

Optus Submission to
the Australian Competition and Consumer Commission
on
Telstra's PSTN OA Service Exemption Application
(Public Version)

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1. Executive Summary

- 1.1 Telstra has applied for exemption from declaration of the PSTN OA service in a number of CBD and metropolitan exchanges where competitors have deployed DSLAMs.

Impact on Competition in Long Distance Services

- 1.2 Optus accepts the principle that layers of regulation may be withdrawn where they are not required to promote competition. However, the PSTN OA service plays a role in promoting competition in long distance telecommunications services (including international services), and if the requested exemption was granted, infrastructure-based competitors could not entirely substitute for that role. Exemption would impact on the existing standalone market for long distance services, since Telstra would have the ability and incentive to reduce its rivals' ability to compete in that market. Although long distance services would remain available as part of a bundle of telecommunications services, it is nevertheless likely that competition in long distance services would be diminished, as a result of barriers to entry and Telstra's market power.
- 1.3 Further, the proposed PSTN OA exemption is likely to impact on competition in the provision of services to large corporate and government customers as a result of the typical requirements for complex features, ubiquitous offerings and WOB contracts in that market.
- 1.4 Optus also has concerns about the viability of infrastructure-based competition at a level sufficient to ensure that the consumer retail market for the bundle of telecommunications services including line rental and long distance services is sufficiently contestable and workably competitive given constraints on ULLS based access and the limitations of other options. These concerns are outlined below.

Potential Modes of Infrastructure Based Competition

- 1.5 In order to establish that competition would survive if the exemption application were granted, Telstra relies on the availability of the ULLS, the LSS and alternative infrastructure.
- 1.6 Optus submits that:
- the ULLS is potentially a viable mode of competition (subject to caveats noted in the next section); however
 - the LSS and alternative technologies such as HFC and mobile are each subject to limitations and so cannot exert an effective competitive constraint on Telstra's pricing.

Constraints on the Availability and Expansion of the ULLS

- 1.7 Optus submits that there are a number of actual or potential issues that could limit or adversely impact access seekers' use of ULLS notwithstanding that they have deployed a DSLAM in an ESA. In particular, Optus notes that:
- there are a number of ongoing regulatory and legal proceedings in relation to ULLS access and pricing;
 - a number of non-price issues that are the subject of current access disputes could limit access seekers' ability to compete with ULLS based services;
 - where Telstra has deployed pair gain systems or a RIM between the exchange and the customer premise the customer is not serviceable via the ULLS;
 - limitations on access to space within exchanges to deploy DSLAM equipment constrain the ability of access seekers to expand their market share; and
 - Telstra has announced plans to upgrade or otherwise augment its network in ways that could prevent access seekers from accessing the ULLS.
- 1.8 Optus considers that no exemption request should be granted with respect to PSTN OA unless each of these matters and proceedings are resolved in a pro-competitive manner.
- 1.9 Optus submits that as part of this inquiry the ACCC should:
- require Telstra to provide details of the location of pair gain systems and RIMs and the likely number of SIOs that will be unserviceable in each ESA as result; and
 - seek an update from Telstra on its plans to upgrade/change the network and more specifically a commitment that these will not impact the use of ULLS.
- 1.10 Optus submits that any decision to exempt Telstra from the declaration of the PSTN OA should not proceed at least until:
- current regulatory proceedings with respect to both price and non-price issues have been finalised and it has been determined that the outcome will promote ULLS based competition;
 - the ACCC has required Telstra to provide alternate TEBA space within its facilities as a condition of granting its exemption request; and
 - the ACCC is satisfied that Telstra's plans to upgrade or otherwise augment its network (and its existing deployment of pair gain systems or RIMs) will not adversely impact the use of ULLS in the exemption area.

Appropriate Threshold for Exemption from Regulation

- 1.11 Telstra has contended that the presence of at least one competitor DSLAM deployed at a given exchange indicates that in the corresponding ESA the level of competitive constraint on Telstra in the provision of bundled voice services is sufficient for the PSTN OA service provided in that ESA to be exempted from declaration.¹
- 1.12 With regard to the appropriate threshold for exemption, Optus submits that:
- LSS based operators should not be treated as equivalent to ULLS-based operators in considering the threshold for exemption application for a number of reasons including the existence of material barriers to switching between the two modes of entry – it follows that declaration of the PSTN OA service should not be withdrawn in markets (or exchange areas) where there are LSS-based competitors, but no ULLS-based competitors to Telstra;
 - there are material barriers to competitive entry by ULLS-based operators, and the existence of one ULLS-based competitor in an ESA is insufficient to conclude that further entry will necessarily be forthcoming;
 - the ACCC should be cautious in accepting the “one DSLAM” threshold for withdrawal of resale regulation – entry of a second operator should be seen as evidence that barriers to entry are reducing and that there is the potential for workable competition, however it should not be the sole decisive factor; and
 - it is not necessarily appropriate to focus exclusively on the ESA level in considering the competitive impact of the exemption application – in addition to an exchange level threshold, the ACCC should also set a threshold based on the level of competition in metropolitan areas – Optus proposes that regulation should not be rolled back unless Telstra faces a single ULLS-based competitor with infrastructure in at least 80% of Band 2 exchanges.

Timing Matters

- 1.13 Optus submits that there should be a phase-in period before any exemption application come into effect, which should last until at least 18 months after the ACCC’s decision. The ACCC should impose a condition that it would expect Telstra to continue supplying the services to give access seekers sufficient time to adjust their business plans to the new environment and transition customers away from the PSTN OA service onto other platforms.
- 1.14 Optus proposes that any exemption application be granted for a period of three years only, and that during that period the ACCC should monitor Telstra’s conduct and pricing of the PSTN OA service and of LD and IDD calling services.

¹ Paterson, October 2007, *Statement by Dr Paul Paterson of CRA International for Mallesons Stephen Jaques on the Economic Considerations for a PSTN OA Exemption* (“CRA paper”) p47 [140]

2. Impact on Competition in Long Distance Services

- 2.1 Exemption from the PSTN OA declaration would be likely to impact on competition in long distance services (including international services). First, the existing standalone market for long distance services would be impacted, since Telstra would have the ability and incentive to reduce competitors' ability to compete in that market. Second, competition in long distance services generally would be diminished despite the continued availability of such services as part of the bundle of telecommunications services offered by Telstra's competitors, as a result of barriers to entry and Telstra's market power. Third, competition in the provision of services to large corporate and government customers would suffer as a result of the typical requirements for complex features, ubiquitous offerings and WOB contracts in that market.

Standalone market for long distance services

- 2.2 A key market impacted by exemption of PSTN OA services is the standalone market for long distance services (including international services).
- 2.3 The PSTN OTA declaration allows this market segment to be unbundled from network access, such that customers can potentially purchase line rental services from one provider and long distance calling from a separate provider. This enables competitive providers to offer long distance services to any given end user, regardless of which carrier is providing underlying network access to that end user.
- 2.4 The rationale for the declaration of PSTN OTA was the recognition that whilst the local loop is a bottleneck, the downstream long distance market is potentially competitive. Since the cost structure of transmission infrastructure is characterised by less extensive economies of scale compared to access infrastructure, a greater degree of competition is viable in long distance calling than in local calling. As a result the proposed PSTN OA exemption could have a significant negative impact on competition in long distance calling, whereas the impact on the consumer retail market for local calling due to the WLR / LCS exemption is likely to be less severe.
- 2.5 As a result of this distinction, Optus considers that the proposed PSTN OA exemption application is of greater concern than the WLR / LCS exemption application. In particular, Optus is concerned that were the proposed PSTN OA exemption to be granted, Telstra would have the ability and incentive to reduce competitors' ability to compete in the standalone long distance market.
- 2.6 Telstra's incentive to prevent competitors from competing in the standalone long distance market arises through its vertical integration. As a vertically integrated provider of access, PSTN OA and long distance services, it can increase its profits by preventing its rivals from competing in long distance or at least raising their costs.
- 2.7 Exemption from the PSTN OA declaration would enhance Telstra's ability to carry out such a foreclosure strategy, since it would no longer be required to offer the wholesale PSTN OA service to rival providers of long distance

preselection services at a reasonable price. The exemption would to a significant extent increase Telstra's control of the bottleneck infrastructure (in respect of end users who purchase retail line rental services from Telstra).

- 2.8 Note that in the context of the *standalone* market for long distance services, the relevant bottleneck infrastructure is the individual customer's line. Likewise, the real geographic limit of the relevant market is the individual customer's line – not the exchange service area. That is, (putting aside for the moment competition in bundled services) provided an end user continues to purchase line rental services from Telstra, only Telstra can offer long distance services with respect to that customer. Substitution to another provider with respect to long distance services alone is only made possible through the PSTN OA declaration. And only Telstra can offer wholesale PSTN OA services with respect to that customer.
- 2.9 It follows that the existence of competitor DSLAM infrastructure in Telstra exchanges is irrelevant to competition in the *standalone* market for long distance services. If the exemption were granted, then competitors would be unable to offer long distance services or PSTN OA services in respect of Telstra line rental customers. So competitors would be unable to exert a significant constraint on Telstra's ability to adopt a foreclosure strategy with respect to standalone long distance services provided to its own line rental customers.
- 2.10 Optus expects that a likely result of exemption from the PSTN OA declaration is that Telstra would cease selling the service or increase the price significantly. This would reduce the ability of Telstra's rivals to compete in the standalone long distance market and cause a deterioration in the quality of services offered to customers in that market.
- 2.11 Telstra's foreclosure strategy would not be complete, since the requested exemption excludes calling card services. Nevertheless, it should be noted that calling card services tend to be of a lower quality than preselect services. Telstra does not need to exclude rivals completely for its foreclosure strategy to succeed; it need only reduce rivals' sales in long distance services to the point where competition becomes unprofitable and they are forced to exit the market.
- 2.12 Telstra argues there would be little impact on downstream markets if resellers exit, since they have a 'de minimis' presence in the market. However, resellers exert competitive pricing pressure at the margin (an impact which goes beyond the number of customers they supply). Further, resellers in fact supply a large number of end users. Optus has a significant switchless wholesale business that relies on PSTN OA services. **Commercial in Confidence begins Commercial in Confidence ends** The PSTN OA is an essential input to this wholesale business.
- 2.13 Optus submits that for end users, the result of the existing low barriers to entry in long distance (and the fact that the long distance market has been protected from Telstra's market power) has been a high level of competition in long distance services, with a variety of service offerings and a significant improvement in prices in the period since the introduction of competition. For example, when the ACCC reported on changes in the prices paid for

telecommunications services in the five year period between 1997-98 and 2002-03, it found that national long distance call prices for residential customers had fallen by 26.4% and international call prices for residential customers had fallen by 58.9%.²

- 2.14 It seems clear that the provision of wholesale PSTN OA services and the competitive long distance market enabled by these services has resulted in competitive pressure on prices for long distance services – that is, long distance services available to all end users, including Telstra retail customers. If the exemption were granted, it is likely that this pressure would ease – particularly with respect to the long distance prices Telstra offers its own retail customers.

Competition in long distance services provided through bundles

- 2.15 A likely consequence of granting the requested exemption is to encourage competition in bundles (including line rental, local calling and long distance calls) rather than in stand alone services such as long distance. Due to the existence of competitor infrastructure in the relevant ESAs end users would be able in many cases to purchase the bundle of services from competitors.
- 2.16 It appears likely, however, that competition in long distance services would be diminished following an exemption, despite the continued availability of such services as part of a bundle, due to barriers to entry and the persistence of Telstra's market power in the access segment.

Barriers to entry

- 2.17 Telstra appears to believe that the exemption would cause many providers of long distance preselection services to invest in access infrastructure and begin offering the full bundle of telecommunications services.
- 2.18 Optus submits that this is unlikely. Currently the barriers to entry in the long distance market are quite low. Factors such as pre-selection, the availability of wholesale transmission and switch-less interconnection means that new entry is relatively low cost. As a result, there are a large number of competitive telecommunications companies providing long distance services.
- 2.19 However, entry into the market for provision of bundled telecommunications services would involve significant investment in DSLAM infrastructure and other business costs which are not required for competition in the long distance market. Analysis undertaken by Optus indicates that the minimum efficient scale required for DSLAM based entry by a competitor is high at around **C-i-C C-i-C**. Further, there are capacity constraints and other issues impeding entry into the market as a ULLS provider (discussed later in this submission).
- 2.20 Consequently, Optus submits that there are material barriers to competitive entry by ULLS-based operators. As a result of these barriers to entry, the PSTN OA exemption is unlikely to cause many resellers to become ULLS

² Australian Competition and Consumer Commission, Changes in the prices paid for telecommunications services in Australia 1997-98 to 2002-03, 31 May 2004, p 63.

operators; most long distance-only providers would exit the market. Further, the requirement to bundle access services would raise the cost of entry and restrict the ability of any new entrants to constrain the prices of those competing in the bundle of services.

- 2.21 In summary, a likely effect of the exemption on the long distance market is to introduce a significant barrier to entry, substantially reduce the number of providers of long distance services and lessen competition in downstream markets for the provision of long distance services.

Telstra's market power

- 2.22 Optus considers it likely that competition in long distance services would be diminished following an exemption, despite the continued availability of such services as part of a bundle, as a result of the persistence of Telstra's market power in the access segment.
- 2.23 Optus notes that despite recent increases in competitive infrastructure, Telstra retains substantial market power in local access. The ACCC's *Fixed Services Review A Second Position Paper* makes it clear that Telstra is still the dominant player in the fixed line market. In 2005-06, Telstra remained the main supplier of local access services, with over 88% of total lines, while Optus (4.2%) and 'other lines' (7.5%) accounted for the residual. Further at a retail level, in 2004-05, Telstra retained large revenue market shares of local telephony (75.3%), domestic long-distance (69.4%), international calls (61.4%) and FTM (74.2%). The paper also noted that based on the retail market shares for Telstra, Optus, AAPT and Primus in 2004-05, the HHI index was 5902, indicating the fixed market is still highly concentrated.³
- 2.24 Although the take up of each of the ULLS and LSS grew in the order of 100% during calendar year 2006, this growth is off a very low base. As the paper notes, compared to the total number of broadband lines, ULLS and LSS take-up is still low, though increasing. Telstra still has an overwhelmingly large market share of line rental customers, to which it generally supplies the entire bundle of telecommunications services.
- 2.25 A possible objection to this argument is that Telstra is no longer a monopolist. Regulated access to the ULLS has removed Telstra's monopoly on access. But a firm may have market power without being a monopolist. At 88% market share (in 2005-06), Telstra is still a dominant firm in the residential access market. Of course it is not the case that end users *cannot* bypass Telstra. But for many reasons (such as high perceived switching costs) Telstra's 'rusted on' consumers *do not* churn away from Telstra. This reluctance to churn means that in practice Telstra still has very substantial market power in the access segment.
- 2.26 As a result, bundles are likely to be priced above the competitive level and any price increase in a single service (such as long distance) will be diluted. This circumstance, combined with the existence of switching costs, means that Telstra's end users are unlikely to switch to a different provider of the bundle

³ Under the 1992 Merger Guidelines in US, a HHI of 1800 and over is considered a 'highly concentrated market'.

following an increase by Telstra in the price of long distance services. It follows that the proposed PSTN OA exemption would deliver Telstra a captive market in the long distance calling segment, consisting of the 'rusted-on' component of its 88% of end users (on 2005-06 figures), and could allow Telstra to increase its prices for both PSTN OA services and retail long distance services.⁴

- 2.27 The PSTN OA declaration constrains Telstra's market power with respect to long distance services, even in respect of its own line rental customers, since it is compelled to offer PSTN OTA services to competitive long distance service providers on reasonable terms. The proposed exemption would give Telstra the ability to leverage its market power in line rental into the long distance calling segment and raise its rivals' costs, impeding them from competing to provide long distance services to the majority of end users.

Impact on competition in the corporate and government segment

- 2.28 In addition to the impacts noted above, which apply generally, Optus would like to highlight the potential for PSTN OA exemption to impact on competition in the supply of services to corporate and government (C&G) customers (businesses with at least 200 employees and government agencies). This market is particularly sensitive to the availability of access to Telstra telecommunications infrastructure; more so than the consumer market where needs are less complex and more localised, allowing infrastructure based competition.
- 2.29 The competitive drivers unique to the C&G market include:
- procurement of services on a 'whole of business' (WOB) basis with preferences for single billing, multiple services and products included on a single invoice and a single point of contact for all telecommunications needs;
 - requirements for ubiquitous coverage of specialised and complex features on top of basic telephony services; and
 - high incumbent inertia with enduring impacts due to high costs of changing providers.
- 2.30 If Optus and other service providers are to compete in this market and meet its demand for whole of business offerings, there needs to be certainty of access to Telstra infrastructure and products. Even established infrastructure operators such as Optus rely on the PSTN OA wholesale input in this market. For example, Optus supplies approximately **CiC begins CiC ends** retail business customers via the PSTN OA service. These customers take a number of services, not solely LD and IDD. They are supplied via PSTN OA because it is not feasible to connect them directly via Optus infrastructure due to various technological limitations.

⁴ This highlights an important problem with market definition on an exchange basis: to a very real extent, the geographical boundary of the market for individual services such as long distance is in fact limited to the individual end user – the geographical unit of the exchange is not determinative of the market for such individual services. Provided an end user continues to purchase line rental services from Telstra, only Telstra can offer wholesale PSTN OA services with respect to that customer.

- 2.31 The requirement for certainty of access to Telstra infrastructure and products is particularly acute in the corporate market. Duplication of Telstra's network on a partial basis may be sufficient to compete profitably in the consumer market, since consumers require connection to only a single residence. Competition by serving limited premises is not feasible, however, in the corporate market due to its WOB and ubiquity requirements. Corporate customers require supply to all of their multiple premises and an entire corporate account may be lost if even one such location is inaccessible (perhaps due to the presence of a RIM or pair gain system in the exchange, or a distance limitation impeding the supply of services via the ULLS).
- 2.32 Further, to the extent complex features (eg, Securitel, Huntgroups) cannot be provided over Optus consumer grade infrastructure (including DSLAM infrastructure), Optus is unable to migrate customers off Telstra resale infrastructure to its own infrastructure, and remains dependent on Telstra resale products including PSTN OA.
- 2.33 Optus submits that the proposed PSTN OA exemption may have grave implications for competition in the provision of services to large corporate and government customers. As a result of the typical requirements for complex features, ubiquitous offerings and WOB contracts in the C&G market, it is generally not possible to substitute consumer offerings for business offerings, so Telstra's competitors in the consumer space cannot necessarily exert a competitive constraint on Telstra's pricing conduct in the C&G market.
- 2.34 Consequently, even if the exemption were granted with respect to consumer services, the ACCC should consider excluding services provided in the C&G market from the exemption on the basis of the distinct competitive drivers which operate in this segment, as outlined above. Excluding the C&G market would provide robust protection for competition in the provision of services to large corporate and government customers whilst enabling infrastructure-based competition in the consumer market.

3. Potential Modes of Infrastructure Based Competition

- 3.1 In order to establish that the markets would be contestable and workably competitive if the exemption application were granted, Telstra relies on the availability of the ULLS, the LSS and alternative infrastructure.
- 3.2 Telstra implies that the availability of these potential alternatives is sufficient to ensure that competition in the downstream markets will remain sufficiently competitive and Telstra's pricing of PSTN OA in the corresponding ESA will be constrained to the extent that regulation of PSTN OA is no longer required.
- 3.3 Optus submits that to be considered a viable mode of infrastructure-based competition in the context of Telstra's exemption application, a potential alternative must:
- allow an access seeker to provide its customers with the relevant services via fixed line voice telephony;
 - address the competitive impact of the exemption application at both the wholesale and retail level; and
 - allow service provision to all (or substantially all) customers in each exchange area via fixed line voice telephony.
- 3.4 Using these criteria, Optus concludes that:
- the ULLS is a viable mode of infrastructure-based competition; however
 - the LSS and also alternative technologies such as HFC and mobile are each subject to limitations and so cannot exert an effective competitive constraint on Telstra's pricing.
- 3.5 Optus accepts the principle that layers of regulation may be withdrawn where they are not required to promote competition. However, where in practice ULLS-based competition is not effective, the PSTN OA would remain an enduring bottleneck in the sense that it is 'essential' to providing services to end-users in downstream markets in a way that promotes the LTIE.
- 3.6 Optus submits that in addition to its exchange level analysis, the ACCC should also take into account the level of competition in metropolitan areas.
- 3.7 The discussion in this section is set out under the following headings:
- The relevant markets;
 - ULLS;
 - LSS; and
 - Alternative technologies.

The relevant markets

- 3.8 There are four key factors for the ACCC to consider in respect of the relevant markets.
- 3.9 First, it is necessary to be clear about the nature of the services for which exemption is sought. The PSTN OA service allows an access seeker to provide its customers with LD, IDD and FTM calls via fixed line voice telephony. Generally, a standard telephone service delivered over a fixed line includes the following features:⁵
- Customer Service Guarantee (CSG)
 - free emergency services access
 - operator assisted services
 - directory assistance services
 - preselection capability
 - itemised billing
 - calling line identification
 - number portability
 - the option of untimed local calls
 - suitable equipment for customers with disabilities.
- 3.10 In addition, the following features are current requirements on Telstra:
- retail price regulation
 - priority assistance for customers with life threatening health problems
 - access to alternative and interim services.
- 3.11 While alternative services which do not fit the definition of a standard telephone service delivered over a fixed line may nevertheless substitute for fixed line voice telephony services for certain customers, the degree of substitutability must be considered carefully.
- 3.12 The second point relates to the functional dimension of the markets. The PSTN OA service is a wholesale input which allows an access seeker to provide services in downstream retail markets. Optus notes that the competitive impact of the exemption application at both the wholesale and retail level will be relevant to the assessment of Telstra's application.
- 3.13 If Telstra's application is to be granted, the ACCC must be satisfied not only that the scope for competition would not be diminished in downstream retail voice markets in the absence of PSTN OA regulation, but also that Telstra's conduct would be constrained by competition in the wholesale market in

⁵ DCITA, 2007, Telecommunications Universal Service Obligation (USO) Review Issues Paper, p.11

which the PSTN OA service is supplied. If this were not the case, then access seekers would be vulnerable to a restriction of supply or increase in wholesale prices that would be detrimental to competition in downstream markets.

- 3.14 The third point relates to Telstra's exchange-based approach to the relevant markets. Telstra has sought exemption application in a number of exchange areas, in respect of all lines within each of those exchange areas. This has implications for the consideration of alternatives to the PSTN OA.
- 3.15 In particular, if Telstra's application were granted in respect of a particular exchange area, if a detrimental impact on competition is to be avoided access seekers must have access to an acceptable substitute wholesale input that would allow provision of fixed line voice services to *substantially all customers* in that exchange area. The exemption application should not be granted if they would lead to the restriction of competition in respect of a substantial number of customers within that exchange area.
- 3.16 The fourth point also relates to the geographical scope of the relevant markets. While analysis at the ESA level is useful for some purposes, it is not necessarily a complete analysis.
- 3.17 As the ACCC noted in the context of the 2002 CBD exemption application, "delineation of the relevant geographic market involves the identification of the area or areas over which the carrier or carriage service provider and its rivals currently supply or could supply the relevant service."⁶
- 3.18 Optus notes that from a supply side perspective operators are likely to take a broader view of the market than just a single ESA. For example when Optus is considering whether to take a new product to market it does not enter one ESA at a time; rather it will consider the economics of the product and take a decision to enter in a much larger geographic area, for example, densely populated metropolitan areas.
- 3.19 Telstra has apparently recognised the arbitrary nature of its exchange-based approach. As Dr Paterson on behalf of Telstra notes, "...the analytical approach I have outlined might well imply that geographic markets are broader than exchange based, and in fact encompass clusters of exchanges within bands that exhibit similar competitive conditions..."⁷
- 3.20 Optus considers that in addition to its exchange level analysis, the ACCC should also take into account the level of competition (and competitive constraint on the incumbent) in the market defined more broadly. For example, the ACCC could take into account the state of competition in metropolitan areas.
- 3.21 This is because competition in telephony services does not occur at the exchange level. Whilst at present carriers' incremental investments are done on an exchange by exchange basis, this is not necessarily the basis on which supply side decisions are made. For example, Optus made a decision to roll out to 340 exchanges in 2005. This decision was based on a combination of

⁶ ACCC, 2002, Future Scope of the LCS, Final Decision, p12

⁷ Statement by Dr Paul Paterson of CRA International for Mallesons Stephen Jaques on the Economic Considerations for PSTN OA exemption [55]

supply side economics, demand analysis and marketing coverage. Optus submits that this type of entry decision is more in the nature of competition in the market.

- 3.22 The implications of this point for the threshold for exemption application are considered below in section 5.

ULLS

- 3.23 The ULLS allows a competitor access to Telstra's local copper loop on an individual customer basis. It allows an access seeker to provide fixed line voice telephony services in downstream retail markets (in addition to data services). It is available as a regulated wholesale service to access seekers who wish to compete in downstream voice markets. Further, when an access seeker takes the ULLS in a given exchange area, it gains the ability to provide fixed line voice telephony services throughout that exchange area (subject to caveats noted in the next section).
- 3.24 Optus considers that the ULLS is potentially a viable mode of infrastructure based competition. The availability of the ULLS can serve as a competitive constraint on Telstra's pricing of the bundle of telecommunications services including LD and IDD services and ULLS-based access seekers can compete effectively in providing fixed line voice services in downstream markets (again subject to caveats noted in the next section).
- 3.25 Where ULLS-based competition is not viable at a level sufficient to constrain Telstra's conduct, the PSTN OA would remain an enduring bottleneck in the sense that it is 'essential' to providing services to end-users in downstream markets in a way that promotes the LTIE.

LSS / VoIP

- 3.26 Line sharing allows a competitor access to the high frequency portion of Telstra's local copper loop on an individual customer basis. It allows that competitor to compete against Telstra to supply that customer with broadband services. High speed broadband services are the predominant use of the high frequency portion of the copper loop.
- 3.27 The basis of regulating line sharing is that access to the service will promote the long term interest of end users of broadband services (or any high speed service). This is likely to be true given it is a necessary input to a key form of competition in the broadband services market (ie, xDSL based broadband). The alternative input to providing xDSL based broadband services is the ULLS. The ULLS provides competitors with the control of the copper loop, allowing them to use the low frequency portion of the copper loop to provide voice services over their PSTNs. ULLS-based competitors to Telstra provide a competitive constraint on above cost pricing in the retail market for voice telephony, to the extent that access to the ULLS is provided on reasonable price and non-price terms.
- 3.28 A line sharing competitor acquires the LSS on the basis that the end-user takes a voice telephony service on the line. This voice telephony service may be acquired directly from Telstra or from another party (including the competitor

itself) via a wholesale line rental (WLR) and local carriage service (LCS). The price of access to these wholesale services therefore determines the pricing constraint that these third parties offer in the retail market for voice telephony.

- 3.29 Alternatively competitors accessing the LSS can also deploy VoIP software and consumer premise equipment to supply voice services to end-users. However, the extent to which these voice services will provide a constraint on voice services provided over PSTNs will depend on their substitutability. Optus notes that there are differences between VoIP services and traditional voice services supplied over a PSTN. VoIP services do not have all the features of a fixed line STS.⁸
- 3.30 It follows that competitors using the LSS (or indeed competitors providing VoIP services by any means) may not offer a sufficiently strong constraint on pricing of voice services to justify the granting of exemption application on PSTN OA. Telstra's approach of including these competitors in the count of players in the voice market is inappropriate.⁹
- 3.31 Optus considers that the LSS cannot serve as an effective competitive constraint on Telstra's pricing of the PSTN OA service since LSS-based access seekers cannot compete effectively in providing fixed line voice services in downstream markets. Further, if the separate application for exemption for the WLR and LCS services were granted, Telstra could make it difficult for LSS service providers to compete at all by withdrawing access to WLR, a pre-requisite for supply of LSS, or by increasing the price of basic access on a stand alone basis.

Alternative infrastructure

- 3.32 Optus considers that alternative technologies such as mobile and HFC are each subject to limitations. Optus concurs with the ACCC's view in its second Position Paper on fixed line services that alternative technologies are not an adequate substitute for the CAN except in a highly localised way.¹⁰ The existence of these networks has not deterred Telstra from seeking to increase prices for PSTN OA in the past.
- 3.33 As a result these technologies cannot serve as an effective competitive constraint on Telstra's pricing of the PSTN OA service and access seekers cannot compete effectively in providing fixed line voice services in downstream markets using these technologies.

⁸ Features of a traditional voice service supplied over a PSTN were set out under the heading 'The relevant markets' above.

⁹ This suggests that the DSLAMs of LSS-based competitors should not be counted in determining the threshold for the removal of regulation. This is discussed below under the heading "LSS-based operators" in section 4.

¹⁰ ACCC, 2007, Strategic Review of Fixed Line Services, Second Position Paper, p22 (FN50)

HFC

- 3.34 Since voice services (as well as broadband and Pay TV services) can be supplied to end users using HFC, it follows that competitor HFC networks,¹¹ where available, have some impact on competition in downstream markets.
- 3.35 However that impact is limited by the geographical extent of competitor HFC networks. Optus' HFC network passes approximately 2.2 million addresses in Brisbane, Melbourne and Sydney of which only 1.4 million are serviceable.¹²
- 3.36 It follows that any constraint placed on Telstra's pricing by Optus' HFC is likely to be limited in two ways.
- 3.37 First, many homes within the HFC footprint, particularly multi dwelling units (MDUs), are not serviceable via HFC. That is, even in geographic areas served by the HFC network, large numbers of customers (primarily those living in MDUs) cannot be served by HFC.¹³
- 3.38 Further, these customers are not likely to become serviceable in the near future. Technical reasons why Optus may be unable to provide telephony services via its HFC network to an MDU include:
- the original network design did not accommodate MDUs in the majority of instances;
 - difficulties in securing agreement from Body Corporates which typically control the MDU common area and wiring access;
 - lack of space for installing multiple CAUs (bulky equipment required for HFC telephony) – a separate CAU is required for every apartment – in MDU common areas;
 - Optus' Local Access Telephony vendor has not had an appropriate technology capable of servicing multiple dwelling apartments (eg, multi-line CAUs) from the HFC network; and
 - difficulties in retrofitting for access to individual MDUs for HFC telephony due to the physical awkwardness of the network equipment including splitter boxes.
- 3.39 These problems are not confined to Optus. Indeed Telstra does not provide any voice services over its HFC network.¹⁴ Similar technical issues also exist

¹¹ Networks owned by Telstra's competitors may be taken into account, however the largest HFC network is largely irrelevant to the discussion since it is owned by Telstra and thus does not provide a competitive constraint on Telstra's pricing or an independent source of competition in retail markets.

¹² ACMA (2006), *Communications Services Availability in Australia 2005-2006*, November 2006, page 18. Other competitor networks are far more geographically limited and will not be considered further.

¹³ There are also some customers in single dwelling units (SDUs) for which Optus may be unable to provide telephony services via its HFC network. Some SDUs may be located in heritage areas where overhead access is denied and undergrounding is not feasible. The distance of some SDUs from the main HFC cable is also a factor, since quality of voice telephony deteriorates (the signal fades) once the distance is greater than 50m.

¹⁴ Telstra (2005), Access Undertaking lodged by Telstra with the ACCC in respect of ULLS, 23 December 2005, p8

in overseas jurisdictions and have created similar problems for the cable operators in those jurisdictions as they have for Optus in Australia. For example, Canadian operators have encountered significant difficulties in supplying MDUs. In 2003, the CRTC (the Canadian regulator) found that there were significant barriers to entry for HFC into MDUs,¹⁵ including:

- Delays in attempting to negotiate acceptable agreements with building owners resulting in loss of potential customers;
- Building owners enter into arrangements with incumbent telephony operators that prevent competitive local exchange carriers (CLECs) from gaining access to serve customers in MDUs. The CRTC subsequently ruled that such arrangements were unjustly discriminatory and contrary to MDU access conditions;
- Fees for use of in-building wire are under the responsibility and control of building owners who impose unreasonable terms and fees before CLECs can grant access (the only alternative for CLECs is to build their own in building wire);
- CLECs have to pay fees for:
 - i) space occupied by telecommunications facilities;
 - ii) additional facilities and utilities to accommodate additional LEC requirements in an MDUs, eg provisioning, installation, construction, electric power; and
 - iii) additional services such as approval of plans, safety and security measures; and
- Before installing or upgrading new in-building wire, CLECs have to get approval from building owners' wiring plans, access to closets, panels and any common pathways required.

3.40 Second, the geographic footprint of the HFC network does not necessarily coincide with the boundaries of Telstra's ESAs. That is, when Telstra states that Optus' HFC network is present within a given ESA, it neglects the fact that substantial geographic areas of the ESA are not served by the HFC network. Attached at Appendix 1 as an illustration of this point is a map showing the geographic scope of Optus' HFC network in Sydney, and the extent to which it coincides with the exchanges in Telstra's exemption area.

3.41 Further, the geographical limitations of Optus' HFC network are not likely to be eased by further significant rollout. It is not expected that the geographic reach of Optus' HFC network will be extended substantially.

3.42 Telstra typically argues that Optus could substantially extend the coverage of its HFC network. Telstra typically argues that if cable companies in Canada and the USA can compete successfully with incumbent telephony operators and expand coverage, then Optus must also be able to do so.

¹⁵ CRTC, Telecom Decision 2003-45

- 3.43 However any comparison with cable companies in other jurisdictions is misleading, since the circumstances facing those cable companies are very different from the circumstances facing Optus in Australia. Optus submits that the success of cable companies in Canada, the USA and the UK may largely be explained in by some or all of the following circumstances, none of which apply in Australia:
- the incumbent fixed line operator is prohibited from owning a cable network,
 - cable operators had geographical monopolies which allowed them to fully exploit the available economies of scale; and / or
 - Pay TV has been very popular in driving cable take-up and is not controlled by the incumbent telephony operator.
- 3.44 These factors have allowed cable companies in Canada and the USA to achieve substantially more attractive scale economies than Optus – a crucial factor in considering the commercial attractiveness of expanding a network. By contrast Optus is unable to attract sufficient customer demand to achieve the same economies of scale required to extend its network, since Telstra’s HFC captures much of the market share that would have otherwise gone to Optus’ HFC.
- 3.45 Finally, third-party access to HFC networks is generally neither sought, nor easily engineered which means it has limited utility as a wholesale constraint on Telstra.
- 3.46 In conclusion, HFC-based competitors cannot compete effectively in providing fixed line voice services to all customers in the relevant markets. Optus considers that competitor HFC networks cannot be considered an acceptable wholesale input which could substitute for the PSTN OA service, since they are available in respect of only a subset of customers in any given exchange area.

WiMAX

- 3.47 Optus considers that the availability of WiMAX will not serve as an effective competitive constraint on Telstra’s pricing of the PSTN OA service in the exemption areas.

Mobile

- 3.48 Mobile networks can be used to provide end users with voice telephony services. However, there are differences between mobile telephony services and traditional voice services supplied over a PSTN, and these services are usually considered to be provided in separate markets. Despite some evidence of fixed to mobile substitution, it is not the case yet that a substantial number of end users in Australia have been prepared to give up their fixed line in favour of a mobile telephone.
- 3.49 Fixed wireless services provided over mobile networks (such as the service provided by Virgin Mobile) are likely to be a better substitute in at least some

respects for traditional fixed line voice services, compared to a standard mobile service.

- 3.50 However, the competitive constraint provided by fixed wireless services provided over mobile networks will be limited, since these services are typically deployed as a “niche play” to use excess or idle capacity on mobile networks. That is, in areas where the relevant mobile network is at capacity, these fixed wireless services will not be provided. The nature of these services means that they will always be extremely limited in their role as a substitute for traditional fixed line services and cannot be relied on to constrain Telstra’s pricing.
- 3.51 In conclusion, mobile competitors are not likely to offer a sufficiently strong constraint on pricing of fixed line voice services to justify the granting of the exemption application for the PSTN OA service.

4. Constraints on the Availability and Expansion of the ULLS

- 4.1 The validity of Telstra's application for exemption depends on the availability of ULLS-based services provided by Telstra's competitors. Where ULLS-based competition is not viable at a level sufficient to constrain Telstra's conduct, the PSTN OA would remain an enduring bottleneck in the sense that it is 'essential' to providing services to end-users in downstream markets in a way that promotes the LTIE.
- 4.2 Telstra's position depends on the assumption that access to the ULLS will continue to be available:
- at competitive prices;
 - at acceptable quality;
 - in respect of all customers at a given ESA;
 - unconstrained by capacity limitations; and
 - unimpeded by network upgrade.
- 4.3 In its "Fixed Services Review, A second position paper" the ACCC noted that one of the criteria it would take into account in assessing the nature of competition is the existence of "Barriers to expansion". The ACCC described these as follows:
- "Barriers to expansion are disadvantages or impediments facing existing service providers already operating in particular market segments that enable incumbents to increase prices or degrades serviceability without attracting the expansion into that segment by those facing the disadvantage".*
- 4.4 Optus considers this factor to be of particular relevance to the present case.
- 4.5 Optus submits that there are a number of actual or potential issues that could limit or adversely impact access seekers' use of ULLS notwithstanding the fact that they have deployed a DSLAM in an ESA. In particular, Optus notes that:
- there are a number of ongoing regulatory and legal proceedings in relation to ULLS access and pricing;
 - a number of non-price issues that are the subject of current access disputes could limit access seekers ability to compete with ULLS based services;
 - where Telstra has deployed pair gain systems or a RIM between the exchange and the customer premise the customer is not serviceable via the ULLS;
 - limitations on access to space within exchanges to deploy DSLAM equipment constrain the ability of access seekers to expand their market share; and

- Telstra has announced plans to upgrade or otherwise augment its network in ways that could prevent access seekers from accessing the ULLS.
- 4.6 Optus considers that in the event of the exemption application being granted, each of the factors noted above would impede the ability of ULLS-based competitors to exert a competitive constraint on Telstra's provision and pricing of line rental and local calling services. It follows that to the extent these constraints persist, the PSTN OA will represent an enduring bottleneck that is essential to effective competition in downstream markets. As a result, the ACCC would be ill-advised to withdraw regulation of PSTN OA on an immediate and unconditional basis.
- 4.7 Optus examines each of these issues in detail below together with a proposed regulatory response from the ACCC. In summary, we argue that no exemption request should be granted with respect to PSTN OA unless each of these barriers to the use of ULLS is addressed.
- 4.8 Optus submits that as part of this inquiry the ACCC should:
- require Telstra to provide details of the location of pair gain systems and RIMs and the likely number of SIOs that will be unserviceable in each ESA as result; and
 - seek an update from Telstra on its plans to upgrade/change the network and more specifically a commitment that these will not impact the use of ULLS.
- 4.9 Optus submits that any decision to exempt Telstra from the declaration of the PSTN OA should only proceed once:
- each of the proceedings noted in this section with respect to both price and non-price issues has been finalised and it has been determined that the outcome will not adversely impact ULLS based competition;
 - the ACCC has required Telstra to provide alternate TEBA space within its facilities as a condition of granting its exemption request; and
 - the ACCC is satisfied that Telstra's plans to upgrade or otherwise augment its network (and its existing deployment of pair gain systems or RIMs) will not adversely impact the use of ULLS in the exemption area.
- 4.10 Optus notes that the ACCC could consider seeking particular undertakings from the Telstra under section 87B of the Trade Practises Act in order to address the key issues.
- 4.11 The remainder of this section is set out under the following headings:
- Uncertainty of ULLS access and pricing;
 - Non-price issues;
 - Pair gain systems / RIM;

- Capacity constraints; and
- Network upgrade.

Uncertainty of ULLS access and pricing

- 4.12 As the ACCC is aware, there are a number of ongoing regulatory and legal proceedings in relation to the supply of ULLS. In particular;
- Telstra has instigated proceedings in the High Court which seeks to challenge the validity of Part XIC of the Trade Practices Act as it applies to ULLS and LSS; and
 - There are ongoing access disputes relating to the price and non-price terms and conditions of supply of ULLS.
- 4.13 The first of these proceedings raises doubt about Telstra’s past and ongoing obligation to provide ULLS and LSS based access services. Clearly, a decision in Telstra’s favour in these proceedings would have a significant adverse impact on ULLS based competition. Telstra would be likely to withdraw ULLS based access and/or set a price that will make it uneconomic for access seekers to compete in metropolitan areas. Further, Telstra would likely seek to extract significant rents from access seekers for services provided to date under interim price rulings by the ACCC. Telstra effectively acknowledges that a ruling in its favour would be terminal for ULLS based competition since its exemption application notes that any exemption order in its favour would cease to have effect should it succeed in its High Court challenge.
- 4.14 The ongoing access disputes raise uncertainty about the future terms and conditions upon which access to the ULLS will be supplied. In particular, Telstra is seeking to have the ACCC impose a geographically averaged ULLS price that will result in a significant increase in access prices for ULLS within the exemption area. Such a price increase is likely to significantly curtail access seekers use of ULLS. This would include limiting access seekers’ scope for expanding the capacity of their existing DSLAMs.

Non-price issues

- 4.15 Optus submits that Telstra’s continual attempts to undermine the competitiveness of ULLS could limit access seekers’ ability to compete with Telstra via ULLS based services. A number of the non-price issues that are the subject of current access disputes are relevant in this regard.
- 4.16 Optus notes that lack of access to efficient processes to connect ULLS in Multi-Dwelling Units (“MDUs”) has the potential to limit ULLS based competition in certain metropolitan ESAs and entrench access seekers’ reliance on PSTN OA notwithstanding their investment in DSLAMs. As noted in separate submissions to the ACCC, Optus has suspended proactive marketing of ULLS based services to customers moving into a vacant MDU because of the adverse customer feedback arising from the current connection processes. While the ACCC has recently made a ruling on this issue, Telstra has yet to provide a workable solution to the problem.

- 4.17 In addition, constraints on access seekers' ability to process ULLS service qualifications (such as Telstra's daily limits on Bulk SQs – capped at 5,000)) are acting to limit the take-up of ULLS. For example the Bulk SQs issue prevents timely access to the ULLS by access seekers and therefore reduces the competitive constraint on Telstra exerted by the ULLS.
- 4.18 **C-i-C begins C-i-C ends**
- 4.19 Given the uncertainties surrounding the continued obligation for Telstra to supply ULLS and the terms and conditions upon which such supply will be based, Optus recommends that the ACCC should proceed cautiously. Any decision to remove the declaration on PSTN OA should only proceed once each of the proceedings noted above have been finalised and it has been determined that the outcome will not adversely impact ULLS based competition.

Pair gain systems / RIM

- 4.20 The ACCC should be aware that access seekers' ability to utilise the ULLS is not unfettered since there are a number of practical constraints on their ability to access a ULLS in any given ESA.
- 4.21 The ACCC will be aware that ULLS relies on the presence of a continuous copper loop. If this loop is broken, as would be the case where Telstra has deployed pair gain systems or a RIM between the exchange and the customer premise then the ULLS is not serviceable.
- 4.22 Where these constraints arise they will act to cap the number of lines that can be serviced through ULLS. In effect this means that Telstra is protected from losing a certain percentage of service to competitors in any given exchange. Further, as noted above in section 2, the inaccessibility of even a limited number of premises is capable of having a disproportionate impact on competition in the corporate and government segment, due to requirements for ubiquity and WOB service.
- 4.23 The extent to which Telstra is protected from competition will differ on an exchange by exchange basis, but the extent of such protection is likely to be significant in some individual exchanges.
- 4.24 There is limited information from Telstra on the presence of these physical inhibitors within its network. Optus submits that as part of the current inquiry the ACCC should require Telstra to provide details of the location of pair gain systems and RIMs and the likely number of SIOs that will be unserviceable in each ESA as result.

Capacity constraints

- 4.25 Access to ULLS requires access seekers to deploy a DSLAM in close proximity to the Telstra exchange. This typically requires the Access Seeker to "rent" space in a Telstra exchange. Indeed, Telstra's terms and conditions for the supply of ULLS require access seekers to have signed its facilities access agreement, in particular the schedule relating to Telstra Exchange Building Access (TEBA).

- 4.26 Under the terms of its TEBA agreement Telstra provides a separate room within its exchange building for access seekers to deploy their interconnect equipment. TEBA space is effectively partitioned into lots of a set size and this is allocated to access seekers on a first come first served basis. The space is used for all interconnect purposes, not simply DSLAM access.
- 4.27 TEBA space appears to be a limited commodity. Optus understands that a number of the exchanges in the proposed exemption area are subject to physical constraints. These constraints will act to place a cap on the proportion of services within that ESA that access seekers could acquire from Telstra.
- 4.28 Specifically, Optus understands that a number of exchanges have limited TEBA space available. This means that access seekers may not be able to deploy sufficient future rack capacity in those exchanges to meet future requirements.
- 4.29 In its DSLAM roll-out Optus has typically deployed one or two racks in each exchange. This will essentially enable Optus to service a certain proportion of lines from that exchange. Once the first racks are full we then have to acquire new space to deploy further racks to serve demand over and above our initial forecast. However, it appears that a number of Telstra exchanges have limited space available. That is no further access equipment can be deployed in those exchanges.
- 4.30 Telstra recently published a list which indicated 68 exchanges subject to caps.
- 4.31 This is potentially a significant barrier to access seekers' ability to expand or fully utilise their competitive presence. Further, it is not at all clear whether Telstra's policy on TEBA constraints is reasonable and consistent with its Standard Access Obligations. **C-i-C begins C-i-C ends** Accordingly, Optus submits that the ACCC should require Telstra to provide full details of the current and anticipated future availability of TEBA.
- 4.32 Telstra is likely to argue that this issue could be mitigated to some extent by the availability of an External Interconnection Cable (EIC) service provided by Telstra. The EIC allows access seekers to extend a ULLS or LSS from a Telstra MDF to a Point of Interconnect (POI) that is not within Telstra's building. Specifically, this would be used when there is no space available for the deployment of equipment in the Telstra Exchange. It would enable access seekers to deploy a DSLAM outside the Telstra exchange in, for example, a roadside cabinet and still access ULLS from the exchange.
- 4.33 However, Optus submits that there are many practical and technical issues with this service.
- Firstly, the terms and conditions on which Telstra makes this service available are extremely onerous. **C-i-C begins C-i-C ends**
- 4.34 Secondly, there are significant practical impediments to the use of the EIC, especially within metropolitan areas. These include:
- Environmental considerations. Placement of roadside cabinets in a metropolitan environment is difficult. Even though the cabinets are likely to be low impact, consideration needs to be given to community

and local resident concerns, safety of pedestrians, security of the cabinet and presence of other utilities in the area. This is particularly an issue for metropolitan exchanges as many of these are in densely populated areas.

- Obtaining mains power, metered or unmetered, from local power authorities can be a long drawn out and expensive process.
- There are also significant costs associated with setting up and maintaining a cabinet.
- The number of serviceable SIOs will be reduced since using the EIC involves adding up to 250m to the length of copper serving each SIO. In any event using a roadside cabinet offers at best a short term fix since it can only serve up to 928 SIOs. The ability to add other roadside cabinets alongside an existing cabinet is limited for the reasons given above.

4.35 Where these constraints arise they will act to cap the number of lines that can be serviced through ULLS. Without access to TEBA, access seekers will only ever be able to serve a small proportion of lines from certain exchanges. In effect this means that Telstra is protected from losing a certain percentage of service to competitors in these exchanges.

4.36 The extent to which Telstra is protected from competition will differ on an exchange by exchange basis, but the extent of such protection is likely to be significant in some individual exchanges.

4.37 This means that ULLS may not act as an effective constraint on Telstra's incentive to offer PSTN OA (or bundled telecommunications services) on uncompetitive terms in the absence of declaration. Indeed, Optus submits that Telstra currently has very strong incentives to actively limit the availability of space within TEBA.

4.38 As noted above, Optus considers lack of access to TEBA is likely to act as a significant constraint on access seekers' ability to expand their competitive presence in certain exchanges. In those exchanges that are currently or likely to be constrained, the ACCC should require Telstra to provide alternate space within its facilities as a condition of granting its exemption request.

Network upgrade

4.39 Since the ULLS was declared Telstra has repeatedly raised issues concerning its plans to upgrade or augment its network.

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

- 4.41 Given the implications of such statements, Optus suggests that as part of this inquiry the ACCC should seek an update from Telstra on its plans to upgrade/change its network and more specifically how these are likely to impact the use of ULLS. This information should be made available to access seekers for their further consideration.

5. Appropriate Threshold for Exemption from Regulation

- 5.1 Telstra's proposed threshold for exemption from regulation is linked to the availability of the ULLS. Telstra considers that the presence of at least one competitor DSLAM deployed at a given exchange indicates that in the corresponding ESA the level of competitive constraint on Telstra in the provision of basic access and voice services is sufficient for the PSTN OA service provided in that ESA to be exempted from declaration.¹⁶
- 5.2 In setting this threshold, Telstra relies on the following propositions:
- LSS based operators can be treated as ULLS based operators (and thus may be considered to exert a similar level of competitive constraint on Telstra's conduct in relation to the PSTN OA), given "similar technical capabilities, underlying economics and the absence of material barriers to LSS-based operators switching to ULLS-based supply."¹⁷;
 - the existence of one ULLS-based competitor is sufficient evidence to conclude that there are no material barriers to competitive entry by other ULLS-based operators¹⁸; and
 - the threshold may be set based on a consideration of factors at the ESA level only.
- 5.3 Optus considers that these propositions are questionable. In particular:
- LSS based operators should not be treated as equivalent to ULLS-based operators in considering the threshold for exemption application for a number of reasons including the existence of material barriers to switching between the two modes of entry – it follows that declaration of the PSTN OA service should not be withdrawn in markets (or exchange areas) where there are where there are LSS-based competitors, but no ULLS-based competitors to Telstra;
 - there are material barriers to competitive entry by ULLS-based operators, and the existence of one ULLS-based competitor in an ESA is insufficient to conclude that further entry will necessarily be forthcoming;
 - the ACCC should be cautious in accepting the "one DSLAM" threshold for withdrawal of resale regulation – entry of a second operator should be seen as evidence that barriers to entry are reducing and that there is the potential for workable competition, however it should not be the sole decisive factor; and
 - it is not necessarily appropriate to focus exclusively on the ESA level in considering the competitive impact of the exemption application – Optus considers that in addition to an exchange level threshold, the ACCC should also set a threshold based on the level of competition in

¹⁶ CRA paper p47 [140]

¹⁷ CRA paper, p11, FN14

¹⁸ CRA paper, p47 [145]

metropolitan areas – Optus proposes that regulation should not be rolled back unless Telstra faces a single ULLS-based competitor with infrastructure in at least 80% of Band 2 exchanges).

- 5.4 The discussion in this section is set out under the following headings:
- LSS-based operators;
 - Barriers to expansion: Minimum Efficient Scale required for DSLAM entry;
 - Other issues relating to the “one DSLAM” threshold; and
 - Geographic scope of the threshold.

LSS-based operators

- 5.5 Telstra counts the DSLAMs of LSS-based operators as equivalent to those of ULLS-based operators in defining the scope of its exemption application areas according to the “one competitor DSLAM” threshold. Optus considers that this is inappropriate, since competition is path dependent.
- 5.6 Competitors currently acquiring the LSS may be able to ‘migrate’ from LSS to ULLS. This would allow them to provide voice services. Telstra has asserted that the cost of this migration is low. However, the costs include the one-off costs relating to disconnecting the LSS and connecting the ULLS as well as the cost of PSTN cards in the DSLAM equipment. We understand that connection costs to both LSS and ULLS are both currently subject to arbitration.
- 5.7 In its 2004 undertaking Telstra proposed a disconnection charge of \$90 and a ULLS connection charge of \$98. Amortised over the life of a customer these costs are likely to be a substantial impediment to migrating customers.
- 5.8 In addition, competitors currently using the LSS would need to install additional equipment.
- 5.9 Telstra’s expert, Dr Paul Paterson has suggested that “these costs are not insurmountable”. Optus contends that this is an inappropriate benchmark to consider whether these costs are a barrier to entry (or a barrier to migration). The question is whether capital markets would fund the investment. Optus submits that the current evidence suggest that this is unlikely to be the case and points to the predominance of LSS based competitors as evidence that this mode of competition has proved more attractive to many investors than ULLS based investments.
- 5.10 In this sense, competition is path dependent. By this we mean that the way in which competitors have started competing affects their ability to compete using alternative platforms. More specifically the fact that the ACCC made available the LSS encouraged entry using that service. The decision regarding which form of access services competitors utilised (LSS or ULLS) would have been based on the expected relative economics at the time of entry. Subsequently, those economics may have changed. They may even have changed to the point in which ULLS competition would now be seen to have a

higher expected payoff than LSS, as suggested by Telstra. However, this does not mean that migration between LSS and ULLS is economic or in the interests of end users. This is because:

- Sunk costs in LSS based entry may make the incremental migration decision uneconomic.
- LSS based competition may be a more attractive commercial model than ULLS based entry despite the ex ante economics.

5.11 We consider each of these in turn.

5.12 Telstra's analysis describes a world in which transactions are costless. Its use of long run costs to assess investment alternatives is not consistent with commercial reality in which short term costs (including costs incurred by LSS-based competitors) exert a real influence on commercial decision-making.

5.13 Telstra also describes a world in which there is a homogenous form of competition. It presents the economics of ULLS and LSS without consideration as to the form competition in the market has taken or is likely to take. This ignores the reality of the market in which the LSS has been successfully used by competitors who have built brand names almost entirely based on broadband provision. There should be no presumptive correlation between the degree of capital investment by an entrant and their level of innovation. The success of these competitors was arguably a result of the fact that they could decouple broadband provision from telephony provision: a so-called niche play which the ACCC should encourage since it is in the long term interests of end-users. A niche play which would be reversed if wholesale services including the PSTN OA were undeclared and these competitors were forced to migrate to ULLS.

5.14 Optus submits that the barriers to customer switching between broadband providers would be increased if that decision also required them to switch telephony providers. As noted by the ACCC in its Competitive Safeguards report:¹⁹

It is evident, and has been well documented, that consumers display what has been described as a 'status quo bias', preferring not to make changes to consumption patterns unless there is a compelling reason to do so. This bias is in addition to actual switching costs faced by consumers and will be particularly strong in telecommunications markets because consumers are locked in to a contract and must make an active decision to change suppliers. This is in contrast to other markets where consumers must make a decision every time they buy a product. The combination of status quo bias and switching costs favours Telstra as the default provider of telecommunications. A potential competitor would need to provide an inducement, usually in the form of a lower price, to overcome the bias. This effect is, of itself, a barrier to entry as it requires that the price charged by the entrant be lower than Telstra's price.

¹⁹ <http://www.accc.gov.au/content/index.phtml/itemId/666113>

- 5.15 It is no doubt for similar reasons that preselection was mandated to promote competition in long distance services, and for the same reason that the LSS was so recently declared by the ACCC to encourage broadband services.
- 5.16 In Optus' view the unbundled provision by Telstra of both wholesale services including the PSTN OA and also the LSS is likely to promote competition in markets (or exchange areas) where there are no ULLS operators. The reasons for this are as follows.
- 5.17 If operators supplying services over the LSS face a barrier to entry in the voice market then Telstra may have the incentive to use this barrier as a point of leverage to lessen competition in the market for broadband services.
- 5.18 Telstra is a significant competitor in the market for broadband services. In competing for customers, Telstra commonly bundles its voice and telephony services. Telstra also separately prices voice services to customers taking broadband services from its competitors using the LSS.
- 5.19 Absent regulation of wholesale services including the PSTN OA in a given market (or exchange area), Telstra may have the ability to raise the relative price of voice services supplied on a standalone basis to encourage customers to take a bundle of voice and broadband services from Telstra. This could be executed via a discount on the bundle of services. Competitors offering only broadband services (over the LSS) would have difficulty in acquiring customers even if they were more efficient in supplying broadband services than Telstra. This is because those customers' total cost of voice and broadband services (with voice from Telstra and broadband from the competitor) could be higher than the price offered by Telstra for the bundle of voice and broadband. This would not be in the interest of end users because competitors would not be competing on their merits.
- 5.20 It is true that leverage of the kind described above only makes sense if competition in the market for broadband services is less than perfectly competitive. However, this is likely given the existence of fixed costs in servicing this market.
- 5.21 In conclusion, LSS based operators are not equivalent to ULLS-based operators in considering the threshold for exemption application for a number of reasons including the existence of material barriers to switching between the two modes of entry and therefore should be excluded from consideration in setting the threshold for exemption application. It follows that declaration of the PSTN OA service should not be withdrawn in markets (or exchange areas) where there are where there are LSS-based competitors, but no ULLS-based competitors to Telstra.

Barriers to expansion: Minimum Efficient Scale required for DSLAM entry

- 5.22 Telstra has contended that the existence of one ULLS-based competitor is sufficient evidence to conclude that there are no material barriers to competitive entry by other ULLS-based operators.²⁰

²⁰ CRA paper, p39 [120]

- 5.23 However, Telstra itself does not go so far as to argue that one competitor *per se* would be enough to constrain Telstra's conduct.²¹ Rather, Telstra's position relies on the proposition that the existence of one ULLS-based competitor is sufficient evidence to conclude that there are no material barriers to competitive entry by *further* ULLS-based operators.²²
- 5.24 A key plank of that position is Telstra's analysis on the minimum efficient scale (MES) required for DSLAM based entry by a competitor. Telstra concludes that the minimum number of SIOs at which ULLS entry becomes viable is no more than 30 SIOs for Band 2 services.
- 5.25 Optus does not support Telstra's conclusions. Analysis undertaken by Optus indicates that the MES threshold is significantly higher at around **C-i-C C-i-C**. Optus submits that Telstra's analysis understates the MES because it appears to:
- overstate the average revenue per customer. We note that Telstra's assumptions are not supported by the results of its own imputation test reports;²³
 - understate the costs associated with supporting ULLS – particularly the costs associated with the back-end support systems; and
 - overstate customer tenure and the life of the asset.
- 5.26 Consequently, Optus submits that there are material barriers to competitive entry by ULLS-based operators, and the existence of one ULLS-based competitor in an ESA is not necessarily sufficient to conclude that further entry will be forthcoming.

Other issues relating to the “one DSLAM” threshold

- 5.27 Optus considers that the ACCC should be cautious in accepting a rule that once there are two operators in a given exchange the environment will be sufficiently competitive to withdraw resale regulation.
- 5.28 First, Optus considers that the ACCC must examine matters that remain a barrier to entry and expansion in the market, such as the constraints identified in the previous section (relating to price, non-price and capacity issues) can be resolved. The scale factors noted immediately above are also relevant here. ESAs are likely to differ in their economics, and the number of competitors that are viable will differ between one ESA and another
- 5.29 Second, the ACCC should consider the industry situation to determine if competition between two players is likely to be sufficient. Economic theory would suggest that if capacity is unlimited (or fairly costless to change) then competition between small numbers of players would yield competitive pricing. In the case of ULLS, once the fixed costs of access to an exchange

²¹ CRA paper, p39 [120]

²² CRA paper, p39 [120]

²³ The Imputation Testing and non-price terms and conditions report relating to the Accounting Separation of Telstra for the June Quarter 2007 – indicates average revenue for a residential customer across voice and ADSL services of \$96.62. This contrasts with Telstra's assumption of \$102.37.

are established capacity can be increased substantially (subject to the capacity constraints discussed elsewhere in this submission). Despite this, since competition is not a one shot game, we would expect repeated interactions between competitors to yield outcomes not entirely consistent with a competitive market (as would be predicted by a Bertrand model of competition). This will depend on the fluidity of capacity decisions. If capacity is not fluid, then the situation may resemble Cournot rather than Bertrand competition – and thus competition will certainly be enhanced by a greater number of suppliers.

- 5.30 More generally, the definition of a threshold in terms of the number of competitor DSLAMs is unlikely to be appropriate, since it depends too closely on business decisions by individual operators. It could even be the case that operators' entry decisions may be distorted by the knowledge that entry into a given ESA will itself impact on the regulatory settings in that ESA. The impact of such a threshold may not be entirely desirable from the perspective of promoting competition. The entry of a second operator should be seen as evidence that barriers to entry are reducing and that there is the potential for workable competition. However it should not be the sole or decisive factor.
- 5.31 An objective standard that does not depend on carriers' supply decisions would be more appropriate, for example, a threshold based on a conservative measure of the viability of the ESA in question for ULLS-based competition. The threshold could be determined through an analysis of cost structure, based on the number of addressable households in the ESA in question (which in turn influences the number of competitors that may be sustained at prevailing prices) or on population density. This analysis should however be coupled with evidence of entry.

Geographic scope of the threshold

- 5.32 Telstra's proposed threshold for exemption is framed in terms of the number of competitor DSLAMs deployed at a given exchange.
- 5.33 However, as discussed above in the section on the relevant markets, Optus considers that there are good reasons for the ACCC to take into account the level of competition (and competitive constraint on the incumbent) in the market defined more broadly, in addition to its exchange level analysis.
- 5.34 Optus proposes that in addition to an exchange level threshold, the ACCC should also set a threshold based on the level of competition in a more broadly defined geographical market, for example "metropolitan areas" or Band 2 areas. As an additional safeguard the ACCC should adopt a rule that regulation should not be rolled back in any broadly defined geographical market unless Telstra faces effective competition across at least 80% of that market. In the case of Telstra's application for PSTN OA exemption, Optus proposes that regulation should not be withdrawn unless Telstra faces a single ULLS-based competitor with infrastructure present in at least 80% of Band 2 exchanges.

6. Timing Matters

Phase-in period

- 6.1 Optus submits that there should be a phase-in period before any exemption application comes into effect, which should last until at least 18 months after the ACCC's final decision.
- 6.2 This will allow an effective market to form for services that will be substitutes for the declared PSTN OA. If an exemption is granted quickly, Telstra is likely to have a competitive advantage in serving wholesale customers who do not rely on ULLS but will seek access to wholesale services from Telstra or from competitors such as Optus who wholesale services over the ULLS.
- 6.3 Optus considers that access seekers will require a reasonable period of time to adjust their business plans to the new environment and transition customers away from the PSTN OA service onto other platforms.
- 6.4 Optus notes that many of its customers are on fixed term contracts which do not expire for at least three years.

Duration of exemption application

- 6.5 Given the far-reaching nature of the application and its potential impact on competition, Optus considers that any exemption application should only be granted for a limited period, to allow assessment of the impact of exemption application on Telstra's conduct and on competition in downstream markets.
- 6.6 Optus proposes that any exemption application be granted for a period of three years only, and that during that period the ACCC should monitor Telstra's conduct and pricing of the PSTN OA service and of retail LD and IDD services.
- 6.7 In this respect, the ACCC should consider its ability to address conduct under Part XIB of the Trade Practices Act. In the case in which Telstra were to refuse (or constructively refuse) to supply wholesale services, the ACCC's powers to address this conduct would likely require re-declaration or a competition notice and Federal Court action. Optus notes that the ACCC's recent success in prosecuting competition cases under these provisions is limited.

Appendix 1: Telstra's Exemption Areas with respect to Optus HFC - Sydney

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Appendix 2: Optus' DSLAM Deployment

In this appendix we set out the ESAs in the exemption area proposed in Telstra's application, compared against the Optus and OPEL DSLAM footprint.

The table is set out as follows:

- column C shows the proposed Telstra ESAs
- column D shows the name of each ESA.
- column E shows whether Optus has deployed or will deploy DSLAMs in these ESAs in the near future where:
 - Y indicates Optus has deployed / will deploy DSLAMs in the ESA in the near future,
 - N indicates that Optus has not deployed and will not deploy DSLAMs in the ESA in the near future,
 - L indicates that Optus has deployed a DSLAM but there is limited capacity available, i.e. only 1 to 25 ports available, and
 - U indicates Optus has deployed a DSLAM but Optus' allocation has reached full capacity and there is no port currently available.
- Further notes on capacity issue, expansion plans and new sites are provided in column F (NB: this column also shows the exchanges which are currently capped, ie, where Telstra has advised that expansion is not possible).
- column G shows whether OPEL has deployed or will deploy DSLAMs in these ESAs where
 - Y indicates that OPEL has deployed or will deploy a DSLAM in the ESA
 - Blank cell indicates OPEL has not and will not deploy a DSLAM in the ESA

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