

TELSTRA CORPORATION LIMITED

Submission to the Australian Competition and Consumer Commission

Telstra's PSTN Originating Access

Exemption Applications

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Overview

Following its application in July seeking roll-back of unnecessary regulation governing access to the local carriage service (LCS) and wholesale line rental (WLR) in competitive exchange areas ("ESAs") across metropolitan Australia, Telstra has now lodged two new exemption applications ("Exemption Applications") relating to the regulated PSTN Originating Access Service ("PSTN OA").

The first application seeks the removal of PSTN OA regulation in the 5 mainland CBDs of Sydney, Melbourne, Brisbane, Adelaide and Perth. This would mirror the Commission's own roll-back of regulation of the LCS and WLR services in those areas (the "CBD Exemption Area").

The second application is complementary to Telstra's exemption applications for LCS and WLR and seeks the removal of PSTN OA regulation in 387 competitive ESAs across metropolitan Australia (the "Metropolitan Exemption Area").

The regulated PSTN Originating Access service is primarily used by access seekers to deliver national long distance, international and fixed to mobile services to end customer's directly connected to Telstra's PSTN network, often as part of a bundle sold in combination with LCS and WLR. Access seekers with their own infrastructure (including DSLAM based infrastructure) can by pass Telstra's network to supply local and basic access services (rather than relying on LCS and WLR) and long distance services (rather than using PSTN OA).

Mandatory access, which is a highly intrusive form of regulation, is only warranted in very limited circumstances - where for example, workable competition does not exist and is unlikely to develop. Unnecessary regulation results in unnecessary costs, market distortions and inefficient outcomes, and will disincent innovation and investment. Rolling back unnecessary regulation removes superfluous costs and unshackles the affected market, enabling competitive forces to promote efficient outcomes. Any delay in removing redundant regulation for PSTN OA will cause unnecessary regulatory cost and hinder further development of facilities based competition in both CBD areas (where ongoing regulation is logically inconsistent with the treatment of LCS and WLR) and across metropolitan Australia where DSLAM-based competition is deepening ever more rapidly.

Within the CBD and Metropolitan Exemption Areas, like LCS and WLR, PSTN OA no longer constitutes the kind of "enduring bottleneck" to which the declared access provisions of Part XIC of Act were intended to apply. Continuing to regulate access to PSTN OA in the 5 mainland CBD areas and the 387 metropolitan ESAs:

• ignores the presence of significant alternative infrastructure (primarily fibre-based access networks in CBD areas and Digital Subscriber Line Access Multiplexers (DSLAMs) in metropolitan areas, but also HFC and wireless networks), which provide a competitive platform for the delivery of substitute services;

- ignores the existence of other declared services such as the Unbundled Local Loop Service (ULLS) that enable the provision of substitutable services to those offered via PSTN OA (in effect regulating the same bottleneck twice); and
- ignores the competitive environment made possible by the deployment of this infrastructure, and in particular the ability of competitors to provide facilities-based services in direct competition to those offered via the PSTN OA services.

Market-based competition provides the best constraint on pricing and supply of services, not artificially-constructed rules imposed by a regulator. The facilities-based competition that is already evident in the CBD and Metropolitan Exemption Areas allows a great degree of innovation and product differentiation. By removing the regulation of PSTN OA in each of the CBD and Metropolitan Exemption Areas, the Commission will allow the facilities-based competition that exists now in these areas to further develop and flourish. This in turn will encourage efficient investment in the provision of the types of products and services demanded by consumers, both now and in the future.

The 5 mainland CBD areas already have a plethora of alternative access networks operating (eg: fibre, fixed wireless, HFC, satellite) and flourishing. For example, there are currently, between 8 and 14 competitive fibre based carriers operating in each of the 5 mainland CBDs. The Commission has already twice made a determination on the sufficiency of infrastructure based competition in these areas (in 2002 for LCS and confirmed yet again in 2006 for LCS and WLR).

Each ESA in the Metropolitan Exemption Area has at least one DSLAM deployed by a competitor to Telstra. Three quarters of the ESAs have DSLAMs deployed by at least two competitors. The rollout of this DSLAM-based infrastructure has been particularly rapid in the last 18 months, and market announcements by several players indicate that this trend is set to continue apace. Other alternative telecommunications infrastructure has also been deployed by many companies in these metro ESAs in recent years. This includes the presence of HFC networks (such as the Optus HFC network) and fixed wireless and mobile networks. These substitutes to Telstra's network add weight to the case for the immediate removal of the unnecessary regulation of PSTN OA.

Because the declaration of the PSTN OA in each Exemption Area is no longer necessary, continued access regulation will only result in unnecessary costs and inefficiencies, harm the competitive process, and discourage efficient investment.

On the other hand, granting these Exemption Applications, will promote competition and the efficient investment in (and use of) infrastructure in the CBD and Metropolitan Exemption Areas. By removing unnecessary costs and distortions, and by promoting vigorous facilities -

based competition, granting these Exemption Applications will promote the long term interests of the end users of telecommunication services.

Introduction

In this submission, Telstra sets out the evidence and arguments in support of its applications for exemption from ex ante regulation of PSTN Originating Access ("PSTN OA") in:

- (a) the five major mainland Central Business Districts of Australia ("CBD Exemption Application"). Exemption is sought in respect of the 17 exchange service areas ("ESAs") in these areas, all of which fall within Band 1 for the purposes of Telstra's geographic classification of the Unconditional Local Loop Service ("ULLS"), and
- (b) the 387 metropolitan ESAs where there is concrete evidence of effective competition ("Metropolitan Exemption Application"). The 387 metropolitan ESAs all fall within Band 2 for the purposes of Telstra's geographic classification of ULLS.

Together the CBD Exemption Application and the Metropolitan Exemption Application are referred to as the "Exemption Applications".

Telstra makes separate exemption applications for CBD and metropolitan areas because, whilst the geographic market considerations relevant to the Metropolitan Exemption Application are also relevant to the CBD Exemption Application, there are some additional considerations for CBD areas. These are addressed below at **Section 2**. For simplicity, Telstra provides this single submission in support of both Exemption Applications.

When Telstra says that acceptance of the Exemptions (i.e., "Exemption") will promote competition and the efficient use of and investment in infrastructure, it is saying that the Exemption in each of the specified CBD ESAs and the specified metropolitan ESAs will promote those things, and therefore, those things will also be promoted (and promoted to a greater extent) if both Exemption Applications are granted.

The remainder of this submission comprises five sections.

In **Section 1,** Telstra sets out the nature and basis of the CBD Exemption Application and Metropolitan Exemption Application. This includes the services covered by the applications, the regulatory background, the ESAs included within the CBD Exemption Area and Metropolitan Exemption Area, and the legal principles the Commission must apply in assessing the Exemption Applications.

The next two sections present evidence of competitive infrastructure deployment and competition within each of the CBD Exemption Area and Metropolitan Exemption Area. Specifically:

• Section 2 outlines the extensive rollout of alternative infrastructure within the CBD Exemption Area and Metropolitan Exemption Area. This is driven primarily by fibre

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networks in CBD areas and the roll-out of DSLAM-based infrastructure in metropolitan areas.

• **Section 3** outlines how the deployment of this competitive infrastructure has resulted in real competition in the supply of PSTN OA and related downstream services in both the CBD Exemption Area and Metropolitan Exemption Area.

In these sections, Telstra explains how DSLAM-based infrastructure is a key driver of competitive entry in the CBD Exemption Area and Metropolitan Exemption Area and how, in the case of the CBD Exemption Area, there is also a vast array of alternative network infrastructure (both fibre and wireless). Further, evidence is presented showing that once an initial DSLAM-based entry has occurred, this provides tangible and sufficient evidence of the contestability of an ESA such that Exemption from regulation in that ESA is justified.

Having established that the supply of the PSTN OA service can no longer be considered an enduring bottleneck in either the CBD Exemption Area or the Metropolitan Exemption Area, the submission then explores the consequences of either continuing to declare access or granting the Exemption Applications:

- Section 4 shows how granting the Exemptions would not compromise competition in downstream markets.
- Section 5 sets out the harmful consequences of continuing to regulate access to PSTN OA in the CBD Exemption Area and Metropolitan Exemption Area.
- Section 6 shows how the Exemptions will promote a competitive environment, encourage further entry; and ensure the efficient investment in (and use of) infrastructure. That is, Telstra will show how granting these exemptions will promote the Long Term Interests of End Users ("LTIE").

In preparing the Exemption Applications, Telstra has relied upon a report from Dr Paul Paterson, a leading economist with considerable expertise in telecoms regulation ("**Paterson Report**").¹ The Paterson Report, together with several statements and a report on factual matters relied upon by Dr Paterson are set out in Annexures **A** to O to this submission.

Confidentiality

This submission has all the confidential information deleted and thus may be disclosed publicly. Telstra will provide the confidential version of this submission and the information

¹ CRA International "Statement by Dr Paul Paterson of CRA International for Mallesons Stephen Jaques on the Economic Considerations for a PSTN Originating Access Exemption", October 2007 ("**Paterson Report**").

contained in it to interested parties subject to those parties signing appropriate confidentiality undertakings.

The confidentiality undertakings do not limit the extent to which interested parties, and the Commission, may analyse and comment on the content of this submission. Rather they are intended to prevent the distribution and use of the confidential material contained in this submission for purposes other than participating in the Commission's public inquiry relating to the exemptions.

The nature and basis of the Exemption Applications

Telstra is seeking Exemptions in respect of certain geographic areas in which it is evident that competitive conditions exist. Exemption from regulation in a limited geographic area is not novel, and is consistent with previous approaches taken by the Commission and with recent statements made by it. For example, the Commission previously granted an exemption from the standard access obligations in respect of the supply of the LCS in the CBDs of Sydney, Melbourne, Brisbane, Adelaide and Perth following an application by Telstra.²

The Commission has continued to expressly endorse a "targeted" approach to regulation in its latest *Fixed Services Review - A second position paper* (April 2007) ("**FSR - Second Position Paper**"), where it stipulated that:³

"...where appropriate, the Commission will geographically delineate markets on a narrower basis than a 'national scope', to reflect that competition has emerged (and is likely to continue to emerge) unevenly in different geographic regions of Australia. In particular, the Commission proposes to base future market definition exercises at the 'local exchange level.'" (emphasis added)

The Domestic PSTN Originating Access service ("**PSTN OA**") was declared by the Commission for the purposes of Part XIC of the Trade Practices Act 1974 (Cth) with effect from 1 August 2006. PSTN OA had previously been deemed declared under section 39 of the Telecommunications (Transitional Provisions and Consequential Amendments) Act 1997 (the Transitional Act). Section 39 of the Transitional Act was a transitional provision to allow the Commission to declare certain services prior to the commencement of Part XIC on 1 July 1997.

Service description and uses of the PSTN OA service

PSTN OA is used by access seekers to supply a range of voice-grade calls, including international, national long distance and fixed-to-mobile ("FTM") calls. There are generally three components to a voice grade call: call origination, conveyance (the switching and transmission of calls) and call termination. PSTN OA provides access seekers with the origination component. It comprises the carriage of voice-grade calls from the calling party to a point of interconnection ("POI") with an access seeker's network.

PSTN Terminating Access ("**PSTN TA**"), which the Commission declared at the same time as it declared PSTN OA, enables a call originating on or being carried on one party's network to be terminated on another party's network. PSTN TA is outside the scope of the Exemption Applications.

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² ACCC, "The Future Scope of the Local Carriage Service – Final Decision", July 2002 ("**2002 Final** Decision")

³ ACCC "Fixed Services Review - A second position paper", April 2007 ("**FSR - Second Position Paper**"), p. iv.

Telstra's PSTN

Other carrier's network

IGS

Interconnect link

Originating Access

Foint of Interconnect link

G/W

Interconnect link

G/W

Terminating Access

Figure 1: PSTN Originating Access and Terminating Access

Notes: In this example, a PSTN OA access seeker acquires access to an end-=user who is directly connected to the Telstra PSTN (the "A party"). The A party places a call to the B-party, who is in this case also directly connected to the Telstra PSTN (but need not be). The call is carried on Telstra's PSTN to an interconnect gateway switch ("IGS"), which is located in or near an exchange in one of the 66 Call Collection Areas ("CCAs"). Within the exchange, a point of interconnect ("POI") between the Telstra network and the other carrier's network has been established and the call is handed across that POI via interconnect transmission. From there the call is routed by the other carrier, on its network, to the B party's CCA (in this case at CCA2). Where it is handed back to Telstra and delivered to the B party via PSTN TA.

PSTN OA service is generally used by access seekers to provide two broad types of downstream services;

- as an input to the supply of long distance and fixed to mobile services,
- as an input to the supply of special access services.

Long distance, FTM and IDD services

PSTN OA enables suppliers of domestic long distance, international and FTM services that do not have their own access networks to access another party's network as an input into the supply of those services. To that end it is used in conjunction with pre-selection or pre-selection override codes as an input to the supply of long distance and FTM services to end customers. This is the primary use of PSTN OA as has been recognised by the Commission.⁴ Access seekers who offer the full bundle of voice services to end-customer's will seek to acquire PSTN OA (used as an input to supply long distance services) with LCS and WLR (in order to supply local services). These uses of PSTN OA are all covered by the Exemption Applications.

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⁴ See, for example, Table 3.2 of FSR - Second Position Paper, p. 19.

Calls to special services excluded from Exemption Application

PSTN OA can also be used by access seekers to provide "special services calls". These are calls from directly connected end-customers on the Telstra network to inbound numbers, for example, 13/1300 (local rate numbers) and 1800 (toll free) numbers. This call-case (depicted in figure 2) has quite different characteristics to the "pre-select/override" call case. In particular, the presence of a retail customer at both the A-end (origination) and the B-End (termination) means that the use of PSTN OA is, in many respects, more analogous to PSTN TA as (from the B-Party's perspective) access via their service provider (the PSTN OA access seeker) must be obtained to a diverse group of A-Party customers who may be connected to multiple PSTN access networks.

For this reason, Telstra has decided to exclude calls to special services from the scope of the Exemption Applications.

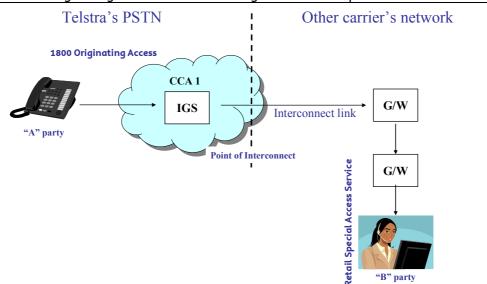


Figure 2: PSTN Originating Access and Terminating Access – 1800 special services

Notes: In this example, an access seeker acquires access to an end-user who is directly connected to the Telstra PSTN (The A party) for the purposes of providing toll free (1800) access to the B party. The B party is a retail customer of the PSTN OA access seeker who wishes to offer a free calling service. The access seeker will pay Telstra a PSTN OA charge for delivering the call from the A party to the point of interconnection (POI) located at the Interconnect Gateway Switch (IGS). The call is then carried on the other carrier's network and delivered to the B party as part of the special access service provided by the other carrier.

The CBD Exemption Area and Metropolitan Exemption Area

The CBD Exemption Area comprises the five major CBD areas⁵ of Australia and consists of 17 Band 1 ESAs. The Metropolitan Exemption Area comprises 387 ESAs in metropolitan areas of Australia, all of which are classified as "Band 2" ESAs by Telstra.⁶

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⁵ The ESA names for the CBD Exemption Area are listed in Appendix A of the Paterson Report.

⁶ The ESA names for the Metropolitan Exemption Area are listed in Appendix A.2 of the Paterson Report.

The majority of ESAs in the Metropolitan Exemption Area are in the six major metropolitan areas — Sydney, Melbourne, Brisbane, Perth and Adelaide as well as Canberra (Figure 3). However, ESAs in Hobart, Darwin and regional centres including Geelong, Ballarat, the Gold Coast and Launceston are also included.

Within the combined CBD Exemption Area and Metropolitan Exemption Area, there are over 5.6 million PSTN services in operation (SIOs). This includes 280,000 SIOs in the CBD Exemption Area and almost 5.6 million SIOs in the Metropolitan Exemption Area. The Exemption Areas include ESAs located in each State and Territory (Table 1).

Table 1: State and territory breakdown of proposed exemption areas (CBD and metropolitan exchanges)

	ESAs included in the exemption areas	Services covered by the exemption areas	
CBD ESAs	·	·	
NSW	5	102,979	
Victoria	3	63,240	
Queensland	4	35,904	
WA	3	48,041	
SA	2	29,976	
Metropolitan ESAs			
NSW	124	1,934,133	
Victoria	92	1,326,310	
Queensland	69	932,009	
WA	54	675,196	
SA	32	529,017	
Tasmania	4	48,807	
Northern Territory	1	14,247	
ACT	11	129,518	

Sydney Melbourne Brisbane **Perth** Canberra Adelaide Exemption Area ESAs Other Band 2 ESAs

Figure 3: Exchange Service Areas in CBD and Metropolitan Exemption Areas

Source: Telstra.

Geographic basis for CBD Exemption Application

In major CBD Areas (Band 1), competition to services offered over the Telstra PSTN comes firstly from the extensive deployment of alternative networks. These alternative networks do not necessarily rely on Telstra infrastructure (for instance exchange buildings or ducts) and 11 9141248_1

will therefore not necessarily 'fit' within a particular ESA. However, considering exemptions at an ESA level (in this case, the 17 Band 1 ESAs) remains appropriate for the reasons set out in the Paterson Report:

- "It is consistent with the context of the current enquiry in that it would not be practical to implement an Exemption Order in an area defined any more narrowly;
- It reflects the topology of the particular network being regulated (Telstra's PSTN);
- It minimises the risk that a too-broad geographical market definition will inappropriately lead to a decision not to forbear, when forbearance would have been desirable;
- The possibility that a larger geographical market definition is relevant is likely to be captured even if ESAs are used, since when aggregated the ESAs identified for exemption would be the larger market; and
- Data on DSLAM deployment, which is one of the relevant considerations in examining possible substitutes for LCS/WLR in CBD areas, is available at no finer granularity than the exchange."

Telstra agrees with this assessment.

As set out below, competition also comes from the extensive deployment of competing DSLAMs in these areas, reinforcing the appropriateness of the ESA-based approach.

Geographic basis for Metropolitan Exemption application

In metropolitan (Band 2 areas), analysis was also undertaken at the ESA level as it allows the most thorough consideration of differences in the provision of services to be considered. As the Commission itself noted:

"The potential advantages of using the 'exchange' as the geographic unit is that it may closely reflect the extent to which there are different competitive conditions in different geographic regions, compared to arbitrary delineations between different geographic levels such as between CBD, metropolitan and rural & regional areas."

Dr Paterson also considers the ESA to be the appropriate geographic level for the Metropolitan Exemption Application. Although his economic analysis suggests that a broader market might be more appropriate, he states:

⁷ Paterson Report, p. 15.

FSR – A Second Position Paper, p. 38.

" ... for the purpose of this Exemption Order application, an exchange based approach is more suitable, for the following reasons:

- It is consistent with the context of the current enquiry in the sense that an Exemption Order would not reasonably be capable of implementation in an area defined any more narrowly;
- It reflects the topology of the network being regulated;
- It minimises the risk that a too-broad geographical market definition will inappropriately lead to a decision not to forbear, when forbearance would have been desirable;
- The possibility that a larger geographical market definition is relevant is likely to be captured even if ESAs are used, since when aggregated the ESAs identified for exemption would be the larger market; and
- Data on DSLAM deployment which is used to proxy the extent of actual and forecast ULLS-based activity – is available at no finer granularity than the exchange."⁹

A more detailed treatment of market definition issues (including the appropriate geographic scope of the market) relevant to the Exemption Applications is set out in Appendix 1.

However, Telstra is of the view that under Part XIC, the Commission need not come to a definitive stance on market definition for the purposes of considering the Exemption Applications. In its Final Determination - Declaration inquiry for the ULLS, PSTN OTA and CLLS of 2006 ("ULLS Final Determination 2006"), the Commission commented:

"Part XIC of the TPA does not require the Commission to precisely define the scope of relevant markets for the purpose of a declaration inquiry, In certain circumstances, to analyse competition it may be sufficient to broadly identify the scope of the relevant markets likely to be affected by declaration. Furthermore over time, declaration itself might affect the dimensions of these markets. Accordingly, market analysis under Part XIC should be seen in the context of shedding light on how declaration would promote competition rather than in the context of developing "all-purpose" market definitions.¹⁰

Telstra agrees with this assessment.

¹⁰ ACCC, Final Determination - Declaration inquiry for the ULLS, PSTN OTA and CLLS of 2006 ("**ULLS Final Determination 2006**", p.13.

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⁹ Paterson Report, p. 15.

The legal basis for these Exemptions

The Commission can only grant the Exemptions if they promote the long term interests of end-users ("LTIE"). However, if the Exemptions do promote the LTIE (and Telstra says that they do for all the reasons in this submission), the Commission must grant them.

In deciding whether the Exemptions will promote the LTIE, the Commission must have regard to the objectives of Part XIC of the Act, being:¹¹

- promoting competition in markets for carriage services and services supplied by means of carriage services;
- achieving any-to-any connectivity for carriage services involving communication between end-users; and
- encouraging the economically efficient use of, and economically efficient investment in, the infrastructure by which carriage services are supplied.

That is why much of this submission will present evidence and reasoning as to why granting the Exemption Applications both promotes competition and promotes efficient use of and investment in infrastructure without compromising any-to-any connectivity.

Interpreting the LTIE

The approach to interpreting the LTIE test has been considered by the Australian Competition Tribunal ("Tribunal"), and can be summarised as follows:

- (a) the granting of an exemption in respect of the supply of a service will be in the LTIE where competition in the market for the supply of a service is already effective, and is likely to remain so;
- (b) whether exemption is in the LTIE must be assessed over the long-term, giving sufficient time for existing and potential competitors to adjust to the outcome, make investment decisions, and implement growth and entry/exit strategies;¹²
- (c) to the extent that exemption would have mixed effects, in terms of potential tension between the competition and efficiency limbs of the LTIE, regard must be had to the overall or net effect of exemption;¹³ and

¹¹ See s. 152AB of the *Trade Practices Act* 1974 ("Act").

¹² See Seven Network Limited (No.4) [2004] ACompT 11 ("**Foxtel decision**") at [120].

¹³ See Foxtel decision at [122].

(d) competition is promoted for the purpose of the LTIE test if exemption would create conditions or an environment for improving competition from what it would be absent an exemption (as opposed to demonstrating the existence of actual competition).¹⁴

The effect of these principles is that it is not necessary to show that there will be an immediate, instantaneous, or short-term increase in competition to prove that the Exemptions are in the LTIE. Rather, it is clear that an exemption must be granted now if it is more likely than not that exemption would create conditions or an environment that will result in an overall or net increase in the LTIE over the long-term. The Tribunal recognised this could mean "some years" in the future.¹⁵

It follows that even if the Commission is concerned that the Exemptions may bring about some short-term or transient deficiencies in competition, the Commission must still grant the Exemptions if the overall or net effect of the Exemptions is in the LTIE.

A more detailed analysis of the legal aspects of the LTIE test (together with an examination of how it has been interpreted by the Tribunal and the Courts) is at Appendix 1 to this submission.

Validity of Part XIC

In current proceedings before the High Court of Australia, Telstra has challenged the validity of Part XIC of the Act as it relates to the ULLS and the LSS. However, Telstra recognises that, notwithstanding these proceedings, the Commission has decided to continue to act on the basis that Part XIC of the Act is valid. Accordingly and, on that basis, Telstra makes these Exemption Applications in respect of the PSTN OA service. In the event that the proceedings result in a determination that Part XIC of the Act is invalid as it relates to the ULLS and the LSS, the Exemption Orders in respect of PSTN OA service proposed by Telstra would cease to have effect.

¹⁴ Re Sydney Airports Corporation Ltd (2000) 156 FLR 10 at [123].

¹⁵ See Foxtel decision at [120].

1 There is extensive competitor infrastructure in the Exemption Areas

In this section, Telstra sets out evidence on the extent of competitive infrastructure deployment in the CBD Exemption Area and Metropolitan Exemption Area respectively. Within both the CBD Exemption Area and Metropolitan Exemption Area, PSTN OA can no longer be considered an enduring bottleneck in the provision of fixed voice and related services. In both areas, there is now extensive deployment of competitive infrastructure such that PSTN OA regulation is not needed to achieve competitive conditions in the downstream telephony market or any-to-any connectivity.

In particular, evidence is presented on the prevalence of DSLAM-based infrastructure and the impact of an initial competitive DSLAM deployment in an ESA. However, whilst there are similar arguments in support of granting the Exemptions in regard to CBD competitive ESAs and metropolitan competitive ESAs, Telstra has identified additional considerations that are pertinent to the Commission's consideration of the CBD Exemption Application. Accordingly, Telstra separately considers the issues that relate to competitive infrastructure in the CBD Exemption Area and the Metropolitan Exemption Area.

CBD Exemption Area

In CBD areas, several competitors have installed extensive substitute networks as an alternative to the use of Telstra's PSTN. The Commission has already made a finding on the sufficiency of alternative infrastructure based competition in the five mainland CBD areas in its 2002 decision to exempt LCS from regulation in those areas. There it noted that:

"[e]ssentially for carriers to be able to compete effectively for one telecommunications service, they must be able to compete effectively for all telecommunications services. This means being able to provide all services via their own networks [ie: including long distance, international and fixed to mobile], or being able to purchase competitively priced telecommunications access services. The Commission considers that in the CBD areas under question, these options are available. "16"

Clearly access seekers can and do offer the full suite of services demanded by customers via their own access infrastructure.

Typically these competitor networks are fibre-based (for example, Powertel's fibre-based network in the Sydney CBD is shown in Figure 4; however there are also extensive, fixed wireless networks deployed in CBDs.

¹⁶2002 Final Decision, p. 43 [clarification added].

Figure 4: Optical fibre loop deployment by Powertel in Sydney



Source: Powertel, *Half Year Financial Report Presentation*, available at, http://www.powertel.com.au/documents/inv pres files/20050826 HalfYearReportPresentation.pdf, accessed 10 September 2007.

The Commission has also found that there is a predominance of multiple, competitive fibre-based access networks in the five major CBD areas:

"In August 2001, the Commission issued a report prepared for it by BIS Shrapnel Telecommunication Infrastructures in Australia 2001 (the BIS Shrapnel Report 2001) which provides an audit of the various types of telecommunications infrastructure in Australia. The report shows that there is a number of competing local access infrastructures to Telstra's PSTN in place, under construction or being planned in the CBD areas of the capital cities under consideration for the exemption. These include fibre optic, microwave and advanced broadband wireless networks." ¹⁷

At the time of that decision the Commission identified multiple fibre access networks operating in major CBD areas. ¹⁸ In a report commissioned by Telstra and attached to this submission at Annexure N independent market researcher Market Clarity has found that the number of CBD fibre access networks has grown in CBD areas; with 20 companies operating 55 networks in the CBD Exemption Area areas as at September 2007 (see Table 2 below).

¹⁷ 2002 Final Decision, p. 20

Sydney – 8 fibre optic networks, Melbourne – 8 networks; Brisbane – 7 networks; Perth – 6 networks; and Adelaide – 5 networks; see ibid., p. 44.

Table 2: Optical fibre loop deployment in CBD/Metropolitan areas, 2007

	Sydney	Melbourne	Brisbane	Adelaide	Perth
AAPT	~	v	~	*	v
Agile				✓	
Amcom				~	V
CITEC			V		
Digital River Networks	V	✓	V		
Macquarie	V	✓			
Nextgen Networks	v	✓	V	✓	~
PIPE Networks	V	V	V	✓	
PowerTel	V	✓	V	✓	V
Primus	V	√	y	~	V
QR Telecommunications			V		
SABRENet				✓	
Silk Telecom		V		✓	V
SingTel Optus	V	✓	V	✓	V
SPI PowerNet		J			
Telstra	V	✓	V	✓	~
Uecom	V	v	~		
Verizon	V	✓			
Victorian Rail Track		v			
Total fibre access networks	11	14	11	11	8

Source: Market Clarity (2007).

In addition to fibre-optic networks, there are also several competitive fixed wireless networks in operation in the CBD Exemption Area (see Table 3 below). These networks are also capable of supplying a full suite of voice and data products in competition to those offered over the Telstra PSTN.

Table 3: Fixed Wireless Broadband Operators in CBD/Metropolitan areas, 2007

Tuble 3.1 ixed Wileless Bloudbuild Opera	Sydney	Melbourne	Brisbane	Adelaide	Perth
BigAir	~	~			
Broadband Anywhere				✓.	
BroadbandNet					V
Central Coast Internet	~				
Cirrus Communications	✓		✓	v	
Clear Networks		✓			
Clever Communications Australia	~	~	~	✓.	
DCS Internet		~			
Eastern Wireless		~			
Hotspotzz	~				
lwireless					V
Link Innovations	~				
Megalink		~			
Optic Fibre and Wireless	~	~	✓		
Pacific Wireless		<			
Personal Broadband	~	~	~	✓	V
Pivit			~		
Stenzel Farming Enterprises Pty Ltd			✓		
Unwired	~	~			
West Australian Networks					V
Wideband Networks		~			
Wizz Pty Ltd	~	~	~		

Source: Market Clarity (2007).

In addition to fibre-based access networks and fixed-wireless access networks, several companies have also installed DSLAM-based infrastructure in Telstra's exchanges. Based on publicly available information, every ESA in the CBD Exemption Area is covered by at least four competitive DSLAMs, with most covered by six competitive DSLAMs (see Figure 5 below).

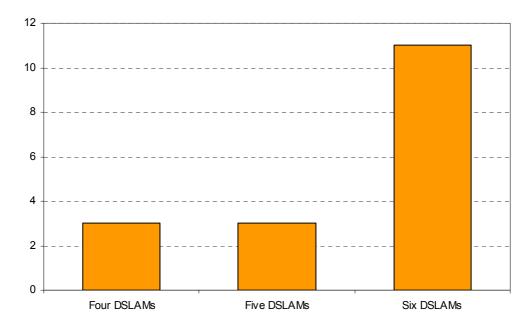


Figure 5: Number of Competitor DSLAMs in each ESA in the CBD Exemption Area

Source: [c-i-c]. This is likely to be highly conservative (see box 1). For example, Telstra has not counted DSLAMs identified as being operated by AAPT-Powertel and iiNet separately. If these companies' infrastructure were separately identified, the number of ESAs in the CBD Exemption Area with four DSLAMs falls to two, the number with five DSLAMS falls to two, the number with six DSLAMs drops to five, whilst the number of ESAs with seven DSLAMs increases to eight.

The deployment of fibre-based networks, as well as fixed wireless and DSLAM-based access networks in CBD areas mean that PSTN OA can no longer be considered an enduring bottleneck to the supply of fixed voice services in the CBD Exemption Area (and has probably ceased being so for a number of years).

As such, Telstra submits that within the CBD Exemption Area, conditions exist that support Telstra's contention that granting the CBD Exemption Application will have the effect of promoting competition in the medium to long-term and be consistent with the LTIE.

Metropolitan Exemption Area

Within the Metropolitan Exemption Area, the PSTN OA service can no longer be considered an enduring bottleneck to the supply of fixed voice services. In each ESA within the Metropolitan Exemption Area, there is alternative infrastructure which enables the provision of substitute services to PSTN OA, and a competitive market for fixed voice and related services.

In fact, the ESAs in the Metropolitan Exemption Area are now "hotbeds" of competition with extensive deployments of competitive infrastructure. Telstra *conservatively* estimates that there are more than a dozen companies using their own infrastructure to supply voice and broadband services within the Metropolitan Exemption Area (see Box 1).

Box 1: Data used in preparing this application

The data used in this report to determine the location of competitive infrastructure has been sourced from publicly available sources and (to a lesser extent) third-party competitive intelligence reports.

There is no single, public source of data on the deployment of telecommunications infrastructure at the level of geographic disaggregation necessary for the present purpose. Further, the information that is available through public sources often only presents a partial picture of the extent of deployment of infrastructure, its capability and the types of downstream services which are provided on that infrastructure – some of which is commercially confidential. As such, there is continued uncertainty as to the extent of competitive infrastructure deployment, and reports may differ. For example, in the recently released report on telecommunications infrastructure by the Australian Communications and Media Authority (ACMA) and the Commission, it was claimed that 19 providers have deployed DSLAM-based infrastructure. In this submission, Telstra has only relied on the DSLAM deployments of 11 different companies (or strategically-aligned partners) in its ESA-level infrastructure data. Telstra believes the Commission itself is sympathetic to these difficulties – as evidenced by its proposed infrastructure audit discussion paper issued in March this year, whose primary purpose was to provide appropriate data regarding of the state of deployment of alternative infrastructure in discrete geographic areas to better inform the Commission in reviewing whether continued regulation is necessary.

Telstra considers that the claims made in this submission and in the Paterson Report as to the coverage of competitive DSLAM-based infrastructure within the CBD Exemption Area and Metropolitan Exemption Area are conservative and are likely to understate the true extent of competitive DSLAM infrastructure build in Australia.

For example, Dr Paterson has been careful to ensure that DSLAM infrastructure utilised by resellers (including Exetel and GoTalk which resell Optus services) is not 'double counted'. Telstra has also been conservative in counting distinct infrastructure installation in services offered by providers who have announced strategic alliances. There is extensive evidence that DSLAM-based infrastructure has been deployed by AAPT, Powertel and iiNet. Telstra has taken the stance of counting only a single competitive DSLAM, where we have evidence that one or more of these three companies is providing DSLAM-based services (such as ADSL2+ services). This is due to recent announcements surrounding the purchase of Powertel by AAPT. There have also been recent announcements that Powertel will provide wholesale services on iiNet infrastructure.

Although Telstra is confident that this conservative estimate does not overstate the true number of competitor DSLAMS throughout the CBD Exemption Area and Metropolitan Exemption Area, it is nonetheless **open to the Commission to issue a notice under section 155 of the Act** upon Telstra or other infrastructure providers to seek full and accurate data on the extent of infrastructure-based competition within the CBD Exemption Area and Metropolitan Exemption Area based on Telstra's confidential wholesale customer information.

See further: CRA International, Paterson Report, p. 29; Speech by Optus CEO to Communications Alliance 6 Dec 06 (available at http://www.optus.com.au), https://home.aapt.com.au/At_AAPT/What_s_news/2007/AAPT_and_PowerTel_tie_the_knot_.html,

http://www.iinet.net.au/about/investor/260506_powertel_announce.pdf

In general, the most common alternatives to Telstra's PSTN for the supply of long distance and related services are DSLAM-based infrastructure, cable networks, fixed wireless networks and mobile wireless networks. In metropolitan areas, the most prominent type of infrastructure enabling the supply of alternatives to PSTN OA and related services is DSLAM-based infrastructure (Box 2).

Box 2: DSLAM-based infrastructure

Throughout this submission, the term "DSLAM-based" refers to infrastructure and services that utilise Telstra's ULLS or LSS access products to install exchange-based equipment (for example, DSLAMs) capable of offering voice or high speed broadband services (or both) to end users. For example, references to "DSLAM-based" competitors are references to competitors using either the ULLS or the LSS, in conjunction with DSLAMs, to provide services to end users.

The ULLS provides access seekers with the copper wire between Telstra's local exchange and the end-user. This enables access seekers to provide both a standard telephone service ("STS")-equivalent service and broadband services that can be directly sold to end-users or wholesaled to resellers. The High Frequency Unconditioned Local Loop Service (otherwise known as the Line Sharing Service or the "LSS") provides similar functionality to a ULLS service in relation to the provision of broadband (ie high frequency) services, but where the PSTN voice service is still provided by another party.

These services have different capabilities, however they both provide access to the underlying CAN infrastructure, allowing competitors to provide an array of fixed-line services in competition to those offered by Telstra (at both the retail and wholesale level) at an ESA by installing a DSLAM and associated equipment. Furthermore:

- Although LSS services cannot offer traditional, POTS voice services, operators can (and
 do) provide competitive voice services by utilising VoIP telephony. As such, both ULLS and
 LSS can be used to supply voice and data services to end users.
- Dr Paterson finds that any economic or technical barriers to carriers switching from LSS to ULLS services are easily surmounted and therefore immaterial.

iiNet Chief Executive Michael Malone has recently been quoted as saying that "I think ULL is the right solution and where we want to see our customers" a notwithstanding that iiNet's current DSLAM deployment is primarily underpinned by utilising LSS. As noted by Dr Paterson in his report, LSS entrants can quite viably shift to ULLS-based supply and directly compete with the LCS and WLR services because ULLS is a viable means of competitive entry. Despite the fact that a number of additional costs must be incurred (such as switching and termination costs, which are not insurmountable), the move to ULLS from LSS provides numerous benefits for competitors who have already incurred the cost of deploying a DSLAM in an ESA:

- Reduced cost of providing a broadband and telephony bundle;
- Increased control over the type of services that can be delivered; and
- Increased scope to differentiate its products:

For these reasons, it is both reasonable and appropriate to aggregate LSS-based and ULLS-based competitor DSLAMs in aggregate for the purposes of the Exemption Applications. To that end, references to DSLAM-based infrastructure in the remainder of this submission should be read as references to DSLAMs connected to ULLS or LSS networks.

^a Sainsbury, M., "Telstra's rivals get rent cut" *The Australian*, 29 June 2007. See further: CRA International, Paterson Report, Appendix D. [c-i-c]Telstra, Submission in Response to the ACCC Discussion Paper in relation to the Redeclaration of the LSS (May 2007,), refer section 3.1.1.1 at pp. 13-14 (substitutability) and section 3.2.2.1 at pp. 23-26 (switching from LSS to ULLS).

DSLAM-based infrastructure is used to supply high speed broadband services and fixed voice telephony (using traditional circuit-switched technology and VoIP) at the wholesale and retail level:

 In every ESA in the Metropolitan Exemption Area there is at least one provider (in addition to Telstra) utilising DSLAM-based infrastructure to supply voice and data

services. Operators of DSLAMs include Optus, AAPT-Powertel/iiNet, Primus, Nextep and Agile (Internode) who each operate extensive DSLAM-based networks across Australia.

- In more than eighty percent of the Metropolitan Exemption Area there are two or more DSLAM-based networks operated by different service providers. There are four or more DSLAM-based networks in almost 150 ESAs (38 percent of ESAs) (see Figure 6).
- Importantly, several of Telstra's competitors have now installed infrastructure throughout the Metropolitan Exemption Area. Based on publicly available information it appears that Optus, AAPT-Powertel/iiNet, Primus, Nextep and TPG have DSLAM infrastructure in over 100 ESAs. Five companies have DSLAM-based networks deployed in at least five states or territories.

This indicates the ease with which the number of DSLAM-based operators can grow within an ESA once the initial conditions for deployment of a single non-Telstra DSLAM are met.

-

¹⁹ [c-i-c]

100%
80%
60%
40%
20%
At least one DSLAMs
DSLAMs
DSLAMs
DSLAMs
DSLAMs
DSLAMs

Figure 6: Percentage of ESAs in the Metropolitan Exemption Area covered by competitor DSLAMs

Source: Telstra analysis based on [c-i-c]. This is likely to be highly conservative (see box 1). For example, Telstra has not counted DSLAMs identified as being operated by AAPT-Powertel and iiNet separately. If these companies' infrastructure were separately identified, the percentage of ESAs in the Metropolitan Exemption Area with two DSLAMs falls to 11 per cent, with three DSLAMS falls to 14 per cent, whilst the percentage of ESAs with four or more DSLAMs increases to 59 per cent.

Cable and fixed wireless networks in the Metropolitan Exemption Area

Aside from DSLAM-based infrastructure, there is also evidence of widespread deployment of cable and fixed wireless networks in the Metropolitan Exemption Area (Table 4). Four jurisdictions — NSW, Victoria, Queensland and the ACT have access to DSLAM-based, cable and fixed wireless infrastructure. In 87 per cent of ESAs there are at least 2 alternative networks (DSLAM-based, cable or fixed wireless). In addition, multiple competing mobile wireless networks cover ESAs in the Metropolitan Exemption Area.

Although it is not necessary in order to demonstrate that granting the Exemption Applications promotes the LTIE (as, for the reasons set out in the Paterson Report, the presence of an initial DSLAM is enough), the presence of these alternative networks can only serve to reassure the Commission of the desirability of granting the Exemptions.

Table 4: Competitor infrastructure in the Metropolitan Exemption Area, by State and Territoru

· · · · · · · · · · · · · · · · · · ·	Number of competitors identified	DSLAM-based infrastructure	HFC/fibre-optic network infrastructure	Fixed wireless infrastructure
NSW	11	✓	✓	✓
Victoria	10	✓	✓	✓
Queensland	9	✓	✓	✓
WA	6	✓	✓	
SA	8	✓		✓
Tasmania	3	✓		
Northern Territory	1	✓		
ACT	8	✓	✓	✓

Source: [c-i-c]

Cable-based networks are present in 205 ESAs in the Metropolitan Exemption Area.²⁰ This includes the Optus HFC network, which is present in 200 ESAs and passes 2.2 million addresses (Table 5). 21 These networks are used to supply fixed voice telephony (using traditional circuitswitched and VoIP telephony) and high speed broadband services, and can therefore also be regarded as alternatives to PSTN OA in supplying downstream markets.

Table 5: Availability of Optus' HFC Network in the Metropolitan Exemption Area

Š	Number of ESAs covered by the Optus HFC network	Percentage of ESAs contestable by HFC
NSW	89	72%
Victoria	69	75%
Queensland	42	61%
Total	200	70%

Source: Paterson Report, Table 5, pp. 33.

Although the Optus HFC network is the most prevalent HFC network in Australia (other than Telstra's own), it is worth mentioning that there are a number of other HFC networks which also act as substitutes to Telstra's PSTN OA and which also demonstrate that Telstra's competitors consider these investments to be viable. These include the HFC networks belonging to TransACT, Neighbourhood Cable, and E-Wire, which cover specific areas across Australia.

Fixed wireless networks are present in 244 ESAs in the Metropolitan Exemption Area (see Figure 7 below). Operators include iBurst, BigAir and Unwired. These networks are used to supply high speed broadband services at the wholesale and retail level and enable the provision of voice services through VoIP telephony (see further Section 3).

²⁰ [c-i-c]

²¹ Optus, Media Release Cable & Wireless Optus demonstrates success of bundling strategy (31 March 1999); see also Paterson Report, pp. 32-33.

300 Number of ESAs in the Exemption Area 250 200 150 100 50 None One or more Two or more Three or more

netw orks

netw orks

26

netw orks

Figure 7: Number of fixed wireless networks in each ESA in the Metropolitan Exemption Area

Source: [c-i-c]

There is continuing expansion of competitive infrastructure

As stated previously, there has been a significant expansion in the deployment of alternative infrastructure over the past ten years. Based on publicly available deployment plans and company announcements, there is no sign that this expansion will slow going forward:

- Optus has announced plans to roll-out DSLAM-based infrastructure to an additional 90 ESAs by the end of 2007-2008, taking their total deployment to 366.²²
- Primus has recently re-commenced its national ADSL2+ deployment, announcing that it will rollout its DSLAM equipment to 100 additional ESAs over the second half of 2007.²³
- Within the Metropolitan Exemption Area, the depth of DSLAM-based infrastructure will also increase (see Figure 8 below). More than 70 per cent of ESAs in the Metropolitan Exemption Area will have at least three competitive DSLAM-based infrastructure offerings available based on current, publicly released deployment plans:²⁴

²² Reported by engin ltd. In their announcement to the ASX, "Engin uniquely positioned to deliver broadband services to the digital home, 12 June 2007, available at

http://www.engin.com.au/Downloads/11_asx_announcement_120607_TiVo_ADSL2_final.pdf ²³ Communications Day, Issue 3066, 28 June 2007.

²⁴ That is, including Telstra, there will be at least four infrastructure based operators in these areas. 9141248_1

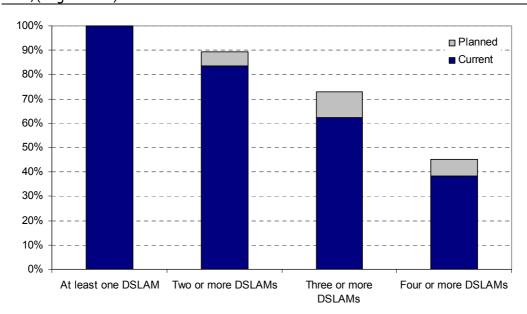


Figure 8: Number of current and planned ULLS-based competitors in Band 2 exemption area ESAs, (August 2007)

Source: Paterson Report, Figure 5, p. 30.

These projected deployments reflect the recent growth in the number of DSLAM-based offerings in the Metropolitan Exemption Area. Since September 2005, the number of ESAs in metropolitan areas with at least one DSLAM-based competitor has more than doubled (see Figure 9 below). Over the same period, the number of competitor DSLAMs in the Metropolitan Exemption Area has more than tripled. As a result, the average number of competitive DSLAMs installed in metropolitan Exemption Area ESAs has increased (see Figure 10 below).

Figure 9: Growth in DSLAM infrastructure within the Metropolitan Exemption Area

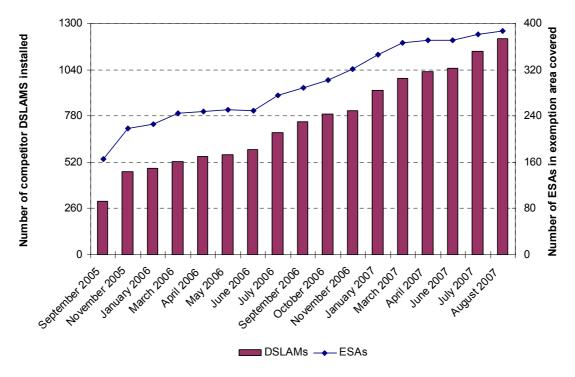
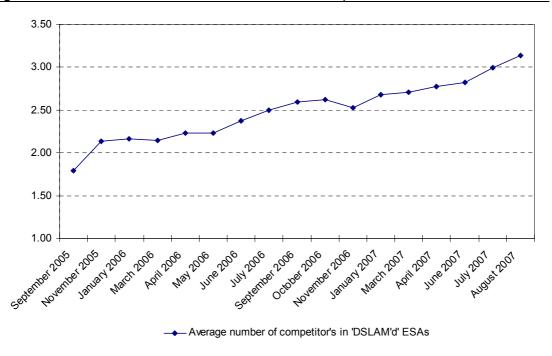


Figure 10: Growth in DSLAM infrastructure within the exemption area



Another way to examine the extensive growth and deepening of competitor DSLAM-based infrastructure in the Metropolitan Exemption Area is to show how the proportion of ESAs in the Metropolitan Exemption Area with none, one, two, three or four or more competitor DSLAMS have changed since September 2005 (see Figure 11 below). In September 2005, less than 50 per cent of ESAs in the proposed Metropolitan Exemption Area had any competitor

DSLAMs installed, with only 3 per cent having four or more installed. In contrast to this, by August 2007, more than 50 per cent of ESAs had three or more DSLAMs.

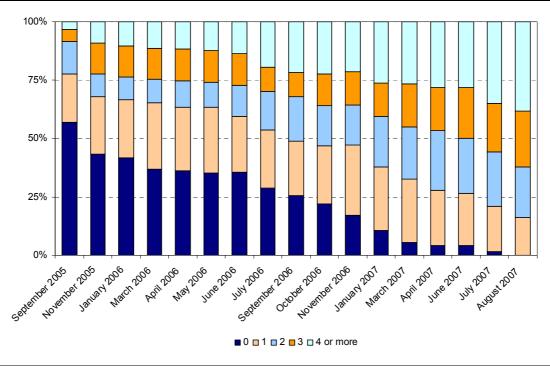
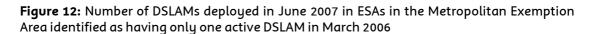
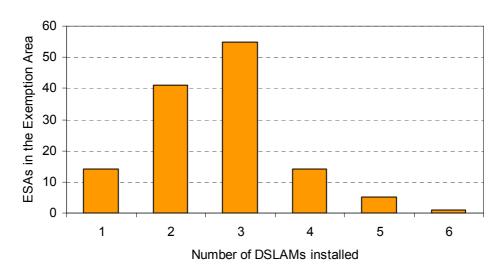


Figure 11: Growth in DSLAM infrastructure within the Metropolitan Exemption Area

The recent growth in DSLAM deployment also reveals that the deployment of an initial DSLAM in an ESA is likely to be followed by subsequent DSLAM deployments from other operators. In March 2006, 130 ESAs in the Metropolitan Exemption Area had only a single DSLAM deployed. By June 2007, 90 per cent of these ESAs had an additional DSLAM installed, with 20 of those ESAs having had three or more additional DSLAMs deployed (see Figure 12).



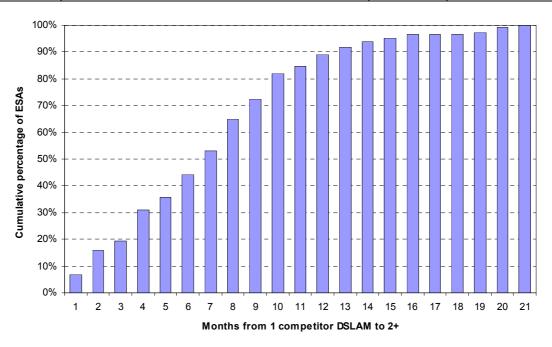


Source: [c-i-c]

Another way to examine the rate at which a second competitive DSLAM is likely to follow an initial competitive roll-out in an ESA is to examine the cumulative frequency distribution in those ESAs where an initial and subsequent DSLAM deployment occurred (Figure 13). Based on Telstra's competitive intelligence data, between September 2005 and August 2007, 149 ESAs in the Metropolitan Exemption Area went from having no competitor DSLAMs installed to having an initial competitor DSLAM, followed by at least one other competitive build.²⁵ As can be seen in Figure 13 below:

- 50 percent of ESAs added a second competitive DSLAM within 7 months,
- 80 per cent of ESAs added a second competitive DSLAM within 10 months,
- 90 per cent of ESAs added a second competitive DSLAM with 12 months.

Figure 13: Rate at which a second competitor DSLAM is brought online, following initial rollout of competitive DSLAM infrastructure in an ESA in the Metropolitan Exemption Area



Source: Telstra analysis.

The ongoing expansion in DSLAM-based infrastructure is particularly significant given that the Commission's decisions to accept or reject the Exemption Applications are likely to be handed down towards the end of the first quarter of calendar year 2008. Although there is sufficient evidence to grant the Exemptions in the CBD Exemption Area and Metropolitan Exemption Area immediately, by the time the Commission reaches its decision, the case will only have become more compelling due to this continued growth.

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²⁵ Of the remaining 222 ESAs in the Exemption Area, 166 ESAs had at least one competitive DSLAM installed in September 2005, 13 went from having no competitive DSLAMs installed to two or more in a single month and 56 added an initial competitive DSLAM in the period but have not as yet added subsequent competitive infrastructure. Of these 56, the median time these ESAs have had only a single competitive DSLAM installed (as at August 2007) was 7 months.

DSLAM-based infrastructure is the key in metropolitan areas

Importantly, although almost every ESA in the Metropolitan Exemption Area contains multiple alternative infrastructure networks, the presence of only one alternative DSLAM-based network suffices to act as a competitive constraint on Telstra. The importance of DSLAM roll-out has been recognised by the Commission:

"...Declaration of the unconditioned local loop service (ULL) in 1999 offered competitors an alternative to purchasing wholesale services from Telstra, by allowing them to deploy their own infrastructure - such as DSLAMs - directly in Telstra's local telephone exchanges.

This offered the opportunity to significantly reduce a competitor's reliance on Telstra's network. By using their own DSLAM infrastructure, access seekers can differentiate their services, potentially offering higher bandwidth data communications and voice services than they could by simply re-selling Telstra's wholesale service offerings." "²⁶

Expert analysis undertaken for Telstra by Dr Paterson finds that the presence of an initial DSLAM-based network operator in an ESA provides a sufficient competitive constraint on Telstra's PSTN OA product.

Dr Paterson's opinion, which Telstra adopts for the purposes of the Exemption Applications, is that from an economic and practical perspective, an ESA with one actual DSLAM deployed by a DSLAM-based competitor would be sufficient to constrain Telstra's behaviour in relation to the PSTN OA service in that ESA.²⁷ The reasons underlying this view can be summarised as follows:

- from an economic perspective, there are no material barriers to DSLAM-based entry or expansion;
- from a practical perspective, the mere existence of one DSLAM-based competitor

 DSLAM demonstrates that there are no material barriers to competitive entry; and
- from a factual perspective, available empirical evidence is consistent with the view that actual entry has occurred.

Furthermore, the acceptance of the Exemption Applications based on this decision rule would be a "low risk" decision for the Commission for the following reasons:²⁸

Ed Willett, Commissioner, speech "Understanding competition in the growth of Australian Broadband", 21 November 2006

²⁷ Paterson Report, pp. 46-47.

²⁸ Paterson Report, pp. 48-49.

- there are no material barriers to DSLAM-based entry or expansion for Telstra's competitors, and hence Telstra faces pricing and provision constraints from both existing DSLAM-based competitors and the entry threat of new competitors;
- the retail services that can be provided by the PSTN OA can be effectively replicated
 by alternative fixed-line networks, including the Optus and other HFC networks. In
 New South Wales, Queensland and Victoria, over 70% of ESAs in the Metropolitan
 Exemption Area are also covered by the Optus HFC network;
- wireless networks are also becoming increasingly tenable alternatives to the PSTN
 OA;
- over three-quarters of the ESAs in the Metropolitan Exemption Area already have two or more DSLAM-based competitors in addition to Telstra;
- planned DSLAM build in 2007 that has been publicly announced has not been included in the exemption footprint. However, if it were included, the number of ESAs in the Metropolitan Exemption Area that would have two or more DSLAM-based competitors would be almost 100 per cent; and
- given that many competitors have deployed DSLAMs, competition will be maintained even if a particular competitor exits the market, as it is likely that they will be replaced by another DSLAM-based operator.

Accordingly, Telstra submits that within the Metropolitan Exemption Area, which is based on the decision rule of at least one actual competitor DSLAM in an ESA, conditions exist that support Telstra's strong belief that granting the Exemption Applications would have the effect of promoting competition in the medium to long-term, and ultimately, be consistent with the LTIE.

There is competition throughout the CBD Exemption Area and Metropolitan Exemption Area

In this section, Telstra sets out evidence on the extent and drivers of competition in the markets for the PSTN OA service and related services in the CBD Exemption Area and Metropolitan Exemption Area. In particular, evidence is presented on the competitive impact of an initial competitive DSLAM deployment in an ESA. Evidence is also presented on the impact of VoIP services and fixed to mobile substitution.

In this section Telstra has placed an emphasis on providing evidence on the extent of competition in the Metropolitan Exemption Area. This is because there can be little doubt that the markets for services provided by means of PSTN OA are clearly competitive in the CBD Exemption Area, as the Commission has already recognised in the context of its roll-back of the regulation of WLR and LCS.

The markets in which the PSTN OA service is supplied are contestable and workably competitive. Evidence of this includes the changes in market shares over time and the current market offerings, the existence of numerous substitution possibilities (including VoIP and mobile telephony services) and the lack of barriers to entry for potential competitors willing to enter the market — driven primarily by the economics of DSLAM-based competitor entry. These factors provide sufficient constraints on Telstra in respect of its pricing and provision of the PSTN OA service, such that in both the CBD Exemption Area and the Metropolitan Exemption Area, exemption is clearly justified.

Substitution possibilities on both the supply and the demand side provide an effective constraint on an incumbent firm's market power. In this respect, DSLAM-based infrastructure and other fixed networks (such as the Optus HFC or, in CBD areas, the multitude of alternative networks) can act as alternative means for providing downstream services supplied via the PSTN OA service. Further, there is a range of alternative access technologies available such as mobile wireless networks that are already providing directly substitutable services and are likely to increasingly constrain Telstra's pricing and supply of the PSTN OA service.

The presence of competitive infrastructure is also driving competition at the wholesale level in the CBD Exemption Area and the Metropolitan Exemption Area. In the wholesale market, several operators are offering substitutes to the wholesale PSTN OA service in the CBD Exemption Area and the Metropolitan Exemption Area:

- Optus offers wholesale access and local calling products throughout its DSLAM-based
 ULLS network in direct competition with Telstra's PSTN offerings.
- AAPT-Powertel, Nextep (a subsidiary of NEC) and Optus offer a range of wholesale products on their extensive DSLAM-based networks across Australia. These platforms

enable resellers to provide high speed broadband services, access services and fixed voice services (using VoIP) which provide competitive substitutes to retail products utilising the PSTN OA service.

Several operators also offer wholesale broadband services (including Optus, AAPT-Powertel, Primus, Nextep, and Agile). These services allow resellers to offer VoIP telephony products and data products in direct competition to services offered via the PSTN OA service and related products.

At the retail level, competition is even more intense. Within both the CBD Exemption Area and the Metropolitan Exemption Area, many companies utilise their own infrastructure or resale services acquired from alternative infrastructure providers, to offer competitive fixed voice, high speed broadband and related products. Typically companies offer bundled voice services (basic access, local calls, long distance, international and fixed to mobile) which is the most dominant form of competitive offer. Only a fraction of customers in the retail market purchase long distance services without purchasing the complete bundle of voice products from the same supplier.

In recent months, competition at the retail level for voice and related services has increased with the launch of the Optus Fusion product (Box 3) and promises to intensify further with the impending launch of 'naked' DSL products from several operators (Box 4).

³⁰ Paterson Report, p. 9.

²⁹ Aside from the 11 DSLAM operators identified by Telstra as having their own DSLAM infrastructure in the Exemption Area, resellers (or companies Telstra did not include as 'operators') include Exetel, Netspace, GoTalk, Westnet, LetsGo, G-Node, Wild IT&T and iSeek, amongst others.

Box 3: Optus Fusion

On July 12 2007, Singtel Optus (Optus) launched its 'Fusion' product. The Fusion offer is touted by Optus as "Australia's first fixed voice and broadband cap, where,

For one fixed price per month, customers who sign up to an Optus Fusion Cap will get unlimited local and national calls; unlimited calls to Optus mobiles; fast broadband with no excess download charges; and included line rental. ^a

Significantly, the Fusion offer is only offered to customers who have access to Optus' DSLAM or HFC network. Analysis of the offer highlights the competitive impact which the use of the Optus DSLAM-based network will have on the voice and broadband market. For instance, Macquarie Equities note that:

"Optus is protecting pricing on broadband, while attacking fixed line voice: Effectively, Optus is giving away the bundled voice services at cost, and charging market rates for broadband services. This is a clear strategy to protect pricing on the growth medium, broadband, at the expense of voice. We expect Optus to back these new plans with an aggressive TV advertising campaign from this weekend.

...

Optus is clearly using its ULL footprint (in addition to cable) to bring pressure to bear upon Telstra's fixed line voice revenues." $^{\rm b}$

Describing the implications of this product launch, and the impact it is likely to have on competition in the fixed voice and broadband market, GoldmanSachsJBWere similarly state that:

"ULL impact is coming: Over the past 12-24 months, various players in the Australian market began deploying DSLAM broadband networks, clearly relishing the move to the improved economics possible with ULL. Today's launch from Optus is the first clear example of what ULL can deliver in a product/pricing sense." ^c

JPMorgan conclude that the launch of the Fusion product is an example of the competitive possibilities offered by ULL-based deployments:

"Now that on-net revenues exceed off-net, we believe that Optus might be more inclined to launch disruptive technologies like VoIP in the consumer market. Because Optus ULL margins are much higher than Resale margins (30%+ vs 10%), Optus can absorb the revenue cannibalization effect of VoIP on ULL but not on resale. We believe that the recently launched Optus Fusion is an example of how the ULL economics will allow Optus to be much more aggressive in the Consumer and SMB fixed line market."

In addition to the launch of the Fusion product, Optus has also further developed its wholesale offerings based on its ULL DSLAM network. Recently, M2 Telecommunications signed a telephony and broadband wholesale/resale relationship with Optus, utilising Optus' ULL-based DSLAM network. This further deepens the ULL-based wholesale market, with M2 Telecommunications offering smaller retail ISPs access to Optus' ULL-based network. ^e

^a Singtel Optus media release, Optus launches Australia's first combined phone and broadband cap, available at http://www.optus.com.au, 12 July 2007. ^b Macquarie Research Equities, Optus sets a monkey amongst the penguins, 13 July 2007. ^c GoldmanSachsJBwere, Optus Launches Australia's first combined fixed + broadband cap, Telecommunications Sector Commentary, 12 July 2007. ^d JPMorgan, Singapore Telecom: 1Q FY08 results, pp.9-10, 14 August 2007. ^e Exchange, M2 launches wholesale ADSL2+ & telephony bundle, vol. 19, no. 32, p. 9, 24 August 2007.

Box 4: Naked DSL

In recent months, several companies have made announcements relating to the delivery of broadband products based on ULL without an underlying PSTN voice service (so called "naked DSL"). This type of product offering would enable an ISP to deliver a broadband service (potentially including a VoIP telephony service), via ULL, without the need to acquire traditional voice circuit switching. For some time, naked DSL products have been expected to increase competition not only in the broadband market. ^a

Speaking at a recent industry conference, AAPT/Powertel CEO Paul Broad, commented that:

the naked DSL (Digital Subscriber Line) product will be available before Christmas but refused to give further details of where the service will be launched. Broad did, however, reveal the naked DSL product will be available as both a wholesale and retail offering. "We're looking at effectively a primary line replacement product ... in my place in Sydney, I don't have a fixed line nor do I want one -- not at AU\$30 month," he told delegates.

In addition to AAPT/Powertel, several other carriers/ISPs have revealed plans to offer naked DSL services. For instance:

- TPG is reported to soon begin offering ULL-based 'naked DSL' products over its DSLAM network.
- iiNet has announced and commenced trials of naked DSL.^d
- VoIP provider engin is "committed to launching a landline free broadband product before the end of the year", which utilises Optus' ULL-based network and:

"will enable subscribers to receive high-speed broadband internet and phone services over a local phone line without paying line rental fees." ^e

 Internode has announced trials of naked DSL products to begin in October, which will offer high speed broadband and VoIP-based telephony functionality.

^a IDC, Australia Broadband Market 2005-2009 Forecast: Naked DSL to Become Lethal to PSTN, October 18, 2005. ^b Best, J AAPT Promises 'Naked DSL' by Christmas, ZDNet, available at http://www.zdnet.com.au/news/communications/soa/AAPT-promises-naked-DSL-by-Christmas/0,130061791,339281360,00.htm, 21 August 2007. ^c Commsday Weekly, TPG reveals new ADSL2+ ULL plans, p. 9, 2 August 2007. ^d iiNet, naked broadband trial terms & conditions, available at http://www.iinet.net.au/products/naked/trialterms.html 25 August 2007. ^e Sinclair, L. Engin starts its TiVo push, The Australian IT, available at http://www.australianit.news.com.au/story/0,24897,22000788-15306,00.html, 2 July 2007.
f From a posting of Internode Managing Director Simon Hackett, available at http://forums.whirlpool.net.au/forum-replies.cfm?t=790081&r=13167345&u=6258#r13167345.

VoIP is an emerging competitive substitute to traditional fixed voice services

VoIP telephony products are increasingly being offered as fully featured substitutes to traditional PSTN telephony. It is estimated that there are over 260 VoIP providers throughout Australia, with almost 100,000 paid VoIP services in operation, which is estimated to climb to more than 2.8 million services by 2011.³¹

VoIP services are offered by several companies, which utilise DSLAM infrastructure in the CBD Exemption Area and Metropolitan Exemption Area, including AAPT, Primus, Optus, iiNet, Soul and Internode. It is also being offered by fixed wireless operators (BigAir). VoIP providers have

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³¹ Market Clarity, *The Australian VoIP Services Market 2004-2011*, 7 March 2006, as reported at http://www.marketclarity.com.au/news/06-03-22.cfm

specifically and aggressively targeted the fixed line services market (and in some cases Telstra directly).³²

In CBD areas, several companies, including Macquarie, Primus and Optus have offered specialised business-grade VoIP products in direct competition to PSTN-based telephony products for some time.

In a recent review of the retail price controls, a number of industry participants (including Telstra, Optus and Chime) made submissions recognising that rapid growth in VoIP technology will pose a significant challenge to fixed line services in coming years.³³ While the Commission did not consider that VoIP posed a significant threat to traditional fixed-line services at that time, it did note that an issue for future determinations would be "the effect of new technologies, such as Voice over Internet Protocol (VoIP), on pricing structures"³⁴. More recently, Commissioner Ed Willet stated;

"We have seen a shift from standard voice over telephone to an emphasis on broadband and all that flows from it, including internet, internet protocol television (IPTV), streaming of audio visual content and voice over internet protocol (VoIP)."³⁵

Other recent developments in relation to the continued roll-out of VoIP include:

- Optus' announcement that it intends to launch VoIP services to SME customers
 nationally in the second quarter of 2007, claiming that the deployment will be the
 first large scale roll-out of the technology in the market.³⁶
- Sholl Communications' links with Mobi's Fabfone VoIP business to increase economies of scale and scalability. According to Mobi Chairman Fabio Pannuti, "It is the board of Mobi's intention to be a market leader in the VoIP space by Q4 2008". 37
- Hutchison and Skype's announcement of deal to enable Skype VoIP services on mobile handsets using the Hutchison 3G network.³⁸
- engin's launch, in March 2007, of a new \$14.95 per month unlimited local and national VoIP plan. engin reported a total subscriber base of 52,500 for the end of December 2006, up 35% over the last sixth month period. It has also added a further

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³² "Telstra loses fight to block VoIP ads" Sydney Morning Herald, 23 September 2006.

³³ ACCC, Changes in the price paid for telecommunications services in Australia 1997-98 to 2003-04: Report to the Minister for Communications, Information Technology and the Arts, (March 2005), pp. 17 and 93.

ACCC, Changes in the price paid for telecommunications services in Australia 1997-98 to 2003-04: Report to the Minister for Communications, Information Technology and the Arts, (March 2005), pp. 1 and 93-100.

Ed Willett, Commissioner, speech "Understanding competition in the growth of Australian Broadband", 21 November 2006.

³⁶ Communications Day, Issue 2990, 7 March 2007.

³⁷ Communications Day, Issue 2987, 2 March 2007.

³⁸ See VOIP News, *Mobile VOIP phones soon*, (22 February 2006). Available at: www.voipnews.com.au/content/view/348/107/); and *Wireless Carrier Offers Wholesale VoIP*, (4 May 2006). Available at: www.voipnews.com.au/content/view/1038/107/

5,500 customers in January and February of 2007.³⁹ engin is also set to be the first Australian company offering mobile VoIP, having announced a Nokia handset distribution deal and mobile calling client.⁴⁰

 engin's announcement on 1 October 2007, of its release of a "\$0 VoIP adaptor" for customers on a 12 month service contract.⁴¹ This eliminates the differences in upfront CPE costs often identified between some VoIP and PSTN products.

Recent comments, made by engin when it released a plan to offer a 'triple-play solution' which included a VoIP telephony offering using the Optus ULLS network, highlight the commercial reality that VoIP is increasingly seen by customers and service providers as a substitute to traditional, PSTN-based voice services:⁴²

"Engin CEO Ilkka Tales sees the combined VoIP, broadband and Tivo offering opening up new markets. It will pitch the expanded offering as a "true PSTN replacement," (emphasis added)

According to Tales, 'there are a number of overseas models that demonstrate how DSL can help aggressively drive the penetration of broadband, particularly when combined with a quality broadband telephony offering. Engin will allow customers to ditch the middleman and have their line setup exclusively for broadband and internet telephony, cutting both telephone and access costs and allowing customers a single point of contact if they need help."⁴³

Fixed to mobile substitution

With mobile subscription penetration reaching saturation,⁴⁴ mobile services are becoming increasingly substitutable for fixed line services. Accordingly, mobile-originated voice calls provide an effective substitute for fixed voice calls, and therefore provide a competitive constraint on the pricing of those calls. From an end-user's perspective, there is little to no difference between making a call to a mobile from a fixed line or from a mobile phone. This is particularly so in the CBD Exemption Area and Metropolitan Exemption Area, where strong

³⁹ Communications Day, Issue 2986, 1 March 2007.

⁴⁰ Communications Day, Issue 2966, 23 January 2007.

⁴¹Warne, Dan, Engin Introduces \$0 VOIP adapter, Australian Personal Computer, available at, http://www.apcmaq.com.au/7252/engin_introduces_0_voip_adaptor, 28 September 2007

engin, ASX Announcement: Engin uniquely positioned to deliver broadband services to the digital home, 12 June 2007, available at www.asx.com.au

⁴³ Communications Day, Issue 3056, 13 June 2007.

This was recognised by the Commission's consultant, wik-Consult Gmbh ("WIK") in Mobile
Terminating Access Service: Network Externality and Ramset Pricing Issues: A Consultancy Report to the
Australian Competition & Consumer Commission in relation to Optus's and Vodafone's Undertakings in
relation to the Domestic Digital Mobile Terminating Access Service, (3 November 2005) ("WIK Report"),
pp. 48-49. Optus has estimated mobile penetration rates to be as high as 97% as at 31 December 2006
- source: SingTel Optus, Management discussion and analysis of financial condition, results of operations
and cash flows for the third quarter and nine months ended 31 December 2006, p. 42.

mobile reception is pervasive. Accordingly, the decision as to which service to use is largely a function of price and convenience.

This view is consistent with that previously espoused by industry analysts and other industry participants including Optus, the Competitive Carriers' Coalition and Vodafone. One industry analyst has observed that "empirical evidence suggests the Australian market is at the cusp of wholesale migration of voice traffic to mobile services". Vodafone has stated that it is "actively encouraging customers to substitute fixed calls with mobile calls with a number of customer offerings" and the recognition "that there is competition between M2M and F2M is in fact acknowledging that mobile services are part of a broader telephony market". Vodafone has elsewhere acknowledged that: Vodafone has elsewhere acknowledged that Vodafone has elsewhere vodafone has elsewhere acknowledged that Vodafone has elsewhere vodafone

"For some people, mobile phones have now become a real alternative to the fixed line. Over time, we believe that fixed to mobile substitution will continue, particularly for voice services."

Similarly, in the Commission's Assessment of Vodafone's mobile terminating access service (MTAS) Undertaking: Final Decision, (March 2006) ("Vodafone MTAS Undertaking Decision"), it was recognised "that fixed-to-mobile substitution is starting to become a more common feature of the telecommunications sector more broadly."⁴⁸. This is consistent with the view of the Commission's expert consultant, WIK, who observed a gradually increasing trend to substitute fixed access lines for mobile subscriptions, with a number of telephone users giving up their fixed-line subscription and becoming mobile-only users.⁴⁹ However, irrespective of whether an end-user abandons their fixed line in favour of becoming a mobile only user, at the level of any individual calling decision a mobile call now increasingly represents a substitute to a fixed line call.⁵⁰

Given the growing trend in substituting mobile calls for fixed line calls, mobile networks will inevitably and increasingly provide a constraint on the price of fixed voice services. This view

⁴⁵ Report from Citigroup (11 October 2004) quoted in ACCC Price Control Review (2005), p. 20.

⁴⁶ Vodafone letter to ACCC dated 9 October 2003, p. 6.

⁴⁷ Vodafone, Submission to the Australian Competition and Consumer Commission: Mobile Services Review 2003 Discussion Paper, (13 June 2003), paras 3.22 and 3.65.

⁴⁸ Vodafone MTAS Undertaking Decision, p. 84.

⁴⁹ WIK Report, p. 48.

The increasing substitutability between mobile calls and fixed line calls has been demonstrated in several key developments over recent months. Most significantly, in July 2007, Optus' Virgin brand launched a 'fixed'-wireless voice and broadband consumer product, utilising the Optus HSDPA enabled 3GSM mobile network (see Corner S., Virgin Mobile launches 3G-based 'fixed line' broadband bundle, Itwire, available at http://www.itwire.com/content/view/13671/). Industry commentators have noted the significance of this product and the competitive threat it poses to the fixed-line voice market (e.g. see Warne, D., Virgin Broadband poised to slaughter Telstra's landline profit, 26 July 2007, available at http://apcmag.com/6795/virgin_broadband_it_will_slaughter_telstras_profit). Other recent developments include Spin Internet's launch of a free wireless broadband service in Sydney (see Spin Internet Media Release, Spin Internet launches Free Mobile Broadband for Sydney in world first, 16 August 2007, available at http://www2.spin.net.au/pressreleases/#20070817T102); and the recent reduction in prices by Hutchison "3" for its "x-series" wireless broadband service, based on its own HSDPA enabled 3GSM network (see Corner, S., 3 cuts HSDPA prices: 1GB for \$29 per month, ITWire, 16 July 2007, available at http://www.itwire.com/content/view/13534/1095/).

has been endorsed by an expert, who was invited by the Commission to present at its July 2007 Regulatory Conference.⁵¹ As reported in Communications Day:⁵²

Aniruddha Banerjee, Boston-based VP of the Analysis Group, told the Sanctuary Cove conference according to a draft posted on the ACCC's website that fixed mobile substitution has "apparently become a pervasive phenomenon worldwide—as documented in countless surveys and investigations conducted by market research companies, regulatory bodies and academic scholars."

Citing evidence that 8% of US households had cut their fixed lines in favour of mobiles and 20% of mobile users had never leased a fixed line, Banerjee said that these empirical trends raised challenges for regulators as they grapple with the complexities of fixed-mobile substitution and its impact on the necessity for fixed regulation.

Banerjee was specifically critical of testimony by competitive carriers in the US to the Federal Communications Commission that argued that as fixed services could not be considered as belonging to the market for mobile services, hence mobile services could not be considered as part of the market for fixed services.

"This unsupported assertion betrays a fundamental misunderstanding of the role of the crossprice elasticity in determining whether or not substitution is occurring," Banerjee said, adding that the cited competitive carrier testimony failed to produce any independent evidence that significant fixed mobile substitution was not happening.

The key competitive driver is low barriers to entry for DSLAM-based infrastructure

Barriers to entry are an important consideration for the purposes of section 152AB(2)(c) of the Act, as low barriers to entry indicate that market conditions are conducive to competition.⁵³

In the CBD Exemption Area, barriers to entry and expansion are less of a concern as those areas are already served by a large number of suppliers and the supply of voice services in those areas is clearly competitive. Nevertheless, DSLAM-based infrastructure provides low barriers to competitive entry in both the CBD Exemption Area and the Metropolitan Exemption Area.

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⁵¹ See Banerjee – Paper.pdf available at http://www.accc.gov.au/content/index.phtml/itemId/793224

⁵² Communications Day, ACCC invited expert says fixed-mobile substitution an empirical reality, Issue 3077, 30 July 2007.

This is not controversial. For an example of the broad economic case for the relationship between an absence of barriers to entry and a contestable, competitive market, see Janusz Ordover, "Effective Telecommunications Service Competition in Australia and the Need for Regulatory Reform (26 November 2000), submission to the Productivity Commission at pp. 65-66. The importance of barriers to entry has also been recognised by the Commission in its Merger Guidelines (at p. 48).

Barriers to entry and expansion in the CBD Exemption Area and Metropolitan Exemption Area are low, primarily because potential new entrants can utilise DSLAM-based infrastructure to compete with Telstra resale services. Where barriers to entry are low Telstra (and other market participants) are constrained to behave in a manner consistent with competitive market outcomes, and regulatory intervention is not in the LTIE as it only introduces superfluous costs (which will ultimately be passed on to end users).

The fact that there are not material barriers to competitor entry and expansion using DSLAM-based infrastructure is due to the following factors:

- entrants do not face materially higher sunk costs than Telstra in relation to investments in DSLAMs;
- entrants do not face materially higher minimum efficient scale (MES) barriers than
 Telstra in relation to investments in DSLAMs;
- there are no technical constraints to DSLAM-based competitors providing a standard telephone service (STS) of an equivalent quality to Telstra's STS;
- entrants do not face materially higher backhaul transmission costs than Telstra in relation to investment in DSLAMs; and
- non-price impediments to DSLAM-based entry and expansion do not pose material barriers to competitors.

These factors are each discussed in turn below.

The sunk costs of DSLAM-based entry are not a barrier to new entry

Sunk costs associated with DSLAM-based entry are not a material barrier to entry for the following reasons:

- a significant proportion of the costs involved in DSLAM investment are unlikely to be sunk. This is because DSLAMs are capable of redeployment by market participants (including Telstra's competitors) in the face of changing demand conditions. Further, DSLAMs have a relatively short life span any period longer than this life span, DSLAM expenses are not sunk costs by definition. Lastly, DSLAM costs form a relatively small component of a competitor's overall costs;⁵⁴
- switching and transmission infrastructure used to provide the voice component of a bundle of voice and broadband services could include sunk costs if it is self-provided.
 However, as DSLAM-based access seekers can purchase these services from existing

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⁵⁴ Paterson Report, p. 38.

network operators such as Optus, Primus, AAPT, Soul and Telstra, these sunk costs can be largely avoided;⁵⁵ and

• sunk advertising and marketing costs associated with DSLAM-based entry at the wholesale level are likely to be minimal as wholesalers can readily identify and directly approach their potential customers who must be licensed carriers. To the extent that DSLAM-based wholesale entrants consider advertising and marketing costs at the retail level (due to self-supply of wholesale services), it is unlikely there will be any additional sunk costs in moving from reliance on resale to use of DSLAMs to provide retail services. ⁵⁶

The Minimum Efficient Scale required for DSLAM entry is not a barrier

A risk associated with DSLAM-based entry is the ex ante uncertainty as to whether an entrant will obtain the minimum efficient scale ("MES") necessary to be competitive in the market.

However, any MES requirements associated with DSLAM-based entry are not a material barrier to entry for the following reasons:

- technological developments continue to lower any potential barriers to entry that may arise from MES requirements as DSLAMs become increasingly scalable over time;
 and
- the wholesale supply of local call services to carriage service providers should not be analysed in isolation from the supply of other services that make use of the same network infrastructure. Accordingly the MES should be considered in the context of bundled voice and data services such that MES need not be reached in the voice market alone in order for MES not to prove a significant barrier to entry. With the rapid growth of, and demand for, retail broadband services, Telstra's competitors will not face prohibitive difficulties in reaching MES.

For the purpose of the Exemption Applications, Telstra staff have undertaken MES-related modelling work which has been provided to Dr Paul Paterson for analysis. A summary of the modelling results is set out in Table 6 below.

[C-I-C]

As Table 6 indicates, at current retail prices, the minimum number of retail SIOs at which ULLS entry becomes viable is no more than [c-i-c] SIOs in Band 2 (where the Metropolitan

⁵⁵ Paterson Report, p. 39.

⁵⁶ Paterson Report, p. 39.

Exemption Area ESAs are located). These thresholds would increase if there were retail price reductions resulting from increased competition (which would be expected if the Exemptions are granted). However, according to Dr Paterson:⁵⁷

"... this would be of no concern if it was due to increased competition resulting in lower prices (this clearly being in the LTIE). In any case, the Band 2 SIO threshold at current prices identified by the model is very low and in my view affords substantial leeway for retail price reductions for voice services without raising MES concerns. In short, I conclude that MES issues are unlikely to prevent de novo ULLS entry at present (or lower) retail prices, especially for existing retailers currently using PSTN OA who could be expected to already have significant customer numbers in Band 2 ESAs."

The provision of a STS voice service is not a material barrier to entry

Telstra submits that there are no technical constraints which would prevent DSLAM-based competitors from providing a STS of equal quality to the STS provided by Telstra. Accordingly, this should allay any concerns that Telstra may be able to leverage any competitive advantage from being able to provide a superior quality STS in the wholesale market.⁵⁸

Backhaul costs are not a material barrier to entry

Backhaul costs associated with DSLAM-based entry do not constitute a material barrier to entry because the backhaul transmission market in the Band 2 ESAs to which the Metropolitan Exemption Application relates is mature and new entrants are able to purchase backhaul transmission from a number of providers. For example, both Pipe Networks and Powertel have deployed extensive fibre optic backhaul networks connecting hundreds of Telstra exchanges in the Metropolitan Exemption Area. ⁵⁹ In addition Primus has recently announced a significant upgrade in capacity to its national backhaul network. ⁶⁰

There are no non-price impediments which constitute a material barrier to entry

Finally, it might be argued that Telstra may be able to impede DSLAM-based competitors through non-price conduct, such as providing a lower quality service than that provided to itself or intentional delays in the provisions of the service.

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⁵⁷ Paterson Report, p. 40.

⁵⁸ Paterson Report, p. 41.

See Powertel, HI 2005 Update available at http://www.powertel.com.au/documents/inv_pres_files/20050826_HalfYearReportPresentation.pdf; PipeNetworks, Our Commitment, p. 9, available at http://www.pipenetworks.com/docs/media/CompanyCapabilities.pdf

⁶⁰ Primus, *Primus Australia Boosts Fibre Optic Network Capacity*, 13 September 2007 available at http://www.primus.com.au/PrimusWeb/AboutUs/News/

This is not a valid barrier to DSLAM-based entry or expansion for the following reasons: 61

- (a) Telstra would be constrained in engaging in any anti-competitive conduct by Part XIB of the Act;
- in respect of the quality and timely delivery of the ULLS or LSS, Telstra is constrained (b) by the standard access obligations, in particular sub-section 152AR(3), which requires Telstra to take all reasonable steps to ensure that the quality of the service is equivalent to that which it provides itself; and
- (c) in relation to network upgrades, Telstra has obligations under its Operational Separation Requirements to ensure that it has provided equivalent notice of network upgrades to its access seekers as it does to itself. 62

In sum, there are no significant barriers to entry

Taken together, the evidence clearly shows that competitors do not face significant, material barriers to investing in DSLAM-based infrastructure. In particular, the evidence suggests that there are no significant barriers to competitors utilising DSLAM-based infrastructure to supply ULLS-based services. Importantly when the Commission considered the potential barriers to existing LSS access seekers transitioning to ULLS-based supply, in the context of its recent Draft Decision on whether to re-declare LSS, it concluded that:

Based on the available evidence, it appears that none of these factors would constitute material barriers to transition. 63

For these reasons, it is clear that there are no material barriers to entry or expansion for competitors using DSLAM-based infrastructure.

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⁶¹ Paterson Report, p. 42.

⁶² See clauses 3.8 and 5.15 of the Operational Separation Plan Telstra provided pursuant to the Telecommunications Act 1997 (Cth).

Granting the Exemption Applications would not 3 compromise downstream markets

This section sets out the likely impacts, if any, that exemption would have on downstream markets. In particular, it addresses the possible concerns that may be held in respect of pure pre-selection operators, override operators, and voice resellers.

In order for a vertically integrated firm to be able to leverage a competitive advantage in a downstream market, it must have "substantial market power over the supply of inputs necessary for downstream rivals to compete".64 Consequently, as stated by Dr Paterson, "where the upstream market is competitive, the vertically integrated firm will not be able to engage in such behaviour".65

As demonstrated above, facilities-based competition in the CBD Exemption Area and the Metro Exemption Area is particularly strong. Not only are there no material barriers to entry or expansion of DSLAM-based infrastructure, but the deployment of DSLAMs, and supply of other alternative substitutes, is widespread. In other words, the upstream market in which the PSTN OA service is supplied is workably competitive, and consequently, Telstra does not have sufficient market power to leverage any competitive advantage in downstream markets.66

It may be arqued that regulation helps to protect the stand-alone pre-selection, over-ride, and voice resale business models. Consequently, in granting exemption, the possibility of full-service supply may lead to the disappearance of these business models from the market. However, according to Dr Paterson:

"Equally, it might be that competitive forces would lead to the unregulated supply of new wholesale services that would be effective (or better) substitutes for PSTN OA and other current regulated upstream services."67

Furthermore, the granting of exemption would not harm downstream competition, given the possible regulatory protection of these types of business models, for the reasons set out below.

Pure pre-selection operators

As identified in the Paterson Report, if the Commission grants the Exemptions, pure preselection operators may either seek an equivalent wholesale service, change their business

⁶⁴ Paterson Report, p. 50.

⁶⁵ Paterson Report, p. 51.

⁶⁶ Paterson Report, p. 52.

⁶⁷ Paterson Report, p. 53.

model to provide a bundle of voice (and potentially broadband) services using the regulated ULLS, or exit the market.⁶⁸

If a pure pre-selection operator were to seek an equivalent wholesale service, there would be, as shown above, sufficient competitive pressure on Telstra, and other providers, within the CBD Exemption Area and Metro Exemption Area, to ensure efficient supply of that wholesale service.

Alternatively, a pure pre-selection operator would face little or no impediment to changing its business model to provide a bundled product through ULLS-based infrastructure. As demonstrated in this Submission, there are no significant barriers to entry in the CBD Exemption Area and Metro Exemption Area, and the operator's existing capabilities and customer base would facilitate the change. Furthermore, according to Dr Paterson, this move towards ULLS-based entry would:

"increase the depth of competition as operators move to a wider supply of services and a more vertically integrated model", thereby "ultimately improving outcomes for end-users." ⁶⁹

Finally, even if the operator were to exit the market, Dr Paterson concludes that downstream competition would not be affected:

"This is because positive downstream market outcomes will be ensured by already strong upstream competition. The presence of ULLS-based providers and alternative network providers in the exemption area means that even in the absence of pre-selection carriers, the prices of voice bundles and stand-alone long distance products will continue to be determined by competitive pressures no less strong, and possibly stronger...than those of the present."

In any case, pure pre-selection supply is a very small and diminishing part of the voice telephony market. Moreover, not all carriers providing pure pre-selection services are exclusively pre-selection carriers. On the contrary, the vast majority of pre-selection carriers also acquire WLR and LCS, and provide retail voice bundles. The class of carriers that use PSTN OA but not LCS/WLR is very small indeed. With this *de minimus* presence in the market, it is very unlikely that the fate of pure pre-selection operators post exemption will impact on the state of competition.⁷¹

Furthermore, as pure pre-selection declines, the increasing bulk of voice supply is bundled across basic access and all calling services. The Commission has previously stated that:

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⁶⁸ Paterson Report, pp. 53-54.

⁶⁹ Paterson Report, p. 54.

⁷⁰ Paterson Report, p. 54.

⁷¹ Paterson Report, p. 54.

"Bundling can be beneficial for both consumers and the carrier or CSP supplying the bundled services if it results in significant efficiencies and pro-competitive benefits. Bundling can allow carriers or CSPs to exploit economies of scope between bundled goods, and economies of scale if the bundling conduct has significant impacts on consumer demand. Consumers can gain when these benefits are passed on in the form of lower retail prices or quality improvements."

Over-ride operators

Some operators use the PSTN OA service to provide override services for domestic long distance, international and/or FTM calls. However, the use of such services has declined markedly in recent years, particularly in the CBD Exemption Area and Metropolitan Exemption Area.⁷³

Moreover, as recently noted by the Commission in relation to competition from this class of operators:

"it... relies on the current access pricing regime and is not sustainably competitive in the long-run." ⁷⁴

Further, the de minimus presence in the market of such operators strongly suggests that the end of override could not have a material impact on competition.

In short, as with pure pre-selection providers, I believe that any effect exemption may have on this class of operator will not substantially lessen competition in the downstream market.

Voice resellers

Although voice resellers are the largest body of PSTN OA users, they are still in no different a position to pre-selection or override operators. That is, in the event of the Exemptions being granted, these resellers may either seek a wholesale service (or bundle of services) from an existing facilities-based operator, they may become a facilities based operator themselves or they may exit the market. ⁷⁵

However, the key point with respect to voice resellers is that, since their business model already contemplates supply of a retail voice bundle, they are likely to be in a stronger position than pure pre-selection or over-ride operators to self-supply using ULLS.

 $^{^{72}}$ ACCC, 'Bundling in Telecommunications Markets: An ACCC Information Paper', August 2003, p.5.

⁷³ Paterson Report, p. 55.

⁷⁴ ACCC, 'Declaration inquiry for the ULLS, PSTN OTA and CLLS: Final determination' (July 2006)

⁷⁵ Paterson Report, p. 56.

Dr Paterson concludes it is likely that an exemption would have no material effect on competition in respect of the voice-only customer segment, for the following reasons.⁷⁶ First, in the proposed Exemption Area Telstra will be constrained by at least one other service provider with the technology base to provide resellers with a wholesale voice-only service that is competitive constraints exist at the wholesale level. Second, existing ULLS-based operators can viably supply voice-only services to the majority of this customer segment. In this respect, Telstra will be constrained by competitive pressure at the retail level in the proposed CBD Exemption Area and Metro Exemption Area.

Telstra agrees with that analysis.

Consequently, overall, competition in the retail market for fixed voice telephony or bundled voice and broadband services would not be compromised by the Exemptions.

⁷⁶ Paterson Report, p. 56.

4 Continued regulation is unnecessary and potentially harmful

This section sets out the risks and costs that would be incurred if the Commission refuses to grant either the CBD Exemption Application or the Metropolitan Exemption Application (or both of them). Specifically, it will clarify how continued unnecessary declaration of the PSTN OA service in the CBD Exemption Area and Metropolitan Exemption Area will distort the market and sets out evidence on the extent and drivers of competition in the markets for PSTN OA and related services in the CBD Exemption Area and Metropolitan Exemption Area.

All regulation is costly, and unnecessary regulation will impose costs that outweigh any perceived benefits. In a competitive environment, regulation that impacts on and interferes with the normal operation of the market is likely to inflict significant costs on society.

As the Commission itself recognises, continued regulation is unnecessary and costly where competition in a particular market is effective and likely to remain so. This view was repeatedly stated in the 2002 Final Decision. For instance, the Commission stated that:⁷⁷

"A relevant consideration in determining whether the exemption will promote competition or encourage economically efficient use of and investment in infrastructure is whether the market is likely to function efficiently in the absence of the service declaration. Related to this is the principle that if the market works effectively without regulation, then regulation will impose unnecessary costs to the economy. Removal of regulation will therefore remove these costs, which in turn would be likely to promote competition and encourage efficient investment. Accordingly, if it is likely that the market would function efficiently without regulation, granting the exemption should promote the LTIE.

•••

Where competition in a market for the supply of a service is effective, and is likely to remain so, continued declaration of the service in those markets is unlikely to be necessary to ensure services are supplied at a competitive price and of the requisite quality.

...

Where existing market conditions already provide for the competitive supply of services, the access regime should not impose regulated access. This recognises the costs of providing access, such as administration and compliance, as well as potential disincentives to investment. Regulation will only be desirable where it leads to benefits in terms of lower prices, better services or improved service quality for end-users that outweigh any costs of regulation."

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⁷⁷ 2002 Final Decision, p. 9, 10, 15-16.

In the broader context of the Fixed Services Review, the Commission focused on the regulation of "enduring bottlenecks", which is defined to mean "a network element or facility that exhibits natural monopoly characteristics and is 'essential' to being able to provide services to end-users in downstream markets in a way that promotes the [LTIE]". In this regard, the Commission expressed the view (at p.iii) that:

"Where an enduring bottleneck does not persist, the Commission will be inclined to progressively withdraw ex ante regulation where it is confident that declaration is not required to promote the LTIE.

The Commission's approach is based on the principle that where it is economically efficient, facilities-based competition is more likely to promote the LTIE. This is because this form of competition allows rivals to differentiate their services and compete more vigorously across greater elements of the supply chain.

It is also based on the principle that, for services or network elements which are not enduring bottlenecks, competitors that do not wish to invest in their own infrastructure will, more than likely, have the opportunity to enter into commercially negotiated arrangements for access with third parties (or the incumbent) without the need for ex ante regulatory intervention. In this regard, the withdrawal of access regulation at certain network layers does not necessarily suggest that these forms of competition will cease, or that their price will necessarily be raised excessively by the access provider. Rather, it is recognition that ex ante regulation is no longer required to ensure that these services are competitively priced at or near their underlying costs."

It is clear from the evidence Telstra has presented that there is extensive alternative infrastructure to Telstra's PSTN within the CBD Exemption Area and Metropolitan Exemption Area, and that this is driving competition in the market for fixed-line voice services (and related services). In particular, the emergence and deployment of DSLAM-based alternative infrastructure means that these markets are now workably competitive (and, in many cases, have been for some time).

In this competitive environment, continuing to impose the ex ante regulatory regime that exists under Part XIC for PSTN OA is unnecessary and costly. The end result will be a stifled and distorted market to the ultimate detriment of Australian telecommunication users.

Regulation will never provide the same incentives for efficient investment in infrastructure as a workably competitive market because of the potential risks involved, including:

- the inherent truncation of returns;
- potential for regulatory dependence;

⁷⁸ FSR - Second Position Paper, p. ii.

- arbitrage; and
- asymmetric impacts.

The cumulative impact of these adverse regulatory effects is the inefficient (and typically under-) investment in infrastructure, which result in consumers not being offered the full range and quality of services they would enjoy in a competitive market.

Truncation of returns

In workably competitive markets the "upside" (i.e. above average returns) of successful investments compensates for the "downside" of unsuccessful projects, such that the overall expected return will be normal over the long term.

Regulated access prices tend to truncate the reward of a successful investment without reducing losses from unsuccessful investments, thereby reducing incentives for investment. As Dr Paterson notes:

"To the extent that access prices are binding, they truncate the rewards from a successful investment but do not reduce the losses from unsuccessful ventures. This reduces the extent to which the regulated firm can undertake efficient, but risky, investments. The effect is to reduce investment incentives. An access provider may be reluctant to expand or modernise its network, lest successful investments are subject to an access claim at cost (truncating upside returns) but no recompense if the investment is unsuccessful (lossmaking). In short, the rewards from regulation are socialised (shared with access seekers) or quickly bid way while losses are internalised (only borne by the investor). Further, the loss of expected returns, and hence the reduction in efficient investments, is likely to be large in a rapidly developing and changing environment such as telecommunications."

Granting the Metro Exemption and CBD Exemption will remove the potential for truncation of returns to reduce investment in infrastructure by the access provider without adversely impacting on the access seeker. In a market as dynamic as telecommunications, the long-run benefits to end users, from granting the Exemption Applications, will outweigh any perceived short-run benefits from artificially lower prices due to unnecessary regulated access.

Potential for regulatory dependence

By contrast, continuing to regulate the provision of the PSTN OA service in the CBD Exemption Area and Metro Exemption Area would provide a crutch to passive competitors, who are unwilling or unable to invest in infrastructure, and to commit to the rigours of a competitive market. Essentially, the continuing regulation of this service, in a workably competitive market, will harm the consumer by delaying progression to facilities-based competition.

⁷⁹ Paterson Report, p.62.

Based on Dr Paterson's analysis, it appears that regulatory dependence is clearly prevalent in the market in which fixed voice services are supplied. This is demonstrated by the high volume of pure resale, despite the availability of substitutes, such as ULLS and VoIP in the metropolitan areas.⁸⁰

These unnecessary regulatory impacts will result in inefficient levels of investment

In a competitive market, prices adjust to eliminate arbitrage opportunities. However, arbitrage opportunities may persist in a regulated market because price relativities do not adjust to equal those that would be observed in a competitive market. In this context, Dr Paterson observes that:

"Where access prices are set by regulators, and especially where prices are set for a number of access services that are close substitutes, the relativities of those prices determine their relative attractiveness. Where those relativities do not mirror those that would occur in an efficient, competitive market, inefficient arbitrage opportunities are created and maintained by regulation – some services are over-used and others are under-used relative to an efficient outcome."⁸¹

The Commission itself has recognised this problem as follows:

"Competitors' decisions about the basis on which to compete will, in large part, depend on access prices relative to investment cost. So long as these signals are correct, the market should make appropriate decisions about whether to invest in alternative infrastructure, and/or rely on Telstra's network and the extent of this reliance. If access prices do not reflect efficient costs, or there are market failures or uncertainty, then competitors' decisions about whether to build or buy could be distorted."82

Put simply, regulated access-based competition provides access prices that are "prone to error" (in the sense that they do not provide efficient build/buy signals), and thus creates arbitrage opportunities. The distortions created by inefficient regulatory build/buy signals have been recently identified by the Canadian Telecommunications Policy Review Panel:

"One argument advanced in favour of a very broad scope of mandated access is that such an approach would promote all forms of competition by making it easier for competitors to resell any portion of the ILEC's network that they want. However, in the Panel's view, a broader scope makes the distortion of entry and investment decisions more pervasive. For this reason, a broad scope of mandated access would not in fact promote all forms of competition. Rather, it would promote only one form of entry (i.e. resale), thus

⁸⁰ Paterson Report, p. 64.

⁸¹ Paterson Report, p. 62.

^{82 2006} Strategic Review, p.13

perpetuating disincentives for new entrants to build facilities and entrenching the ILECs' SMP [substantial market power] over the network and its elements."83

These distortions provide a persuasive example of why the Commission should adopt a proactive role in reducing the extent of access regulation. Therefore, although regulated access promotes arbitrage, it does little to encourage facilities-based competition. In this context, granting the Metro Exemption and CBD Exemption would provide appropriate incentives to competitors to develop competing networks.

Asymmetric Impacts

A key problem faced in setting regulated prices is the amount and quality of information required to make good regulatory decisions. Imperfect information leads to regulatory errors being made. These errors can be particularly costly in a regulated access setting where an inefficient pricing structure, chosen by the regulator, will result in prices that distort production, consumption, and investment decisions.

It is arguable that the likelihood of regulatory error is asymmetrical — i.e. that the regulatory structure and incentives faced by the regulator are more likely to lead to prices being lower than the efficient level, rather than being higher than the efficient level. However, even if the risk of over-pricing is equal to that of under-pricing, the resulting impact will not be symmetrical. As noted by Dr Paterson:

"While over-pricing access by the regulator is unlikely to result in inefficient overinvestment (as such investment by the access provider does not increase its profits, and the access provider has good incentives to price below the regulated price if this will avoid inefficient by-pass investment by access seekers), under-pricing will tend to cause underinvestment by both access seekers and the incumbent. Specifically, access seekers will have an incentive to use the incumbent's network to an inefficient extent rather than build themselves, while the incumbent will be reluctant to invest up to an efficient level as its returns do not justify this."84

These regulatory impacts will result in inefficient levels of investment

As demonstrated above, regulation is costly and when unnecessarily imposed on competitive markets it will inefficiently distort investment incentives by imposing two classes of costs:

⁸³ Canadian Telecommunications Policy Review Panel, *Final Report* (March 2006), pp. 3-35, available at: http://www.telecomreview.ca/epic/internet/intprp-gecrt.nsf/vwapi/report_e.pdf/\$FILE/report_e.pdf (accessed 29 November 2006).

84 Paterson Report, p. 63.

- regulation per se, even if perfectly executed, imposes transaction, compliance and administrative costs;⁸⁵ and
- even with the best intent and most skilful execution possible, there is inevitably an element of regulatory error which itself imposes costs.⁸⁶

This in turn implies that where a market is workably competitive (as is the case for PSTN OA and related services within the Exemption Area) then continued declaration will impede efficient investment in infrastructure.

Indeed, continued declaration of the PSTN OA service, within the CBD Exemption Area and Metropolitan Exemption Area will positively frustrate the efficient use of and investment in infrastructure by both the access provider and the access seekers.⁸⁷

Ongoing declaration has reduced the incentives for efficient investment in infrastructure within the fixed-telecommunications market. In this context, any reduction in incentives to invest, if not sufficiently justified on antitrust grounds should be prima facie indication that regulation is 'doing more harm than good' and exemption is appropriate.

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⁸⁵ Paterson Report, p. 65.

⁸⁶ Paterson Report, p. 65.

⁸⁷ See Paterson Report, pp. 65 – 68.

Granting the Exemptions will promote the LTIE 5

The evidence and arguments set out in this submission establish that, from an economic perspective and from an assessment of the state of competition, there is no reasonable basis for the Commission to continue regulating PSTN OA in either the CBD Exemption Area or the Metropolitan Exemption Area. In this section, Telstra applies these factors to each limb of the LTIE test and concludes that, upon a proper consideration of that test (as interpreted by the Tribunal), the Commission must reach the conclusion that granting the Exemptions has the overall effect of promoting the LTIE.

Promotion of competition

Based on the Commission's own rationale, continued regulation is both unnecessary and costly where it can be shown that the market in which the relevant service is supplied is already competitive and is likely to remain competitive. This is particularly the case where regulation will hinder the development of facilities-based competition, which is a more efficient promoter of competition.

In its 2006 Draft Decision, for example, the Commission quoted from Commissioner Ed Willett's speech given at the AFR Fourth National Infrastructure Summit, where the Commissioner stated that the most competitive and innovative areas are those in which competitors have built their own networks, rather than just reselling space on Telstra lines.⁸⁸ More recently, the Commission expressed this view in its recent FSR - Second Position Paper, stating:

"The Commission's approach is based on the principle that where it is economically efficient, facilities-based competition is more likely to promote the LTIE. This is because this form of competition allows rivals to differentiate their services and compete more vigorously across the greater elements of the supply chain."89

This sentiment is echoed by commentators such as Cave, who points out that, given the choice between regulation and competition – competition wins:

"Almost everyone believes that 'competition is the best regulator'. It promotes consumer welfare by offering choice, variety, keen prices and innovation; whereas regulation is often associated (but is not necessarily the sole cause of) lack of choice, uniformity, high costs and disincentives to innovate." 90

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⁸⁸ Willett, E, Commissioner, speaking at the AFR Fourth National Infrastructure Summit, Sydney, August 2005.

89 FSR - Second Position Paper, p iii.

⁹⁰ Cave, Making the ladder of investment operational 2004.

Facilities-based competition is preferable to regulated access for a number of reasons. First, it can lead to greater price competition as entrants have more control over costs and face incentives to develop and deploy more efficient technologies in order to compete with the incumbent operators.⁹¹ This would in turn lead to greater product differentiation, delivering lower prices and greater choices to consumers.

Second, it enables greater service innovation since the entrants are no longer tied to the functionality of the incumbent's network.⁹²

Third, it also ensures that competition for supply will extend over a wide-range of markets, driving out inefficiency and arbitrage throughout the supply chain, and delivers superior results to the limited form of resale competition that regulation promotes.

By contrast, for the reasons identified in section 4, access or resale-based regulation can reduce the intensity of competition by dampening the firms' incentives to compete across the value chain, and by reducing the scope for product differentiation. It also promotes similarity in cost structures and service offerings such that end-users are unlikely to benefit from real service diversity and have little prospect of realising gains from innovation.

The importance of service element diversity was recognised by the Commission in the 2002 Final Decision as follows:

"Where, for example, an exemption is likely to result in increased service diversity, endusers will be able to gain access to an increased range or choice of services. In such a case, an exemption may be expected to promote competition to a greater extent than continuing declaration that results in a larger number of suppliers in the market, but means all suppliers essentially offer the same service at the same price.""⁹³

The stepping stone model

One argument in favour of temporary regulated access has been the "stepping-stone" model, which the Commission has endorsed as providing the analytical basis for declaration. However, the stepping stone model has now been called into question, both in Australia and overseas, particularly in circumstances where it appears to be impeding the development of facilities-based competition. For example, in the FSR – Second Position Paper the Commission states:

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⁹¹ Duarte Brito and Pedro Pereira (2005), "Ownership Structure of Cable Networks and Competition in Local Access," *mimeo*, April.

⁹² Cave M, 'Encouraging infrastructure competition via the ladder of investment, *Telecommunications Policy*, 30, 223-237, 2006.

⁹³ 2002 Final Decision at page 17.

⁹⁴ See for example, Appendix to "Restoring European economic and social progress: unleashing the potential of ICT", a report by Indepen for the Brussels Round Table of leading European

"In its June 2006 position paper, the Commission supported the 'stepping stone' approach to competition, but with the very important caveat that 'full facilities-based competition is the end goal in all circumstances'. Further, the Commission notes that the stepping stone hypothesis does not necessarily suggest that multiple forms of mandated access at different network layers should be left in place indefinitely. The Commission's position has consistently been that it will only seek to promote facilities based (full or quasi) competition where it is likely to be economically efficient, and therefore in the LTIE."

...

"....it increasingly appears that the seamless continuum that is implied under the stepping stone hypothesis – between resale-based competition and full facilities-based competition – is unlikely to be a realistic outcome for the regulation of fixed line services. Moreover, it appears increasingly likely that the presence of enduring bottlenecks in fixed-line markets is likely to differ in nature across different geographic regions in Australia." ⁹⁵

Telstra has previously criticised the validity of the stepping stone model as a basis for setting regulatory policy in Australia and repeats those concerns here. Accordingly, Telstra welcomes the Commission's willingness to reconsider the usefulness of this model, including in areas where alternative infrastructure based competition exists.

Irrespective, of whether or not the stepping stone or ladder of investment hypothesis is valid, it was never intended that it would operate as a permanent and sweeping fixture across the entire telecommunications landscape. As one of the original proponents of the ladder of investment hypothesis Martin Cave, said:

"[the regulator should choose] the point on the ladder at which the intervention should still be applied. This decision will be based on an analysis of the scale and prospects of the operators at various points, with a bias in favour of those more advanced in their infrastructure buildings." ⁹⁷

Cave argues that this step is necessary to avoid the very real risk that application of the ladder of investment approach will slow down rather than speed up investment:

"[the ladder of investment] is not an argument for providing access at low prices on a carte blanche basis. Instead the proper approach seeks to restrict mandatory access to a limited

telecommunications operators and equipment Manufacturers: Brian Williamson, Phillipa Marks, David Lewin, Justine Bond and Helen Lay.

⁹⁵ FSR - Second Position Paper, p. 21.

⁹⁶ See, for example, pages 15-17 of Telstra's response to the Commission Proposal – "A Strategic Review of the regulation of fixed network services", February 2006.

⁹⁷ Martin Cave. November 2004. *Making the ladder of investment operational*,. p 29.

period – after which it ceases to be available, or becomes subject to commercial agreement, or rises in the regulated price." ⁹⁸

Cave argues further that as far as possible where assets are found to be non-replicable a single rung on the ladder is proposed in terms of access and regulation, and can be withdrawn where an asset is already or imminently replicable. As Cave says, a "....rigorous approach is necessary to prevent implementation of the 'ladder' approach relapsing into a policy of 'easy access', thereby denying consumers the benefits of infrastructure competition" [emphasis added].

The surest step towards facilities-based competition is not continued declaration, but rather exemption in those areas where there is actual infrastructure roll-out. This will, in turn, send the correct signals to the market that regulation, at the very least regulation of resale services where enduring bottlenecks do not exist, is not intended to be a permanent fixture on the telecommunications landscape and will be removed at the earliest opportunity where facilities-based or quasi-facilities-based alternatives exist.

The Exemptions will promote facilities-based competition

The Exemptions will promote facilities-based competition (and therefore satisfy the promotion of competition criterion) in the market in which PSTN OA is supplied for the following reasons.

First, there is extensive roll-out of alternative infrastructure in the CBD Exemption Area and Metropolitan Exemption Area (in particular DSLAM-based infrastructure and to a lesser extent HFC networks) which can be used as alternatives to PSTN OA in providing downstream services.

Second, empirical and economic evidence (set out in sections 2 and 3) illustrate that efficient, workable competition already exists in the markets in which PSTN OA is provided because of the presence of these alternatives.

Third, the extent of competition is only likely to improve further in the future given that the barriers to entry and expansion to these alternatives are low, and with the increasing penetration of new technologies such as VoIP.

Given that the market in which PSTN is supplied is already workably competitive and is likely to remain so, the Exemptions will ensure that competitors will rely less on regulated prices in the CBD Exemption Area and Metropolitan Exemption Area and will face greater incentives to develop more efficient technologies to compete with incumbent operators. This will facilitate a movement away from access-based competition towards facilities-based competition,

⁹⁹ As above, at p. 30

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⁹⁸ As above, at p. 29.

which will in turn drive out inefficiency and arbitrage throughout the supply chains, delivering lower prices and greater choice to consumers in the long-run.

The Exemptions will not compromise competition

Further, for the reasons set out below, granting the Exemptions will not foreclose or compromise competition in the downstream markets because of supply side substitution in the upstream input market.

One potential concern associated with the granting of any exemption order might be that Telstra would attempt to take advantage of perceived absence of regulatory control and raise prices above cost in a manner it could not do if the services continued to be declared, or that it would withdraw the services altogether.

However, the existence of workable competition in the CBD Exemption Area and Metropolitan Exemption Area, based on the ready availability of alternative upstream inputs, means that any rise in Telstra's PSTN OA price above its efficient costs, would not materially affect competition in the retail market and prices would continue to be competed down in those areas towards efficient costs.

Likewise, due to the competitive constraints imposed on each ESA (in particular by the presence of DSLAM-based entry) Telstra will have incentive to continue to supply PSTN OA to maximise utilisation of its own network assets as it is faced with intense competition in supplying competitive voice services to end-users in those areas.¹⁰⁰

All of this, of course, ignores the reality that the price Telstra charges for PSTN OA is likewise competitively constrained. Any attempt to price these services above the competitive level would be quickly responded to by increased DSLAM roll-out and extension of existing capacity, increased self-supply of services and expansion of wholesaling by alternative infrastructure providers (including DSLAM based-competitors). This would lead to the "supracompetitive" price increase being competed out and pricing would then revert to competitive levels. Significantly, this would be achieved without regulatory intervention, without the risk of regulatory error, distortion and overreach and without regulatory delay, reflecting the supremacy of workable competition as the best regulator. This state of play exists now in the CBD Exemption Area and Metropolitan Exemption Area and the intrusion of regulation is unnecessary and damaging.¹⁰¹ It is nonsensical to posit that the Exemptions might be granted (which would require a finding that Telstra is constrained by workable competition in both the CBD Exemption Area and Metropolitan Exemption Area) and then to hypothesize

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For example, the presence of other resellers or wholesalers of voice, line rental and related services means that at both the wholesale and retail layer Telstra will face significant competition in the drive to retain and attract end-customers to its network.

¹⁰¹ Refer more detailed discussion of the risks and damage caused by regulatory over-reach and damage in section 4 above.

about whether Telstra could act without competitive constraint after the Exemptions are granted.

The key point is that Telstra has no incentive to either withdraw supply or price in a way which would negatively impact its resale customers. To do either of these things in the CBD Exemption Area or Metropolitan Exemption Area would only accelerate the bypass of Telstra's network we are already observing in these areas.

A further concern is that the granting of the Exemptions might foreclose or compromise competition in the downstream market. However, Telstra submits that this concern is unfounded. As noted, substitution possibilities are ubiquitous in the CBD Exemption Area and Metropolitan Exemption Area as each ESA has at least one (and in many cases more) DSLAM(s) installed. If Telstra were to indulge in profit maximisation or foreclosure strategies, the ready availability of upstream inputs, notably ULLS, in the CBD Exemption Area and Metropolitan Exemption Area would allow retailers to simply substitute away from Telstra supplied PSTN OA. As noted in Dr Paterson's expert opinion, supply side substitution in the upstream input market effectively negates Telstra's ability to foreclose competitors in the downstream retail market.¹⁰²

Nor will the exemptions compromise downstream competition by reducing the ability and/or incentive for current resellers to compete for and supply customers' standalone voice services. As concluded by Dr Paterson, the Exemptions are unlikely to have any material effect in competition in respect of the voice-only customer segment for two reasons: first, in the CBD Exemption Area and Metropolitan Exemption Area, Telstra will be constrained by at least one other service provider with the technology base to provide resellers with a wholesale voice-only service; second, existing DSLAM-based operators can viably supply voice-only services to the majority of this customer segment.¹⁰³

Finally, Telstra notes that Part XIB of the Act provides an additional layer of protection against concerns that the Exemptions could result in foreclosure of the retail fixed-calls market.

Any-to-any connectivity of end-users

In its recent inquiry into PSTN OA declaration, the Commission stated that it regards the anyto-any connectivity criteria to be of continuing importance. In particular, the Commission stated:

"One key reason for the declaration of PSTN OTA in 1997 was that such declaration was likely to promote any-to-any connectivity. This is because at the time there were

¹⁰² Paterson Report , p. [49].

¹⁰³ Paterson Report p. [51].

no alternative means of obtaining access to directly connected end-users on Telstra's PSTN. The Commission concluded that in the absence of an access obligation, a carrier may have an incentive to restrict access to its core network to inhibit the ability of other carriers to compete.

The Commission considers that any-to any connectivity is still a key consideration in assessing the need for declaration of the PSTN OTA service. As the Commission has noted in the past, access to customers is necessary both for successful entry and for continued competition."¹⁰⁴

Telstra considers the Commission to be in error in considering PSTN OA and PSTN TA together in this regard. Although there may arguably be a prima facie case for declaration of PSTN TA on the basis that use of a termination service from the called party's access provider is the only way to access that party, this is not the case for PSTN OA. According to Dr Paterson, in the absence of a PSTN OA declaration, a service provider will still have an incentive to originate calls on its network since doing so generates revenue. Moreover, the price charged for this origination will be constrained by market forces, and the level of competition between access providers.

It follows that a customer on any network will still be able to reach a customer on any other network if the Exemption Applications are granted. Otherwise, as pointed out by Dr Paterson:

"If an access provider fails to originate calls on their network they will not only lose the revenue from that call, but also jeopardize retention of the customer. The customer will be able to simply move to an access provider that is willing to originate their call either using a ULLS-based connection or an alternative local access network." 106

Furthermore, when the Commission approved Telstra's application for exemption from the standard access obligations in respect of the LCS in CBD areas, it noted that the any-to-any criterion enabled the consideration of "similar" services to the service in question: 107

"The reference to 'similar' services in the Act enables this objective to apply to services with analogous, but not identical, functional characteristics, such as fixed and mobile voice telephony services or Internet services which may have differing characteristics."

Accordingly, the Commission concluded in the 2002 Final Decision that: 108

"The Commission is satisfied that with the presence of alternative infrastructure and declared services, the exemption will not have bearing on any-to-any connectivity."

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 $^{^{104}}$ ACCC, 'Declaration inquiry for the ULLS, PSTN OTA and CLLS: Final Determination', July 2006, p. 45

Paterson Report, p. 69.

¹⁰⁶ Paterson Report p. 69.

¹⁰⁷ 2006 Final Decision, p. 58.

¹⁰⁸ 2006 Final Decision, p. 58.

Telstra agrees with this assessment and submits that it is also applicable to the current Exemption Applications given the extent of alternative infrastructure and declared services within the CBD Exemption Area and Metropolitan Exemption Area, providing, or readily capable of providing, similar services to PSTN OA.

Efficient use of and investment in infrastructure

As noted above, granting the Exemptions will promote facilities-based competition through encouraging greater investment in competing infrastructure. Telstra further submits that granting the Exemptions will promote the efficient use of, and investment in, infrastructure and makes the following observations in respect of each of the factors of consideration under this limb of the LTIE:

- **technical feasibility** the widespread deployment of DSLAMs, and consequently, the supply (and self-supply) of services equivalent to PSTN OA over DSLAM infrastructure in the CBD Exemption Area and Metropolitan Exemption Area demonstrates that alternative means of supply are technically feasible within both the CBD Exemption Area and Metropolitan Exemption Area;
- legitimate interests of the access provider Telstra's legitimate business interests will
 not be adversely affected by the granting of the Exemptions, but rather will be
 enhanced by allowing Telstra greater commercial freedom and flexibility; and
- incentives for investment as set out above, the incentives for investment will be
 greatly improved if the Exemptions are granted because the risks and potential
 market distortions associated with investment in a regulated environment will be
 removed.

Economic benefits highlighted in the Paterson Report

In his Expert Report, Dr Paul Paterson provides extensive evidence as to why granting the Exemptions:

- **will promote competition** in particular facilities-based competition
 - Facilities-based competition is superior to resale-based competition as encourages greater differentiation of prices and features over a wide range of markets.¹⁰⁹
- will not impact on any-to-any connectivity. in the absence of PSTN OA being a declared service, a service provider will still have an incentive to originate calls on its network since doing so generates revenue and is critical to retention of customers.¹¹⁰

¹⁰⁹ Paterson Report, pp. 59-61.

will encourage efficient use of and investment in infrastructure - 111

o Efficient use of infrastructure will best be promoted by the operation of

competitive markets. Where workable competition exists, firms face incentives to

maximise efficient use of their existing infrastructure.

o Moreover, in a competitive market, the discipline of rivalry provides the best

incentives for carriers to invest efficiently in new infrastructure and use their

existing infrastructure more efficiently. In a competitive facilities-based market,

the process of investment and innovation gives a carrier a competitive edge. 112

Overall net effect of Exemptions is in the LTIE

Overall, Telstra notes that it is important to keep in mind in considering the Exemption

Applications that the statutory criteria and the case law demand that the Commission

consider the overall net effect of the Exemptions. Therefore, even if the Commission is of the

view that the Exemptions would bring about some temporary or transient deficiencies in

competition or is not perfectly satisfied with some of Telstra's arguments, Telstra submits

that the overwhelming long-term benefits of the Exemptions through promoting facilities-

based competition and removing unwarranted regulation would significantly outweigh any

such short-term negative impacts.

Granting the Exemptions will create a more responsive, competitive telecommunications

environment within the CBD Exemption Area and Metropolitan Exemption Area. Removing

unnecessary access regulation in areas where there is already workable facilities-based

competition will further promote competition in the supply of fixed voice and broadband

services. Granting the Exemptions will also encourage firms (including Telstra) to invest in

infrastructure, enabling the provision of a greater variety of services. This will create an

environment that will result in real improvements to the interests of Australian

telecommunications users over the long term.

Telstra Corporation Limited

October 2007

¹¹⁰ Paterson Report, p. 69.

¹¹¹ Paterson Report, pp. 59 – 68.

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APPENDIX 1 - Statutory criteria and market definition

This Annexure sets out the legal analysis underlying Telstra's view of the statutory criteria and the relevance of market definition for the purposes of the Exemption Applications.

Statutory criteria

Part XIC of the Act establishes an industry specific regime for regulated access to telecommunications services designed to promote the LTIE of carriage services or services provided by means of carriage services. The Commission is required to grant the Exemption Applications pursuant to section 152AT of the Act if doing so will promote the LTIE.

In determining whether a particular thing promotes the LTIE, regard must be had to the following objectives set out in section 152AB of the Act:

- (a) the objective of promoting competition in markets for carriage services and services supplied by means of carriage services;
- (b) the objective of achieving any-to-any connectivity for carriage services involving communication between end-users; and
- (c) the objective of encouraging the economically efficient use of, and economically efficient investment in, the infrastructure by which carriage services and services provided by means of carriage services are supplied.

Section 152AB(6) of the Act provides that in determining whether exemption is likely to result in the achievement of the objective of encouraging the economically efficient use of, and the economically efficient investment in, the infrastructure by which listed services are supplied regard must be had to:

- the technical feasibility of supplying the service;
- the legitimate commercial interests of the supplier of the services; and
- the incentives for investment in the infrastructure by which the service are supplied and any other infrastructure by which services are, or are likely to become, capable of being supplied.

For present purposes, the "particular things" are the making of orders exempting Telstra from all of the standard access obligations in respect of the supply of the PSTN OA service in the

CBD Exemption Area and Metropolitan Exemption Area. Accordingly the relevant question is whether the Exemptions will meet the objectives set out above. 113

The phrase "regard must be had" means that the decision maker is required to take each of those objectives into account and to give weight to them as fundamental elements in making its determination. 114 This process involves a consideration, and comparative weighing up of, each objective, or factor. 115 The decision maker cannot simply "jettison or ignore the factors", or "give them cursory consideration only in order to put them to one side". 116 Rather, each of these objectives or factors are actually "fundamental to the practical exercise which is being undertaken". 117

The approach to interpreting and applying the LTIE test has been articulated by the Tribunal in its 2004 Foxtel decision on the applications for anticipatory exemptions lodged by Telstra and Foxtel in respect of the analogue pay TV service. 118 This approach, which Telstra respectfully adopts, is summarised in the following paragraphs from that decision:

> "108 The point is ... whether there are other (favourable) consequences of exemption such that the abrogation or withdrawal of the protection provided by the standard access obligations, by way of exemption from those obligations can be justified.

109 The focus of the Commission and the Tribunal must be upon the fact that it is the exemption from the standard access obligations that will promote the long-term interests of end-users. This is made clear by the provisions of s 152AB of the Act, particularly in subs (2). It is made clear that it is a "particular thing" that is to promote the long-term interests of end-users. In the particular cases before the Tribunal, the "particular thing" is the making of an order exempting the carrier or carriage service provider from all the standard access obligations. Accordingly, it is necessary to ask whether the exemption from those obligations will achieve the objectives set out in subs (2) of s 152AB.

119 We accept that the 'future with and without' approach provides helpful quidance in applying the LTIE test. In making this assessment we are guided by the fact that, in the words of s 152AB(2), the "particular thing" that is

¹¹³ Seven Network Limited (No.4) [2004] ACompT 11 at [109]; East Australian Pipeline Pty Limited v ACCC [2007] HCA 44 at [52].

114 R v Hunt, ex Parte Sean Investments Pty Ltd, (1979) 180 CLR 322 per Mason J at 329; Telstra Corporation

Limited, Australian Competition Tribunal [2006] ACompT 4, at [68].

¹¹⁵ East Australian Pipeline Pty Limited v ACCC [2007] HCA 44 at [51]

¹¹⁶ Eastern Australian Pipeline Case, [52]; and see Re Michael, ex parte Epic Energy [2002] WASCA 231 at [55]
¹¹⁷ Eastern Australian Pipeline Case, [52]

¹¹⁸ Seven Network Limited (No.4) [2004] ACompT 11.

before us is the granting of the exemption applications... . However, it should be noted that the 'future with and without' test requires the forecasting of future market behaviour, competitive activity and market conduct in a particular area or region and the development of an investment. But the answer to the application of that two-fold enquiry (the future with and without the exemption) is not the ultimate or final answer to the issues posed. That answer must be couched in terms of an appropriate degree of satisfaction that the making of an order exempting each of Foxtel and Telstra from the standard access obligations in s 152AR will promote the long-term interests of end-users of the services they provide. This degree of satisfaction is reached by applying the future with and the future without test, that is to say we compare the future situation with the exemption orders having been made with the future situation without the exemption orders having been made. We then ask the question: which situation is in the LTIE; cf Re QIW Ltd (1995) 132 ALR 225 at 276.

- Having regard to the legislation, as well as the guidance provided by the Explanatory Memorandum, it is necessary, in our view, to take the following matters into account when applying the touchstone the long-term interests of end-users:
 - End-users: in this matter, "end-users" include actual and potential subscribers to subscription television services and other viewers in their households. The term is also likely to include businesses, such as hotels and other places where people congregate, that subscribe or may potentially subscribe to subscription television services;
 - Interests: the interests of end-users lie in obtaining lower prices (than
 would otherwise be the case), increased quality of service and increased
 diversity and scope in product offerings. In our view, this would include
 access to innovations such as interactivity in a quicker timeframe than
 would otherwise be the case; and
 - Long-term: the long-term will be the period over which the full effects of the Tribunal's decision will be felt. This means some years, being sufficient time for all players (being existing and potential competitors at the various functional stages of the subscription television industry) to adjust to the outcome, make investment decisions and implement growth as well as entry and/or exit strategies.

...

- The use of the "long-term" may also assist in resolving the apparent tension between the criteria in s 152AB(2)(c) and (e). For example, action that promotes competition in the short-term may deter investment and hence, over the longer-term, competition may lessen (resulting in reductions to efficiency and innovation). Moreover, an action may promote competition at the retail level (resulting in more channels offered by more operators), but may deter facilities-based competition, with fewer service providers being prepared to establish delivery mechanisms of their own than would otherwise be the case. Assessed over the long-term, however, there is less likely to be any conflict between the promotion of competition and efficiency. Nonetheless, to the extent that there are mixed effects, we will have regard to the overall or net effect.
- It was put to us that the earlier decision in Re Sydney Airports Corporation Ltd (2000) 156 FLR 10 ("Sydney Airports") provided assistance in interpreting the "promotion of competition" criterion. In Sydney Airports, a review of a decision to declare a facility pursuant to Pt IIIA of the Act, it was stated (at par[106]):

"The Tribunal does not consider that the notion of 'promoting' competition in \$44H(4)(a) requires it to be satisfied that there would be an advance in competition in the sense that competition would be increased. Rather, the Tribunal considers that the notion of 'promoting' competition in \$44H(4)(a) involves the idea of creating the conditions or environment for improving competition from what it would be otherwise. That is to say, the opportunities and environment for competition given declaration, will be better than they would be without declaration." (paragraph 123)

In our view, this description is apt for the criterion established under s 152ATA(6) and s 152AB(2)(c). In addition, we consider that this description is equally applicable to assessing whether the "particular thing" encourages economically efficient use of, and investment in, infrastructure pursuant to s 152AB(2)(e)."

In light of this decision, the key question to be considered by the decision maker in each of the present cases is whether the granting of the Exemption will further each of the objectives that make up the LTIE. As enunciated by the Tribunal in the Foxtel decision, the starting point for making this assessment is to utilise the "future with and without" test and compare forecasted future market behaviour, competitive activity and market conduct if the exemption is granted to future market behaviour, competitive activity and market conduct if

the exemption is not granted.¹¹⁹ Any such assessment must also take a sufficiently long term view to enable it to take into account the full effects of the decision.

However, it should be noted that while the "future with and without" test may provide "helpful guidance" in applying the LTIE test, it should not and cannot be used to provide the ultimate or final answer to the issues in considering whether to the exempt the PSTN OA service. The danger of sole reliance on the "future with or without" test is that it can inadvertently lead to an analysis which does not consider all of the elements of the LTIE criterion, and would be contrary to the Tribunal's expressed view in the Foxtel decision, where it clearly stated that the outcome of the test "is not the ultimate or final answer to the issues posed". ¹²⁰

These principles clearly establish that it is not an answer to an exemption application to:

- Identify short-term (or even medium-term) or transitory detrimental consequences
 for competition where it is more likely than not that exemption would create the
 conditions or an environment that will result in an overall or net increase in the LTIE
 over the long-term; or
- "cherry-pick" isolated detrimental impacts (even over the long-term) where it is more likely than not that exemption would create the conditions or an environment that will result in an overall or net increase in the LTIE over the long-term.

Relevance of market definition to Exemption Applications

Section 4E of the Act defines "market" for the purposes of the Act. The Tribunal articulated this basic concept in Re Queensland Co-Operative Milling Association Limited (1976) ATPR \$\\$40-012\$ in the following terms (at 17,247):\$^{121}\$

"We take the concept of a market to be basically a very simple idea. A market is the area of close competition between firms or, putting it a little differently, the field of rivalry between them. (If there is no close competition there is of course a monopolistic market). Within the bounds of a market there is substitution — substitution between one product and another, and between one source of supply and another, in response to changing prices. So a market is the field of actual and potential transactions between buyers and sellers amongst whom there can be strong substitution, at least in the long run, if given a sufficient price incentive."

In defining the relevant market, a purposive approach must be adopted.¹²² That is, the market should not be defined in a vacuum and consideration needs to be given to the purpose

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¹¹⁹ See Foxtel decision at [119].

¹²⁰ Foxtel decision at [119].

See also Re Tooth & Co Ltd; Re Tooheys Ltd (1979) ATPR \P 40-113 at 18,196-18,197 which further stressed the multi-dimensional aspect of markets and the way in which this should be considered.

for which the market definition exercise is being undertaken. This involves "a choice of the relevant range of activity by reference to economic and commercial realities and the policy of the statute" as a result of which "the identification will be evaluative and purposive as well as descriptive."123

In the present case, the purpose of the inquiry is the assessment of whether the granting of the Exemptions from the standard access obligations in respect of the PSTN OA service would be in the LTIE. In this context, the focus is on the impact of the continued regulation of the PSTN OA service on competition in a range of related downstream markets, the efficient operation of those markets, and the incentives for efficient investment in the infrastructure used to provide services in those markets.

In light of this purposive approach, it is important to analyse the LTIE implications of the continued declaration of the PSTN OA service in each of the CBD Exemption Area and the Metropolitan Exemption Area in its broader context - namely, that the PSTN OA service is merely one of a number of services, including broadband data services, long distance and international calling services, and fixed-to-mobile calling services that can be provided at the wholesale and retail levels of these markets over DSL enabled lines. The declaration of the PSTN OA service as a distinct declared service under Part XIC should not be allowed to obscure the fact that granting the Exemptions will promote competition not only in the voice (including data over broadband) but also broadband (including voice over broadband) services markets.

This view is consistent with the analysis of the relevant retail markets conducted by Dr Paul Paterson, who concluded that: 124

"...the relevant retail market includes the full bundle of fixed voice services, those being basic access, local calls, national and international long distance calls and fixed to mobile calls. The market potentially also includes broadband services." (emphasis added)

Product market

Telstra agrees with the Commission that, in the case of PSTN OA, the relevant markets for consideration include those in which fixed voice services, are supplied. Those in which mobile services and, in terms of the promotion of (at least) facilities-based competition, broadband services are supplied are also relevant. 125

 $^{^{122}}$ This aspect has been reiterated in many decisions , see, for example, Singapore Airlines Ltd vTaprobane Tours WA Pty Ltd (1991) 33 FCR 158 at 174; and Telecom Corporation of New Zealand Limited v Commerce Commission (1991) 3 NZBLC 102, 360.

123 Singapore Airlines Ltd v Taprobane Tours WA Pty Ltd (1991) 33 FCR 158 at 174.

Paterson Report, p. 13.

¹²⁵ See 2006 Final Decision at p 13.

However, for the reasons set out above, this does not mean that, the supply of these services should be analysed in isolation from each other, or the supply of other services that make use of the same network infrastructure.

For the purpose of delineating the boundaries of the relevant markets for the purpose of these Exemption Applications, it is necessary to consider not just PSTN OA, but also the other services which are also provided on the same network infrastructure. There is demand in Australia to acquire services which provide access to, or use of, fixed telephony networks for the purpose of supplying telecommunications services including fixed line rental services, local call services, long distance call services, international call services, fixed-to-mobile call services, dial-up internet access and data services, broadband and ADSL internet access and data services, and other data services (together "Fixed Network Services") to suppliers of telecommunications services or to end-users.

As retail fixed line rental services are generally not supplied or acquired on a separate basis, economic substitutability and competitiveness are to be determined by reference to, and occur between, the retail bundles of services which are supplied and acquired, which include retail fixed line rental services. Bundles of services which include mobile telephony services but not fixed line rental services, can also be economically substitutable for and competitive with bundles of services which include fixed line rental services.

The view that PSTN OA is supplied in a broader market encompassing (at least) all fixed voice services is supported by the analysis conducted in the Paterson Report, which concludes that there is evidence that a "cluster market" exists for retail fixed voice services. A cluster market is defined by the Commission as a market "comprising a bundle of related products, where the costs of unbundling mean that suppliers of the component products are unable to defeat a SSNIP by a hypothetical monopolist supplying the whole bundle of products."

The Paterson Report sets out several attributes of the retail fixed voice services market that are consistent with the existence of a cluster market. These include: 128

- the available evidence on actual customer purchasing patterns suggests that almost
 all customers purchasing local telephony services from Telstra's competitors are also
 purchasing national long distance services. It has been estimated that around 86 per
 cent of resale basic access lines are bundled with local call services and other fixed
 voice call services, and in respect of the retail market as a whole, 97 per cent of basic
 access lines are bundled with local calls and other fixed voice services;
- there are commercial grounds for concluding a broad market that includes all fixed voice services as Telstra and all of its closest competitors sell and market the full

¹²⁸ Paterson Report, pp. [13-15].

¹²⁶ Paterson Report, pp. 1[3-14].

¹²⁷ ACCC Merger Guidelines, June 1999, para 5.60.

range of fixed voice services. For instance, Optus, Primus and AAPT all include local, national and international calls and fixed to mobile calls as part of their standard residential package. Further, the objective of carriage service providers appears to be to market and sell as many retail voice services to customers as possible, as opposed to marketing and selling particular voice services only; and

bundling of fixed voice services also makes sense from the supply side, as the
investments made in the retailing functions of a particular subset of retail fixed voice
services (eg customer support, billing, marketing etc) can also be applied to other
subsets of retail fixed voice services.

Furthermore, Dr Paterson suggests a number of unbundling costs, including the inconvenience of receiving multiple bills from splitting voice services between multiple suppliers and as well as loss of economies of scope in relation to billing, customer acquisition and retention costs.¹²⁹

While Dr Paterson does not consider broadband services as part of the cluster market for retail fixed voice services, he notes that there are good reasons for including broadband services in the same retail market as fixed voice services on the grounds of supply side substitution and commercial reality.¹³⁰

Indeed, the Commission has itself acknowledged that:

"We have seen a shift from standard voice over telephone to an emphasis on broadband and all that flows from it, including internet, internet protocol television (IPTV), streaming of audio visual content and voice over internet protocol (VoIP)." ¹³¹

Temporal market

In the 2006 Final Decision, the Commission noted the level and nature of competition in CBD areas of major capital cities and expressed the view that "where alternative infrastructure exists, there is merit in using this as a starting point for ongoing considerations concerning the effectiveness of infrastructure-based competition." Nevertheless, in the 2006 Final Decision, the Commission decided to re-declare PSTN OA in all areas (CBD, metropolitan and regional) for a period of 3 years till 31 July 2009.

Telstra agrees that it is relevant, when considering the appropriate duration of a declaration (or re-declaration) of a service to assess the appropriate time for consideration of substitution possibilities. However this consideration of must be undertaken on a forward looking basis,

¹²⁹ Paterson Report, p. [13].

¹³⁰ See Paterson Report, pp. [13-14].

¹³¹ Ed Willett, Commissioner, speech "Understanding competition in the growth of Australian Broadband", 21 November 2006.

¹³² See 2006 Final Decision, p 51.

rather than focusing solely on the current extent of competition and infrastructure deployment at the time the decision to declare (or re-declare) the relevant service is made.

Thus the actual presence of sufficient alternative local access infrastructure or declared services, such as the ULLS, in particular geographic areas, whilst providing a sufficient basis for the granting of an exemption from the standard access obligations in respect of PSTN OA in both the CBD Exemption Area and the Metropolitan Exemption Area, is not a necessary precondition to the granting of the Exemptions.

Telstra believes that a period of 3 years until 31 July 2009 represents a period over which the likely development of future competition and new infrastructure deployment can be usefully assessed for the purposes of the Exemption Applications.

Geographic market

As set out in the main body of this submission, the Commission has indicated a willingness to move towards conducting marketing definition exercises at the local exchange level for certain purposes. This view is supported by Dr Paul Paterson in the Paterson Report and has been adopted by Telstra in setting the scope of both the CBD Exemption Area and Metropolitan Exemption Area.

Conclusions on market definition

While Part XIC does not require the relevant decision maker to take a definitive or determinative stance on market definition, Telstra's view on market definition and the appropriate scope of the both the CBD Exemption Area and Metropolitan Exemption Area is that an ESA based approach to market definition is appropriate for the purposes of the Exemption Applications.

ANNEXURE A - STATEMENT BY DR PAUL PATERSON OF CRA INTERNATIONAL FOR MALLESONS STEPHEN JAQUES ON THE ECONOMIC CONSIDERATIONS FOR A PSTN ORGINATING ACCESS EXEMPTION

ANNEXURE B - [C-I-C]

ANNEXURE C - [C-I-C]

ANNEXURE D - [C-I-C]

ANNEXURE E - [C-I-C]

ANNEXURE F - [C-I-C]

ANNEXURE G - [C-I-C]

ANNEXURE H - [C-I-C]

ANNEXURE I - [C-I-C]

ANNEXURE J - [C-I-C]

ANNEXURE K - [C-I-C]

ANNEXURE L - [C-I-C]

ANNEXURE M - [C-I-C]

ANNEXURE N - REPORT BY MARKET CLARITY PREPARED FOR MALLESONS STEPHEN JAQUES ON TELECOMMUNICATIONS ACCESS NETWORKS IN AUSTRALIAN CAPITAL CITIES

ANNEXURE O - [C-I-C]