre costs based on recently quoted prices for fibre construction in the Melbourne CBD (the result of a competitive tendering process). This exercise resulted in substantial cost estimates ranging between **CiC** and **CiC**. A separate estimate noted below (for a job with a relatively short required distance) resulted in an estimated connection cost of **CiC** .

4.15 Optus also notes that the costs estimated in this exercise are highly variable. Every building connection is unique in that the specific issues encountered in connecting each building are different. Consequently, Optus submits that it is misleading and inappropriate to view connection cost from an average viewpoint as Lordan does. When Optus makes a decision to invest or connect fibre to a particular building in the CBD, this decision is made on a client by client or building by building basis.

4.16 In this regard, Optus notes that revenue projections from building access fibre to CBD buildings can be highly variable. The substantial cost required to build access fibre may well exceed expectations of revenue in respect of some customers and make investment by competing carriers uneconomic. For example, in early 2008 Optus received an application from a corporate customer located in a capital city CBD to be delivered voice services. After carrying out the normal evaluation procedure Optus decided *not* to build access fibre. The projected total revenue from this customer for the duration of a two year contract was approximately **CiC**. Given a relatively short required distance of 54 metres, and taking into account pit, conduit, subduct and cable haul, Optus has estimated connection cost of **CiC** or **CiC** per metre. To build fibre in this case was uneconomic.

4.17 In this real world scenario and in many similar cases, it would not feasible to build access fibre, either because the cost for building fibre to the building is high or because the expected revenue was low. However it may well in these circumstances be economically feasible for Optus to purchase the DTCS in order to serve the customer. The cost of a Telstra DTCS suitable for the above case would be around **CiC** a year. In such instances the proposed tail-end exemption application will harm competition in the downstream markets in which services are supplied to the customer in question.

4.18 Further, in such instances the proposed exemption could reduce investment in infrastructure. It may very often be the case that after Optus has secured a customer using a Telstra transmission service, it will subsequently become feasible to build access fibre, for example if a second customer in the same building is acquired. Alternatively, in a case where capacity is exhausted in a particular building and a particular customer demands extra services, it may take time to build the necessary infrastructure. In this case, Optus may find it necessary

to use the DTCS on a temporary basis. These opportunities for access seekers to build scale before investing in infrastructure will be lost if the proposed exemption is granted, with severe implications for investment and competition.

4.19 Optus notes that because Telstra's network is already connected to every (or almost every) CBD building, it generally does not face the above problems faced by other carriers. As the incumbent, Telstra enjoys a significant first mover advantage over other carriers in accessing buildings. According to research by BIS Shrapnel (2001) referred to by Smart (p21) Telstra's fibre network is connected close to 100% of buildings. The corresponding figure for Optus is around **CiC**.

4.20 Optus concludes that the high cost of building access fibre infrastructure is a significant barrier to entry in tail-end transmission capacity.

4.21 Further, Optus notes that in metropolitan areas the barriers to entry are even greater, since greater distances and lower expected revenues mean that it is likely to be less economic to build fibre access infrastructure compared to CBD areas.

IEN

4.22 Similarly, Optus notes that costs and projected revenues will vary between IEN routes, and some routes will be able to support more infrastructure than others. However the IEN routes proposed for exemption carry significantly greater traffic than tail-end POI-to-premises routes, and thus investment in these IEN routes is more likely to be economic compared to tail-end routes.

Efficiency of investment

4.23 As noted above, there are significant barriers to entry in tail-end transmission. As a result, Optus considers it unlikely that the proposed exemption would result in additional investment in access infrastructure. Nevertheless, even if the proposed exemption did motivate additional investment, Optus submits that any impact of the proposed exemption in promoting such investment would not be efficient. Optus takes this view for the following reasons.

4.24 First, Optus submits that the infrastructure by which Telstra provides the DTCS should be considered enduring bottleneck infrastructure. Telstra's network has ample capacity. Accordingly, it possesses natural monopoly characteristics and the current access regime leads to an efficient use of the network. The existence of alternative infrastructure (eg, fibre access infrastructure) does not necessarily mean that Telstra's network is not a natural monopoly, since these networks may represent inefficient duplication. The existence of these networks is insufficient in and of itself to warrant the removal of regulation; just as the absence of alternative infrastructure is not necessarily sufficient to satisfy a case for the continued declaration of a service. Optus estimates that it currently runs its own access fibre infrastructure to only around **CiC** of CBD buildings. Other carriers are likely to serve fewer buildings. To achieve the same level of competitive access as that provided by the DTCS would appear to require all carriers active in

the market to duplicate Telstra's infrastructure to 100% of the buildings in the CBD. Even if this outcome was likely, it would represent inefficient duplication, not efficient investment in infrastructure.

4.25 Second, Optus submits that even if the proposed exemption did motivate additional investment in infrastructure capable of substituting for the DTCS, it would cause a deterioration in technical efficiency since it would result in the supply of services to some customers through a more costly infrastructure than is currently the case. As discussed above, the cost of building fibre access infrastructure to different CBD buildings is highly variable. In order to minimise production costs, Optus is more likely to serve more costly buildings using the DTCS. Optus considers that this approach is technically efficient because the cost of serving a particular customer is minimised.

4.26 Third, Optus notes that that the access price for the DTCS is set by the ACCC according to the efficient cost of supply including a normal commercial return on investment (the TSLRIC of providing the service).[18] Such a price provides the most accurate signal to guide an access seeker to make its build or buy decision without distortion, and thus promotes efficient investment in infrastructure. This has been recognised by the Competition Tribunal[19] and also by the ACCC:

> *"The Commission's view is that transmission prices should be based on the TSLRIC of providing these services.… The Commission considers that such prices encourage competition in telecommunications markets by promoting efficient entry and exit in dependent markets as well as encouraging economically efficient investment in infrastructure."* [20]

4.27 It follows that the proposed exemption is not necessary to promote efficient investment since the DTCS access price sends the correct economic signal to achieve this objective. By removing the signal, the proposed exemption can only diminish the incentives for efficient investment. In the case where the access seeker is 'forced' to invest in its network rather than use the more efficient option of using the incumbent's network, it will not satisfy the efficient investment criterion. An economic entity forced to invest can hardly ever be efficient – for if it was an efficient investment, the access seeker would have already invested in these projects. The decision about the level, timing and pattern of investment is best made by the party bearing the risk of that particular investment. This fundamental idea underlies the operation of the market system, and is integral to allocative, technical and dynamic efficiency. The best way for the ACCC to promote efficient investment in infrastructure is to do exactly what it has already done: set a cost-reflective DTCS access price, and allow access seekers to make their own investment decisions on that basis.

18 ACCC, 2004, Pricing Principles for Declared Transmission Capacity Services — Final Report, p23

19 ACT, Telstra Corporation Ltd (No 3) [2007] ACompT 3, [164]

20 ACCC, 2004, Pricing Principles for Declared Transmission Capacity Services — Final Report, p23

5. Impact of proposed exemption on competition

5.1 Optus submits that the proposed exemptions in tail-end DTCS would not only fail to promote competition as required cause severe and lasting damage to competition in downstream markets.

5.2 Telstra appears to expect the Commission to accept that the proposed exemption would promote effective competition as a theoretical matter by virtue of causing a shift from access-based competition to infrastructure-based competition. This theoretical assumption does not withstand close scrutiny. Optus submits that it would be entirely unsafe for the Commission to rely without more on the theory that an increase in access seekers shifting some of their customers from the DTCS to the use of their own access fibre will improve the conditions or environment for competition.

5.3 First, the proposed exemptions would harm access seekers' ability to compete by removing their ability to access the tail-end DTCS. The tail-end DTCS is a key input to the supply of services to large corporate and government customers, to mobile customers and also (through the wholesale channel) to mass market customers.

5.4 The significant successes in competition in various downstream markets in recent years, and particularly in markets for business customers, have come about in part as a result of the availability of access to regulated transmission capacity services. The DTCS has allowed access seekers to overcome the significant barriers to entry resulting from the high cost of building fibre access infrastructure and the variability of cost and revenue, and to compete on a less unequal footing with the incumbent as they build scale in the market. The proposed exemption both underestimates the utility of the availability of the DTCS to access seekers to allow them to compete and also more fundamentally puts at risk the gains that have already been made.

5.5 There are no viable substitutes for the tail-end DTCS other than direct fibre infrastructure. Alternative platforms including wireless, satellite and the ULLS do not provide an adequate substitute for the DTCS. As noted earlier in this paper, the existing level of infrastructure-based competition is lower than that suggested by Telstra, and the proposed exemption is likely to encourage little if any compensating increase in infrastructure-based competition. As a result the proposed exemption would remove existing constraints to Telstra's dominance in downstream markets in substantial sections of the CBD and Metropolitan areas.

5.6 In the absence of the DTCS, the arena for competition in CBD areas would be limited to those CBD buildings to which it is economic for multiple operators to serve. Optus estimates that it currently runs its own access fibre infrastructure to only around **CiC** of CBD buildings. Other carriers are likely to serve fewer buildings. To achieve the same level of competitive access as that provided by the DTCS would appear to require all carriers active in the market to duplicate Telstra's CBD infrastructure on a large scale.

5.7 Significant investment in access fibre infrastructure by multiple carriers is extremely unlikely, due to the significant barriers to entry posed by the substantial and variable cost of such investment, and the variability in expected revenue. The more likely outcome is that a small percentage of CBD buildings will be subject to competition (eg those which are less costly to serve or for which sufficient revenue can be won to support multiple operators). The proposed exemption would stifle competition and return the vast majority of CBD buildings to monopoly service provision.

5.8 In metropolitan areas the barriers to entry are greater, since greater distances and lower expected revenues mean that it is likely to be less economic to build fibre access infrastructure compared to CBD areas. Given the issues of bandwidth, quality and availability that affect the ULLS, it is not a viable substitute for the DTCS. As a result the proposed exemption would damage competition in downstream markets in metropolitan areas, impacting on the supply of services to large corporate and government customers, on the supply of services to mobile customers and also (by affecting the wholesale channel) on mass market telecommunications services..

5.9 Optus notes that the impact on competition resulting from the proposed exemptions in respect of IEN DTCS is likely to be less significant compared to the proposed tail-end DTCS exemptions. There may be sufficient existing infrastructure on the IEN routes proposed for exemption to preserve competition. Further, IEN routes carry significantly greater traffic than tail-end POI-to-premises routes, and thus investment in these routes is more likely to be economic compared to tail-end routes.

5.10 Finally, Optus submits that the hypothetical efficiencies resulting from infrastructure-based competition are not in and of themselves a benefit to consumers. Only if these efficiencies are translated in to lower prices or better services are consumers better off. Even in the hypothetical situation where infrastructure-based competition yielded gains, Telstra has yet to show in a way that could satisfy the ACCC that these gains would be passed to end-users. If efficiencies in the use of the infrastructure are retained as profits for producers, this is not in the LTIE. If insufficient competitive constraint was placed on Telstra (for example if the competing infrastructure was too costly to be competitive), then there is no guarantee that prices would fall or consumers would benefit.

6. Timing matters

Phase-in period

6.1 Optus submits that if any of the applications are granted, there should be a phase-in period before the exemptions come into effect. The phase-in period should last until at least 24 months after the ACCC's final decision. This period would be necessary to allow access seekers to consider build opportunities (limited though they may be) and to provide customer transition.

6.2 This timeframe would also be necessary to allow an effective wholesale market to form for services that will be substitutes for the declared DTCS, and to allow access seekers a reasonable period of time to adjust their business plans to the new environment and transition customers away from the DTCS.

Duration of exemptions

6.3 Optus considers that if any of the applications are granted, the exemption should apply for a limited initial period, to allow assessment of the impact of exemptions on Telstra's supply of transmission capacity services and on competition in downstream markets. Optus proposes that any exemptions be granted for a period of two years only, and that during that period the ACCC should monitor Telstra's conduct and pricing of transmission capacity services.

Appendix A: Cost estimates for access fibre construction in Melbourne CBD

6.4 Optus routinely carries out estimates of the cost of building fibre infrastructure. Four sites in the Melbourne CBD for which estimates were calculated in 2007 have been selected at random. These estimates are based on quoted prices for access fibre construction in the Melbourne CBD, which are the result of a competitive tender process conducted by Optus for all build activity of this nature. Some information about the four sites (including the approximate build / lease mix for the ducts used, the build distance, the build cost and the cost per metre) is provided below: **CiC**

6.5 In order to assess the accuracy of the cost estimates from the Lordan report, Optus has extracted from the report costs comparable to the four sites above in terms of the build mix, and expressed them in terms of cost per metre,[21] as follows: **CiC**

6.6 Optus notes that on a per metre basis the costs estimated at its four Melbourne sites were substantially higher than the comparable cost estimates from the Lordan report, as noted below: **CiC**

6.7 It is also worth noting that the cost estimates provided by Optus are underestimates since they do not take into account the design and planning upfront costs included in the Lordan study. If Optus was to take this into account then this would increase the cost by between 4 to 6 percentage points. As noted above, these estimates were randomly selected and should be taken as representative of the build costs of access fibre in the Melbourne CBD.

21 Note that the build distances used in these estimates were "reverse engineered" based on information provided in the public version of the report.