

**Optus Public Submission to**  
**the Australian Competition and Consumer Commission**  
**in response to**  
**Draft Decision on Telstra's LCS and WLR Exemption Applications**

**June 2008**

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## **1. Introduction**

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- 1.1 Telstra applied to the ACCC in July (and October) 2007 for exemption from regulation of the wholesale line rental (WLR) service and the local carriage service (LCS) in 387 exchange service areas in capital city metropolitan areas.

### **The Draft Decision**

- 1.2 The ACCC has proposed to grant an exemption in respect of 229 ESAs (the ACCC's ESA footprint), which meet certain criteria including:
- 14,000 or more addressable SIOs; or
  - four or more ULLS-based competitors (including Telstra).
- 1.3 The rationale for the decision is that the declaration of the WLR and LCS services may be holding back access seekers' investment in DSLAM infrastructure which would otherwise take place in some ESAs. The ESAs that meet the ACCC's criteria are those where the ACCC views investment in DSLAM infrastructure as most economically feasible.
- 1.4 The granting of the exemption orders is subject to the following conditions:
- If an ESA is "capped", then the exemption will not apply in that ESA for any period during which the ESA remains capped; and
  - If, during the term of the order, the ULLS becomes unavailable or obsolete within an ESA for any reason other than that set out above, the exemption will cease to apply within that ESA.
- 1.5 The exemption will come into effect one year after the final decision.

### **Executive Summary**

- 1.6 Whilst Optus supports the ACCC's recognition of the exchange capping issue, its proposal to impose conditions on the exemptions which will assist in preserving competition and its setting of a transition period, the basis on which the ACCC proposes to grant the exemption is flawed.
- 1.7 This exemption application has been overtaken by events. In particular the imminent rollout of the National Broadband Network (NBN) and the shift from legacy technologies to IP-based technologies eliminate any benefit from the exemption, particularly in the corporate and government market.
- 1.8 The purpose of the exemption is to encourage competition based on the Unconditioned Local Loop Service (ULLS), and in assessing Telstra's application the ACCC has carefully examined the exemption's potential for promoting such competition. But in doing so it has failed to recognise that the days of ULLS-based competition are numbered.

1.9 Telstra's exemption application request amounts to a 'con trick' on the industry and the regulator. It is seeking approval to cease supplying resale-based services just as ULLS-based competition is about to be rendered obsolete by the migration to the NBN. The ACCC should be assessing Telstra's motives which are clearly aimed at a 'land grab' for customers ahead of migration to the NBN.

1.10 In this paper Optus will submit that:

- fibre infrastructure will be rolled out to most of the ESAs within the ACCC's ESA Footprint by the end of 2009 – particularly if the FTTN operator is Telstra.
- removing regulated access to LCS and WLR would *not* encourage access seekers to invest in their own infrastructure given the imminent deployment of a NBN, which will strand DSLAMs (Telstra's planned rollout would make this stranding complete). Yet the exemption is aimed at encouraging new DSLAM investment – this is a waste of resources, and contrary to the criteria the ACCC must have regard to.
- Optus is already investing in IP-based technologies, independent of Telstra's exemption application. But high switching costs will prevent existing customers from making the transition to IP for some years since their systems are configured for legacy technologies. The migration must therefore be gradual **CiC**. If the exemption goes ahead Optus must either make wasteful investments in old technology – or face losing customers who are unable to migrate rapidly to IP. This in turn would cause a loss of scale which would reduce the viability of Optus' investment in IP. Far from driving investment in new technology, this exemption will impede it.
- the exemption would leave no competitive constraint preventing Telstra from raising the price of WLR and LCS wholesale services to CSPs supplying services to corporate and government customers.
- the exemption would entrench Telstra's dominant position in fixed line telecommunications going forward into the new NBN environment – by allowing it to squeeze out resale competitors.

1.11 Current developments including the shift to NBN and IP-based technologies will have an immense impact on the competitive landscape in the industry. These developments are of such magnitude that they undermine the foundations of the current telecommunications access regime. As a result Telstra's current exemption applications will have consequences very different to those that could have been anticipated only a few years ago. Optus urges the ACCC to take a step back and make a hard-nosed assessment of what this exemption application is really likely to achieve.

1.12 The competitive impact of an exemption would be severe in the corporate and government market. If the ACCC presses ahead with granting an exemption, Optus urges it to consider a limitation on any exemption so that it would not apply to services supplied to corporate and government customers – at least until **CiC**, when the migration will be complete.

## 2. Optus' Investment in IP-based Technology

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- 2.1 Independent of any exemption application, many telecommunications companies including Optus are already moving from inefficient legacy networks to new technologies based on a core IP network. Optus Business' investment in IP-based technology is described in this section.
- 2.2 Yet, as will be explained further below, the exemption will not encourage investment in such technologies. A key reason for this is that high switching costs will prevent Optus' existing customers from making the transition to IP for some years. In fact the exemption could only encourage counter-productive investment in the old networks – or (more likely) reduce the viability of the new investments in IP-based technologies.

### Overview of Optus Evolve

- 2.3 Optus Evolve™ is Optus' new generation converged core IP network and business communications product suite, used for delivering “converged business applications”.
- 2.4 Optus Evolve can be contrasted with traditional point-to-point enterprise networks, which connect company sites using fixed data links. These ‘legacy’ networks are often difficult to upgrade and costly to maintain. They tend to be too slow and inflexible for converged applications such as voice over Internet protocol (VoIP) and videoconferencing, and unable to cope with new emerging multi-media applications. They have limited scalability and a mixture of access types which has resulted in an assortment of protocols and features adding cost and complexity. By contrast IP-based networks such as Optus Evolve can result in efficiency gains and cost savings.
- 2.5 A customer presentation entitled “Introducing Optus Evolve” is attached at Appendix A. CiC
- 2.6 Optus would be happy to provide the ACCC with further information on the Optus Evolve network and product suite if required.

### The relevance of Optus' IP-based core network to this exemption application

- 2.7 No doubt the ACCC would wish to encourage investment in new technologies, such as Optus' investments based on a core IP network. However Optus submits that the exemption *will not* encourage such investment.
- 2.8 The first point to note is that Optus and other network operators are *already* investing in new infrastructure, independent of Telstra's exemption application. Optus' investment in IP-based technology has been driven by developments in technology and customer requirements. The decision to invest in the Optus Evolve network predates Telstra's exemption application by a number of years. However, these investments require scale to succeed; scale that Optus has built gradually. CiC The exemption will not encourage other carriers to make investments in new infrastructure as it denies those other carriers the opportunity to build scale.

- 2.9 The second point relates to Optus Business' need for specialised and complex features **CiC**. As Optus has previously submitted, corporate customers often require a number of specialised and complex features (for example, "Voicemail on Huntgroups").<sup>1</sup> **CiC**
- 2.10 Optus' investments in IP-based technology will enable it to provide services with complex features on its own network: Optus will **CiC** become capable of providing features comparable to the ones under discussion.
- 2.11 Crucially however, high switching costs will prevent Optus' existing customers from making the transition to IP for some years. The migration must therefore be gradual. It is important to stress that the gradual nature of the migration is driven by the needs of customers. **CiC** As a result the exemption – which is aimed at forcing existing end users off Telstra's network onto competitors' networks – will prevent corporate users getting access to the complex features they need.
- 2.12 It follows that the exemption's impact on efficient investment will be counterproductive. If the exemption was granted the only way Optus could supply its existing customers without reliance on Telstra is by making separate duplicative investments in complex features using legacy technologies – ie technologies that are already being superseded by IP-based technologies. That is, the only sort of investment the exemption could actually encourage is inefficient and wasteful investment in old systems. On the other hand if Optus did not make these wasteful investments in old technology, then it may lose customers who are unable to migrate rapidly to Evolve. This in turn would cause a loss of scale which would reduce the viability of Optus' investment in Evolve. Far from driving investment in new technology, the exemption will impede it.

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<sup>1</sup> For a more detailed list, refer to Optus' January 2008 Supplementary Submission, *Impact of WLR / LCS Exemptions in the Corporate and Government Market Segment*

### **3. Likely Timing of NBN Fibre Roll-out to the ACCC's ESA Footprint**

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- 3.1 In considering whether access seekers currently utilising regulated LCS and WLR would make the investments required to participate in ULLS-based competition in the event of an exemption being granted, the ACCC must take into account the likely timing of the fibre roll-out relating to the National Broadband Network (NBN) in its proposed ESA footprint.
- 3.2 In this section Optus considers this issue and concludes that fibre infrastructure will be rolled out to the majority of the ESAs within the ACCC's ESA Footprint by the end of 2009 – particularly if the FTTN operator is Telstra.

#### **Government objectives**

- 3.3 The Federal Government intends to build a NBN, in partnership with the private sector, which will deliver a dedicated downlink transmission speed of at least 12 Megabits per second (Mbps) over each connection provided to a premises, using FTTN or FTTP architecture, and that will be available to 98 per cent of Australian homes and businesses. It has committed to provide funding of up to \$4.7 billion and to consider regulatory changes necessary to facilitate the deployment, over five years, of the NBN, and it has published a request for proposals to roll-out and operate the network.<sup>2</sup>
- 3.4 It is not in question that the new fibre network will be rolled out in the ESAs in the ACCC's ESA footprint. The key question is when this will occur.
- 3.5 The Federal Government has announced its intention to decide on the preferred FTTN operator by the end of this year. The selected provider can start rolling out the network any time from the beginning of January 2009 and will presumably do so as quickly as possible.
- 3.6 The Government has set an objective that the new NBN will be rolled out and made operational progressively over five years beginning once the Government decides on the preferred supplier by the end of 2008. That is the objective is that the network will be complete (able to serve 98% of the population) within five years. However the network is likely to be operational in many areas well within that timeframe.

#### **Telstra's intentions**

- 3.7 This section examines the situation if Telstra was the preferred supplier. Optus does not mean to imply that the NBN operator will necessarily be Telstra. However, we believe that the ACCC must consider the downside risks of its decision in this application – if only because access seekers will certainly be considering those risks in making investment decisions. And in terms of both the impact on competition and the possibility of stranded investment, those risks will be highest if the NBN operator is Telstra. So in

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<sup>2</sup> DBCDE, April 2008, *Request for Proposals to Roll-Out and Operate a National Broadband Network for Australia*

this section focuses on the possibility that the NBN operator is Telstra, in order to examine the greatest potential risks to competition from the ACCC's draft exemption decision, and the likely impact on access seekers' investment decisions.

- 3.8 Optus submits that the rollout of the NBN will most likely begin immediately after the announcement of preferred operator. With regard to beginning the FTTN rollout, Telstra has stated publicly that:<sup>3</sup>

*“while its charges would be higher than G9's, Telstra has the infrastructure and finances in place for a very fast roll-out.”*

*“Telstra would be ready to start rolling out a high-speed fibre-optic broadband network within two weeks if the Federal Government and competition watchdog gave it the green light to proceed.”*

- 3.9 Optus submits that the rollout of the NBN will most likely progress very rapidly – it must do so if the NBN operator is to meet the Government's timeframe, which requires cutover of approximately 70,000 nodes in 5 years (over 1,000 a month). Assuming there are approximately 40 nodes per exchange, then this means 25 exchanges will be fibred each month. On the timing of the FTTN rollout, Telstra has stated publicly that:<sup>4</sup>

*“within 9 to 12 months [of receiving the necessary assurances from the Government] Telstra will begin switching on the first FTTN enabled exchanges. From 9 to 36 months Telstra will activate the FTTN network progressively as each exchange area is upgraded. We expect to complete up to 33% of exchange areas within the first 18 months and up to 67% within 36 months...”*

- 3.10 As a conservative estimate Optus expects the first tranche of exchanges to be activated by the end of 2009. The relevant question for this inquiry, however, is: when is the rollout likely to have reached the ESAs within the ACCC's ESA Footprint? The answer to this question depends on which exchanges the FTTN operator is likely to target for early deployment and activation.
- 3.11 The question then becomes, is it likely that the ESAs within the ACCC's ESA Footprint would be among the first exchanges to be targeted for rollout?
- 3.12 Optus submits that the answer is 'yes': the ESAs within the ACCC's ESA Footprint would most likely be among the first tranche of exchanges to be targeted for FTTN rollout – particularly if the FTTN operator is Telstra. There are three main reasons for this conclusion.
- 3.13 First, the number of ESAs within the ACCC's ESA Footprint (229) is relatively small, and at 25 exchange areas a month (as estimated above), it would take under a year for all of these exchanges to be fibred.
- 3.14 Second, the ESAs within the ACCC's ESA Footprint are demonstrably those most commercially attractive to telecommunications providers (they have been

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<sup>3</sup> ABC News, 7 June 2007, “Telstra 'ready to roll out' broadband plan”  
<http://www.abc.net.au/news/stories/2007/06/07/1944591.htm>

<sup>4</sup> Telstra, May 2007, Advertisement in major newspapers, Telstra has a broadband plan for Australia



selected because of the size of the addressable market and the number of existing ULLS competitors). The ESAs will be most attractive to the FTTN operator for the same reason. The ACCC itself appears to have recognised the FTTN operator is likely to roll out selectively to exchanges where there is most competition: “encouraging transition to ULLS-based competition in particular ESAs... will be a key driver of this fibre deployment... fibre upgrades being realised in a more timely manner.”

- 3.15 Third, ULLS-based competition, compared to resale competition, has a substantial negative impact on Telstra’s profits (since wholesale prices are based on cost, rather than on what the market will bear). Thus Telstra has a strong incentive to eliminate ULLS-based competition as quickly as it can. If Telstra is the preferred supplier, it is likely to prioritise FTTN rollout to the ESAs where there is most ULLS-based competition: ie, the ESAs within the ACCC’s ESA Footprint.
- 3.16 On this basis Optus concludes that fibre infrastructure will be rolled out to the majority of the ESAs within the ACCC’s ESA Footprint by the end of 2009 – particularly if the FTTN operator is Telstra. This likelihood is crucial to the question of whether access seekers currently utilising regulated LCS and WLR would make the investments required to participate in ULLS-based competition in the event of an exemption being granted.
- 3.17 In this regard it is crucial to understand that the NBN, as a FTTN network, cannot be unbundled – at least not economically (as set out in Appendix C). Telstra has stated its intention to completely strand competitor DSLAM investment in exchanges. If Telstra is the NBN operator, then (if its statements last year are any guide) access seekers’ investments in DSLAMs in all fibred exchanges will be unable to serve any customers and thus completely stranded by its network deployment – by the end of 2009.<sup>5</sup>

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<sup>5</sup> With other proposals (eg the G9 proposal as submitted last year) DSLAMs are likely to remain in exchanges and will be able to serve nearby addresses (up to a third of lines). Nevertheless even then the economics of the investment would be severely impacted, given the reduced addressable market.

#### **4. Will investment take place?**

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- 4.1 The ACCC has taken the view that the removal of regulation “would have a strong positive impact upon the incentives for investment by access seekers in their own infrastructure” and concludes that the exemption is likely to “encourage access seekers currently utilising regulated LCS and WLR to invest in ULLS-based competition...”.<sup>6</sup>
- 4.2 Optus considers that the ACCC has not taken into account adequately the impact of the NBN on the investment decision. As a result its conclusion is mistaken. Removing regulated access to LCS and WLR would *not* encourage access seekers to invest in their own infrastructure given the imminent deployment of a NBN – subsidised by \$4.7 billion of government funding – which would strand any such investments almost immediately.
- 4.3 This conclusion is even stronger with regard to infrastructure used to supply services to corporate and government customers.

#### **Impact of the NBN on the Investment Decision**

- 4.4 The ACCC has taken the view that the exemption is likely to “encourage access seekers currently utilising regulated LCS and WLR to invest in ULLS-based competition...”.<sup>7</sup>
- 4.5 A key factor impacting on this issue is the likelihood of that investment being stranded due to the rollout of the NBN. In its draft decision the ACCC recognises this, noting the “possibility” that “the investment would become stranded because the fibre would be deployed to the cabinet, bypassing the need for the exchange”.
- 4.6 Optus notes that stranding is a reality – not just a possibility – particularly if Telstra is the NBN operator. The NBN, as a FTTN network, cannot be unbundled – at least not economically (as set out in Appendix C). If Telstra is the NBN operator, then (if its statements last year are any guide) access seekers’ investments in DSLAMs will be completely stranded by its network deployment.<sup>8</sup>
- 4.7 The ACCC appears to have taken the position that the identified “possibility of their investment being ‘stranded’” would not deter access seekers from investing in new infrastructure as a result of its view on three key matters of fact: namely that access seekers would:<sup>9</sup>

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<sup>6</sup> ACCC, April 2008, Draft Decision, p78

<sup>7</sup> ACCC, April 2008, Draft Decision, p78

<sup>8</sup> With other proposals (eg the G9 proposal as submitted last year) DSLAMs are likely to remain in exchanges and will be able to serve nearby addresses (up to a third of lines). Nevertheless even then the economics of the investment would be severely impacted, given the reduced addressable market.

<sup>9</sup> ACCC, April 2008, Draft Decision, p.54. The ACCC also noted that encouraging transition to ULLS-based competition could lead to a more rapid fibre rollout in particular ESAs. However this point relates to a result flowing from investment in additional DSLAMs – it is not relevant to the question of whether such investment would actually take place.

- (a) benefit from switching to ULLS-based service provision despite the fact that the period of ULLS-based service provision would be of limited duration (since a period of ULLS-based service provision would leave the access seeker better positioned for the transition to fibre: “it could allow access seekers to build their reputation and customer base...”);
- (b) have sufficient certainty about the length of time they would have to recoup their investment (provided the operator of the new fibre network released a sufficiently certain migration timetable: “...when the reasonable notification period is clarified, it will reduce the uncertainty of any fibre upgrade”); and
- (c) have sufficient time to recoup their investment before fibre was deployed in a given ESA and the DSLAM stranded: “an efficient access seeker can make a return on its DSLAM investment within approximately two years...”.

*Would access seekers benefit from a temporary switch to ULLS?*

- 4.8 The ACCC appears to have taken the view that access seekers would benefit from switching to ULLS-based service provision despite the fact that the period of ULLS-based service provision would be of limited duration (since a period of ULLS-based service provision would leave the access seeker better positioned for the transition to fibre):

*“the move to ULLS-based provision of fixed voice services prior to a fibre upgrade... could allow access seekers to build their reputation and customer base through this deeper level of investment because of the ability to provide differentiated products. This could allow access seekers to better transition to an alternative service (possibly a wholesale bitstream service) and make it more viable to compete in the downstream market if and when fibre is deployed.”*

- 4.9 This reasoning is erroneous since it does not adequately take into account A) the economics of ULLS-based service provision, B) the practicalities of ULLS rollout and C) the nature of access arrangements in the NBN.
- 4.10 Optus considers that the “benefits” of a temporary switch to ULLS-based service provision as outlined by the ACCC have not been fully demonstrated. It is not clear why an access seeker seeking to transition to a wholesale bitstream service (after the transition) would be better placed (or find it more viable to compete) if that access seeker was (before the transition) competing using the ULLS rather than the WLR. The ability to provide differentiated products will be much reduced under the new fibre network compared to current unbundled local loop regime, since (as set out in Appendix C) the new network cannot be unbundled (at least, not economically). It is questionable whether access seekers would find it worthwhile to make an infrastructure investment in order to build a reputation based on providing products and service levels of a type they will no longer be able to provide in the new environment.

- 4.11 Investments made by access seekers to support ULLS-based service provision (such as provisioning systems) are unlikely to be capable of being transitional to NBN-based services. It is highly likely that the NBN operator would deploy (and require access seekers to deploy) new provisioning systems – meaning access seekers’ investments to support legacy ULLS-based competition would be wasted.

*Would access seekers have sufficient certainty about timing of fibre deployment?*

- 4.12 The ACCC appears to have taken the view that access seekers would have sufficient certainty about the length of time they would have to recoup their investment: “...when the reasonable notification period is clarified, it will reduce the uncertainty of any fibre upgrade”.
- 4.13 This view appears to be based on an expectation that the operator of the new fibre network will be required to provide access seekers with notification of the proposed fibre rollout a reasonable period of time before the actually rollout occurs in the relevant ESA. The ACCC appears to suggest that two years notice would be a reasonable notice period: “...in New Zealand, two years notice is required for a major network modernisation such as a fibre upgrade.”
- 4.14 This comment shows scant regard for the Government’s intentions under its NBN tender. The Government wants the NBN to be rolled out within five years to 98% of the population, which will require over 1,000 nodes to be deployed each month. There will be no room for notice periods of months or years. Within the first 12 months almost all the exchanges in the ACCC’s footprint will have been cutover. That is, the ULLS will be a legacy.
- 4.15 Optus notes that the Government’s Request for Proposals document for the NBN does not include any requirement that access seekers be provided with notification of the proposed fibre rollout, reasonable or otherwise. Indeed, Government policy appears to be that the NBN will be rolled out as rapidly as possible.<sup>10</sup>
- 4.16 If the requirement for a reasonable notification period does not eventuate, access seekers will need to make decisions on whether to invest in an environment of significant uncertainty over the length of time they will have to recoup their investment before it is stranded due to fibre deployment.

*Would access seekers have sufficient time to recoup their investment?*

- 4.17 The ACCC appears to have taken the view that access seekers would have sufficient time to recoup their investment before fibre was deployed in a given ESA and the DSLAM stranded: “an efficient access seeker can make a return on its DSLAM investment within approximately two years...”.
- 4.18 It is relevant to consider that:
- The date of release of the ACCC’s Final Decision will be no earlier than August 2008;

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<sup>10</sup> Malcolm Farr, Daily Telegraph, 10 March 2008, *Broadband promise hard to keep*.

- Access seekers making investments as a result of the exemption decision would begin the process of investment when the final decision is made – and in addition to the time required to plan and implement the DSLAM investment, it also typically takes 6 to 12 months for an access seeker to get access to a Telstra exchange – so to take a very conservative assumption, an access seeker could begin providing DSLAM-based services no earlier than the date when the exemption comes into effect (the ACCC has recognised the need for this phase-in period).
  - The exemption Order is proposed to come into effect 12 months after the date of release of the ACCC’s Final Decision (so no earlier than August 2009);
  - According to the ACCC it takes 24 months after that for the investment to be recouped: Aug 2011.
- 4.19 The ACCC appears to be contemplating that access seekers will have two years (eg, from August 2009 to August 2011) in which to recoup any investment in infrastructure made as a result of the draft decision. This view is wrong.
- 4.20 Optus submits that it is highly likely that the FTTN will have been rolled out to the ESAs within the ACCC’s ESA Footprint substantially before August 2011. As noted above, it is likely that fibre infrastructure will be rolled out to the majority of the ESAs within the ACCC’s ESA Footprint by the end of 2009 – particularly if the FTTN operator is Telstra.
- 4.21 This timeframe allows any suppliers who make the decision to invest in DSLAM infrastructure as a result of the ACCC’s final decision on this exemption application only a few months – in any event less than a year – to recoup that investment before the infrastructure is stranded by fibre rollout.
- 4.22 This is insufficient time for “an efficient access seeker” to make a return on its DSLAM investment according to the ACCC’s view: “an efficient access seeker can make a return on its DSLAM investment within approximately two years...”.
- 4.23 Further, Optus submits that in fact “an efficient access seeker” would require longer than two years to make a return on its investment. While it is true that an efficient access seeker could make a return on an *incremental investment in DSLAM equipment in an individual exchange* within two to three years, this is not the relevant question. The ACCC is seeking to promote a shift from service provision based on resale to service provision based on DSLAMs. Access seekers making such a shift would need to invest in significantly more resources than just electronics in an individual exchange. Even if backhaul could be leased, new provisioning systems and network management systems would still be required. Optus’ own consumer DSLAM rollout in its entirety has a payback period of **CiC**.
- 4.24 Consequently, Optus considers it unlikely that any access seeker contemplating making an investment as a result of this exemption application would have sufficient time to recoup their investment before that investment was stranded as a result of fibre deployment. In these circumstances, access

seekers would be unwise to make substantial capital investments in DSLAM infrastructure.

- 4.25 Optus notes from its own experience that its current consumer DSLAM rollout is planned to reach 366 DSLAMs by July 2008, before the ACCC's final decision on this application. Optus notes that some **CiC** of the ESAs within the ACCC's ESA Footprint are outside Optus' consumer DSLAM footprint – even after the completion of the rollout, as set out in the following table: **CiC**
- 4.26 According to the logic of the draft decision, one would expect that Optus would extend its rollout to those ESAs within the ACCC's ESA Footprint yet not covered by Optus' DSLAM footprint. However **CiC** in the current environment, with stranding not merely a risk but a certainty, to make such investments would not be a sensible commercial decision. This analysis must apply to an even greater extent to providers who currently rely on resale and do not have all the necessary backhaul and network management systems and other required infrastructure in place for ULLS-based service provision.
- 4.27 In conclusion Optus considers it highly unlikely that there will be any investment in infrastructure made as a result of the exemption decision.

#### **Corporate and government customers**

- 4.28 Corporate customers often require a number of specialised and complex features, for example, "Voicemail on Huntgroups", as Optus has previously submitted.<sup>11</sup> **CiC**
- 4.29 The ACCC has taken the view that the exemption decision is likely to "encourage access seekers currently utilising regulated LCS and WLR to invest in ULLS-based competition...".<sup>12</sup>
- 4.30 Optus notes that some **CiC** of the ESAs within the ACCC's ESA Footprint are outside Optus' business DSLAM footprint – even after the completion of the rollout, as set out in the following table: **CiC**
- 4.31 While the draft decision does not include analysis relating specifically to services supplied to corporate and government customers, according to the logic of the draft decision, it appears that the ACCC anticipates that the exemption will encourage Optus to make investments to fill in the gaps in its DSLAM coverage and move to serving all its business customers in the exemption area through ULLS and make additional investments to enable these complex features to be provided to all existing customers on its own network.
- 4.32 However, as noted above, it is likely that fibre infrastructure will be rolled out to the ESAs within the ACCC's ESA Footprint by the end of 2009 – particularly if the FTTN operator is Telstra. – particularly if the FTTN operator is Telstra.

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<sup>11</sup> For a more detailed list, refer to Optus' January 2008 Supplementary Submission, *Impact of WLR / LCS Exemptions in the Corporate and Government Market Segment*

<sup>12</sup> ACCC, April 2008, Draft Decision, p78

- 4.33 For Optus to recover its incremental investment in the DSLAM equipment alone in an individual exchange would require two to three years of providing DSLAM-based services in that exchange (or two years, according to the ACCC). In addition to the time required to plan and implement the DSLAM investment, Optus notes that it typically takes 6 to 12 months for an access seeker to get access to a Telstra exchange. Accordingly, it would be very conservative to assume that an access seeker could begin providing DSLAM-based services from the date the exemption comes into effect. Nevertheless, based upon this conservative assumption, Optus would require until (best case) August 2011 or (worst case) August 2012 to recover that incremental investment.
- 4.34 Consequently, even considering investment in DSLAMs alone, Optus would not have sufficient time to recoup its investment since that investment is likely to be stranded by the end of 2009 as a result of fibre deployment arising out of the Government's NBN tender.
- 4.35 Further, Optus notes that the investments required to enable complex features to be provided on its own network to existing customers are very costly. Relevant costs include software and hardware costs, licensing fees paid to the switch vendor, development costs, which include internal testing and upgrades, changes to billing and IT provisioning systems. The projects required to introduce new features take time. Once a new feature is introduced, the customer migration from Telstra services to the Optus internal service is also costly and time-consuming. Productisation alone is very costly and time-consuming. For example, the BNP Enhancement project,<sup>13</sup> carried out by Optus during 2004-2006, which introduced four new features, cost CiC. And this was a relatively simple project, since these features were already available for some Optus products. The project merely involved work required to make it possible to supply these features with the BNP product, so the costs are only a subset of the full range of costs that would be required to introduce a new product not previously supplied by Optus. Optus estimates that productisation of a single new feature is likely to cost CiC.
- 4.36 Further, any additional investments made by Optus to enable complex features to be provided on its own network to existing customers who currently subscribe to these services would be investments in legacy technologies that are already being superseded by IP-based technologies (since the equipment and systems of those existing customers are configured for legacy technologies). This fact is relevant to the issue of whether Optus could recover the investment, because new customers will not want legacy services, and thus their revenues will not be available to recover the investment in such services. These legacy services will in the future be supplied to a small and dwindling customer base as customers migrate to new services. Optus would not be able to recoup any such investments.
- 4.37 Consequently, Optus submits that it would not be economically feasible to make investments to provide complex features over its own network to

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<sup>13</sup> Further details of this project are provided at Appendix B.

existing customers in conjunction with DSLAM-based services, and the exemption will not alter this position.<sup>14</sup>

- 4.38 In conclusion, Optus submits that the exemption will not promote new investment in infrastructure, particularly in the corporate and government market sector. In fact it would undermine investment by disrupting Optus' migration plans for business customers. Until customers are ready to migrate to IP-based technology Optus would be forced to cease supply to these customers.

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<sup>14</sup> This is not to say that Optus will not invest in infrastructure capable of providing complex features. In fact as noted earlier in this submission Optus is already investing in NGN technology which will be capable of providing complex features comparable to the ones under discussion. However, it is important to note that this latter investment is: A) not a result of the exemption (since it was begun prior to the exemption); and B) not capable of being encouraged by the exemption, since even after this investment has been made, the complex features under discussion cannot be provided to all existing customers with legacy systems via DSLAM-based services.



## **5. Would investment be efficient?**

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- 5.1 The ACCC has concluded that exemption would encourage access seekers to invest in ULLS-based competition, “and if they did so, that this would be an efficient outcome.”<sup>15</sup>
- 5.2 Optus considers that in assessing the efficiency of any investment it considers likely to be encouraged by the exemption, the ACCC has not adequately taken into account the impact of the NBN in stranding those investments. Optus submits that investment of resources in equipment that will be stranded almost immediately is wasteful of society’s resources, and cannot be considered “an efficient outcome”.
- 5.3 Further, the ACCC has not taken into account that the investments that it considers likely to be encouraged in the corporate and government sector (eg, any additional investments made by Optus to enable complex features to be provided on its own network) are investments in legacy technologies that are already being superseded. To invest in legacy technologies that will be rendered obsolete almost immediately is counter-productive, and not an efficient course of action.

### **Impact of the NBN on the Efficiency of Investment**

- 5.4 According to the ACCC, productive efficiency is achieved where individual firms produce the goods and services that they offer at least cost. This is a static concept, which must be balanced with dynamic considerations. By contrast, dynamic efficiency reflects the need for industries to make timely changes to technology and products in response to changes in consumer tastes and in productive opportunities.
- 5.5 Optus submits that the treatment of dynamic efficiency is incomplete. Dynamic efficiency requires achieving an efficient allocation of resources over time. In this sense, promoting dynamic efficiency is not only about promoting innovation; it also incorporates the objective of minimising the production cost of services over time – which logically extends to avoiding unnecessary waste and duplication of investments.
- 5.6 The ACCC’s draft decision fails to promote dynamic efficiency in this sense. If an exemption decision did encourage access seekers to make investments in DSLAM equipment which were stranded almost immediately, this would represent an essentially pointless detour on the path to the next technological advance – and an enormous waste of society’s resources.
- 5.7 Yet the ACCC appears to take the view that this detour is a positive development. In its draft decision, it notes with approval that encouraging transition to ULLS-based competition could lead to a more rapid fibre rollout in particular ESAs. That is, the ACCC believes the exemption would encourage DSLAM build in a given ESA which would in turn tempt the FTTN operator to target that ESA for early fibre rollout (which would strand the

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<sup>15</sup> ACCC, April 2008, Draft Decision, p78

DSLAMs) – and this accelerated obsolescence is seen as a positive. Optus submits that the ACCC’s reasoning in this area – in addition to apparently encouraging anticompetitive behaviour by the incumbent – appears to reflect a focus on the “wrong sort” of progress (which cannot be in the LTIE). If the FTTN operator prioritises a particular ESA (with ULLS competitors) for early fibre rollout over another ESA (without ULLS competitors), this action would not bring new technologies to market faster in an overall sense, and should certainly not be interpreted as evidence of innovation and technological dynamism. The ACCC should be highly suspicious of such behaviour since it would destroy competition.

- 5.8 Optus submits that stranded investment is an inefficient duplication of resources and to encourage it cannot be in the long term interests of end users.
- 5.9 The ACCC concluded in its draft decision that “while there may be some allocative and productive efficiency losses in the short-term... these would be outweighed [by] the long-term benefits flowing to consumers from the increased ULLS-based competition.”<sup>16</sup>
- 5.10 Optus submits that there will be no such “long-term benefits” flowing to consumers, for the simple reason that there will be no ULLS-based competition in the long term. As noted above, the exemption decision will only come into effect in August 2009, and it is likely that fibre infrastructure will be rolled out to the ESAs within the ACCC’s ESA Footprint by the end of 2009 – particularly if the FTTN operator is Telstra.
- 5.11 The period of “increased ULLS-based competition” which the ACCC sees as a likely consequence of the exemption is destined to be short-lived. Consequently the exemption’s effects will be limited to its short-term consequences – identified by the ACCC as “allocative and productive efficiency losses.”

### **Corporate and government customers**

- 5.12 Any investments made as a result of the exemption in order to supply services to corporate and government customers (eg, any additional investments made by Optus to enable complex features to be provided to all existing customers on its own network) would be even worse (in terms of productive and dynamic efficiency outcomes) than investments in DSLAMs.<sup>17</sup>
- 5.13 The reason is that any additional investments made by Optus to enable complex features to be provided on its own network to existing customers who currently subscribe to these services are investments in legacy technologies that are already being superseded by IP-based technologies.

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<sup>16</sup> ACCC, April 2008, Draft Decision, p79

<sup>17</sup> As noted above, the draft decision does not include analysis relating specifically to services supplied to corporate and government customers. Nevertheless, according to the logic of the draft decision, it appears that the ACCC anticipates that A) the exemption will encourage Optus to make investments to fill in the gaps in its DSLAM coverage and move to serving all its business customers in the exemption area through ULLS and make additional investments to enable these complex features to be provided to all existing customers on its own network, and that B) if it did so, “this would be an efficient outcome”.

- 5.14 As set out earlier in this submission, Optus is currently undertaking investment – independent of Telstra’s exemption application – in IP-based technology (Optus Evolve) which will replace all these services and be capable of providing complex features comparable to the ones under discussion within two years. Some of these features will be available under the Optus Evolve network by the time the ACCC’s exemption decision comes into effect.
- 5.15 The obvious question which follows is: why then does Optus require continuing access to Telstra’s network?
- 5.16 The answer is that Optus’ existing customers are not all ready to migrate to the Optus Evolve network immediately. When installing a telecommunications network solution, corporate and government customers must incur substantial costs in hardware, IT systems and staff training, just to name a few. As a result, once the decision is made and the costs incurred, corporate and government customers typically remain with the current system for a number of years. Unlike Telstra, we do not force technologies on customers; rather we let them choose when to upgrade.
- 5.17 The systems and equipment owned and operated by Optus’ existing customers’ are configured for legacy technology and so migration to an IP-based network – although ultimately advantageous in a number of ways – would be costly for the customer. Optus expects its existing customers to migrate to the Optus Evolve network gradually: some will be ready to upgrade their systems sooner, and others will still see value in their legacy systems for a number of years before making the transition. **CiC**
- 5.18 Several points follow from this discussion.
- 5.19 First, the exemption will not encourage Optus to undertake investment in order to provide complex features to new customers under its own network – since Optus has already undertaken (or is already in the process of undertaking) just such an investment in the form of a new IP-based network.
- 5.20 Second, even after Optus has completed its investment in a new IP-based network, it will not be able to provide the complex features to the majority of existing customers who do not wish (or cannot afford) to migrate immediately to the new IP-based network.
- 5.21 Thus, if the exemption is to promote any investment by Optus in order to provide complex features at all,<sup>18</sup> such investment would have to be in legacy technology, which would be used as a “stop-gap” measure to supply services to a small and dwindling customer base as customers migrate to the new IP-based network.
- 5.22 This brings us to the question of whether such investment would be efficient.

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<sup>18</sup> As noted in the previous section it is highly unlikely that the exemption could promote any investment by Optus in complex features provided over legacy technology, since the small and dwindling customer base taking these features would not provide sufficient revenue for Optus to be able to recoup any such investments.

- 5.23 As noted above, promoting dynamic efficiency involves minimising the production cost of services over time – which logically extends to avoiding unnecessary waste and duplication of investments.
- 5.24 In this regard, it is relevant to note that investment in legacy technology to provide complex features is very costly and time-consuming. As noted above, Optus estimates that productisation of each single new feature is likely to cost **CiC**.
- 5.25 Optus submits that if the exemption decision did encourage access seekers to make investments in investment in legacy technology to provide complex features, this would be an inefficient waste of resources. Further, it would divert scarce capital from investment to produce genuine advances in technological infrastructure (such as the Optus Evolve network).
- 5.26 Further, if Optus did not make these wasteful investments in old technology, then it may lose customers who are unable to migrate rapidly to Optus' IP-based network (Evolve). This in turn would cause a loss of scale which would reduce the viability of Optus' investment in Evolve. Far from driving investment in new technology, this exemption will impede it.
- 5.27 To attempt to encourage investment in legacy technologies that will be rendered obsolete almost immediately is counter-productive, and not an efficient course of action. The exemption cannot encourage efficient investment, but assuming it has any impact on investment at all, it may in fact deter efficient investment.

## **6. Impact on competition**

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- 6.1 The ACCC states that is satisfied that competition will be promoted by the granting of exemptions within the ACCC's ESA Footprint.<sup>19</sup> It also notes the underlying policy intent of Part XIC of the TPA, which does not intend that the access regime "impose regulated access where existing market conditions already provide for the competitive supply of services."
- 6.2 Optus considers that in reaching its conclusion the ACCC has not taken into account the unique requirements of corporate and government customers including requirements for complex features and for whole-of-business service, and as a result its conclusion is not valid, at least for the corporate and government market.
- 6.3 Optus submits that the availability of ULLS in the ESAs within the ACCC's ESA Footprint does not provide an adequate substitute for the WLR service in the corporate and government market. As a result Telstra will be able to operate without competitive constraint in the pricing of the WLR and LCS wholesale services to CSPs supplying services to corporate and government customers in the event the exemption is granted.
- 6.4 The exemption will allow Telstra to grow its market share at the expense of its competitors through a refusal to supply the affected services – and thereby entrench its dominant position in fixed line telecommunications going forward into the new NBN environment.

### **Corporate and government customers**

#### *Market definition*

- 6.5 Optus in its supplementary submission did not address the question of whether, technically, corporate and government customers constitute a "market". Optus notes the ACCC has not found it necessary to "be definitive or determinative about the market definition", preferring to carry out "a broad analysis of the state of competition in the corporate customer segment".<sup>20</sup>
- 6.6 Accordingly, Optus' approach to date has been to focus on the *impact* of the proposed exemption on competition in the provision of services to corporate and government customers. This impact is clearly different to the mass market impact, as a result of the unique requirements of corporate and government customers including requirements for complex features and for whole-of-business service (as set out in our January supplementary submission).
- 6.7 For the purposes of considering this exemption application at least, Optus submits that either a separate retail market can be defined for the provision of services to corporate and government customers, or at least that there is a very significant market segment made up of corporate and government customers with particular service requirements, distinct from the mass market.

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<sup>19</sup> ACCC, April 2008, Draft Decision, p69

<sup>20</sup> ACCC, 2004, Competition in the corporation customer segment of telecommunications markets, p15

- 6.8 To be more specific, Optus submits that, in the product dimension, corporate and government customers (defined using an appropriate measure yet to be determined) typically require distinct services which are delivered using specialised technologies, and that mass market services are not substitutable for those services. For example, the “voicemail on huntgroups” feature<sup>21</sup> is a distinct service required by large organisations but not by mass market consumers and delivered using legacy technology which has been installed on Telstra’s network but not on Optus’ network. They also typically require services to be provided on a whole-of-business basis by a single provider to numerous separate premises in different locations (as discussed in our January submission) – features which have been recognised by the ACCC.<sup>22</sup>
- 6.9 The boundaries of a market may be defined using the ‘hypothetical monopolist’ test, which employs a SSNIP<sup>23</sup> analysis to investigate the substitution possibilities.<sup>24</sup>
- 6.10 Consider a hypothetical monopolist in a proposed “market” for corporate and government customers (“the monopolist”). If the monopolist chose to implement a SSNIP, that SSNIP could not be defeated by potential competitors operating in the mass market, because complex features are provided using specialised technologies which are not required for mass market service provision.
- 6.11 If a mass market firm wished to begin serving corporate and government customers (without relying on the monopolist’s network<sup>25</sup>), it would need to make significant, irreversible new investments to enable complex features to be provided on its own network. As noted earlier in this submission, relevant costs include software and hardware costs, licensing fees paid to the switch vendor, development costs, internal testing and upgrades, billing system, IT provisioning; and productisation of even a single new feature is likely to cost **CiC**. A firm that cannot currently serve the market without making significant, irreversible new investments is defined as being outside the boundaries of the market.<sup>26</sup>
- 6.12 It follows that services are provided to corporate and government customers in a separate retail market, or at least a significant market segment, distinct from the mass market.

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<sup>21</sup> Refer to Optus’ January submission for a description of this and other complex features.

<sup>22</sup> ACCC, 2004, Competition in the corporation customer segment of telecommunications markets, p8

<sup>23</sup> SSNIP = small, significant, non-transitory increase in price.

<sup>24</sup> Both demand side substitution and supply side substitution are considered. Supply side substitution occurs when firms endowed with assets that can be easily adjusted to produce substitute goods are able to respond to a price increase by switching their production facilities to produce the goods or services subject to such price increase. Dr. Atilano Jorge Padilla (NERA), 2001, *The Role Of Supply-Side Substitution In The Definition Of The Relevant Market In Merger Control*, A Report for DG Enterprise A/4, European Commission, page 19.

<sup>25</sup> Competitors cannot rely on the monopolist to sell them services with complex features at wholesale. Indeed, Telstra could refuse to sell services with complex features to its competitors at wholesale (with or without the exemption), as these services are not declared.

<sup>26</sup> Dr. Atilano Jorge Padilla (NERA), 2001, *The Role Of Supply-Side Substitution In The Definition Of The Relevant Market In Merger Control*, A Report for DG Enterprise A/4, European Commission, pages 4 & 5.

*Competitive constraints on Telstra's conduct in the corporate and government market*

- 6.13 The objective of market definition in this context is to identify the most important competitive constraints on the regulated firm in the event that regulation was withdrawn.
- 6.14 Optus submits that in the event the exemption is granted the competitive constraints on Telstra's conduct would be quite different (and weaker) in the corporate and government market compared to the mass market. The reason for this is that the availability of ULLS in the ESAs within the ACCC's ESA Footprint provides a ready substitute for the WLR service in the mass market; whereas in the corporate and government market it does not, for two main reasons:
- First, business customers often require services to be provided on a whole-of-business basis by a single provider to numerous separate premises in different locations - a requirement which cannot be provided using the ULLS since DSLAM coverage is limited by the presence of RIMs and large pair gains systems; and
  - Second, many existing business customers of Optus and other providers require a number of complex features to be provided using legacy technology which is available only on Telstra's network and thus cannot be provided in conjunction with the ULLS. This factor is temporary, since the number of customers requiring services to be provided using legacy technology will dwindle over time. Nevertheless, it will remain significant for a number of years (until around CiC). We note that Telstra continues to serve many thousands of customers with these legacy features.
- 6.15 These two problems do not significantly affect competition in the mass market, because mass market customers do not require complex features and because the inability to supply a limited number of premises (due to the coverage limitations of ULLS) is not fatal to the ability to compete in the mass market as it is in the corporate market.
- 6.16 In conclusion, in the event the exemption is granted Telstra will be able to operate without competitive constraint in the pricing of the WLR and LCS wholesale services to CSPs supplying services to corporate and government customers.

*Likely impact of the exemption in the corporate and government market*

- 6.17 In the event the exemption is granted, it is likely that Telstra will exercise its market power by increasing the price of the WLR and LCS wholesale services to CSPs supplying services to corporate and government customers. An increase in these prices would result in a reduction in competitive tension in the corporate and government market generally.
- 6.18 It is also possible that Telstra could decide to withdraw the WLR and LCS wholesale services, which would remove Optus' ability to submit compliant tenders to whole-of-business customers that use these services (ie, foreclose Optus from the market for these customers). It is possible that Telstra will

continue to provide these services on a commercial basis, however this cannot be assumed.

- 6.19 Optus submits that a refusal to supply by Telstra cannot be ruled out. Indeed, such an anticompetitive tactic would enable Telstra to grow its market share at the expense of its competitors in the lead-up to the NBN. This would enable Telstra to entrench its dominant position in the corporate and government market in preparation for the transition to the new NBN environment.
- 6.20 The revenue Optus receives from managed services contracts with large corporate and government customers taking the WLR and LCS wholesale services is substantial. If the service is deregulated and Telstra stop supplying, Optus' annual revenue at risk is estimated at **CiC**, based on Optus having a total of **CiC** of revenue from Managed Services customers that have LCS/WLR services in the identified exchanges and an Optus Business estimate that **CiC**% of these customers would be lost if Optus was unable to offer the LCS/WLR services.
- 6.21 In conclusion, Optus submits that the exemption's impact on competition in the corporate and government market is likely to be significant. If the exemption were granted, existing market conditions would not "provide for the competitive supply of services" in the corporate and government market, and thus it is appropriate and desirable in the interests of preserving competition that the access regime impose regulated access, according to the underlying policy intent of Part XIC of the TPA.
- 6.22 The exemption would weaken competition in the corporate and government market and entrench Telstra's dominance going forward into the new NBN environment.
- 6.23 Optus submits that, given that the competitive impact of an exemption would be particularly severe in the corporate and government market, any exemption to be granted should be subject to a further limitation on its application, such that it would not apply to WLR and LCS services supplied to corporate and government customers.

### **Mass market**

- 6.24 Optus notes that the limitations on the exemption imposed by the ACCC will do much to mitigate the exemption's impact on competition in the mass market.
- 6.25 Nevertheless, there will be an impact. As noted above, Optus considers that removing regulated access to LCS and WLR would *not* encourage access seekers to invest in their own infrastructure given the imminent deployment of a NBN which would strand any such investments almost immediately.
- 6.26 It follows that at least some resale-based access seekers will be vulnerable to an increase in the price of the affected services by Telstra or an outright refusal to supply.



- 6.27 A refusal to supply would result in some access seekers being unable to compete in the mass market in at least some ESAs.<sup>27</sup> **CiC**
- 6.28 Optus submits that a refusal to supply by Telstra cannot be ruled out. Indeed, such an anticompetitive tactic would enable Telstra to grow its market share in voice services at the expense of resellers at the very time that the NBN is being rolled out (secure in the knowledge that no resellers will risk investing in DSLAMs that will immediately be stranded). This would enable Telstra to entrench its dominant position in the mass market in preparation for the transition to the new NBN environment.
- 6.29 Consequently the exemption would weaken competition in the mass market and entrench Telstra's dominance going forward into the new environment.

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<sup>27</sup> Further, the coverage limitations of the ULLS due to RIMs and large pair gain systems mean that some parts of ESAs will remain off limits even to access seekers with DSLAMs.

## **Appendix A: Introducing Optus Evolve**

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**CiC**

## **Appendix B: BNP Enhancement project**

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**CiC**

## Appendix C: The NBN Threatens ULLS-based Competition

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- 1.1 The NBN is to be an ubiquitous broadband network based on fibre-to-the-node (FTTN) technology. ULLS-based competition will be threatened because unlike the existing copper network, FTTN cannot be effectively unbundled.

### *NBN cannot be unbundled*

- 1.2 The focus of interconnection today is the Telstra exchange, where competitors can locate their electronic equipment to access the Telstra copper loop via the ULLS. Under an FTTN based architecture things will be very different.
- 1.3 The electronic equipment that provides the broadband service will be moved from the exchange to a street-side node or cabinet closer to the customer. A copper run will still provide customer connectivity between the node and the customer premise, however fibre will now be deployed to the node. To roll-out FTTN on a national basis will require equipment to be deployed in around 70,000 nodes. By contrast competitors today have located electronic equipment at around 387 exchanges.
- 1.4 The NBN design will render much of the existing exchange equipment – both Telstra and competitor owned – essentially useless. It also means that to ‘unbundle’ a FTTN network, competitors would need to put new equipment into each node. Whilst this might be possible in theory; in practice it will not be viable.
- 1.5 There are environmental and technical constraints associated with co-locating equipment at the node. This would require multiple cabinets to be located on kerb-sides, which given their size is unlikely to be either practical or environmentally desirable.
- 1.6 Notwithstanding these difficulties the economics of node based deployment dictate that unbundling on the FTTN will not be viable. In today’s model, with unbundling at the exchange, competitors are able access around 10,000 to 20,000 services from equipment they deploy at each exchange. This provides competitors with sufficient scope and scale to viably compete with Telstra.

However, in an FTTN environment equipment needs to be located at the node. Since each node only serves around 200-300 customers this would require deployment of multiple equipment to replicate today’s competitive environment. With only 200-300 services from which to recover its investment a competitor would need to have access to close to 100% of the lines deployed from each node.

*Telstra's plans will significantly undermine competition*

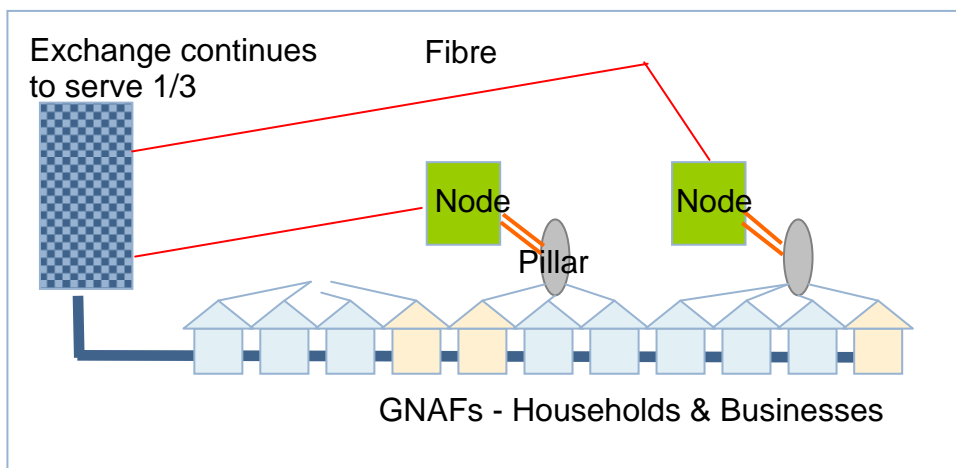
1.7 Telstra's plans go much further and the anti-competitive impact will be greater since its architecture involves the complete by-pass of the existing local exchanges. In a presentation to Communications Alliance on 28 March 2007 Telstra provided an overview of its plans to deploy a VDSL based FTTN solution. Mr Dan Burns, Executive Managing Director Network & Technology, Telstra Operations, indicated that:

- (a) All access lines in its planned footprint will be cutover to the new network;
- (b) There would be no need for access seekers to deploy their own DSLAM's/MSAN's; and
- (c) That ULLS will no longer be supported after the cutover of services to the FTTN

1.8 The implication of Telstra's plans is that existing competitor equipment in the local exchanges will become fully stranded. This is notwithstanding the fact that many customers could usefully continue to be served by the existing exchange based equipment.

1.9 The two diagrams below demonstrate the impact of Telstra's plans.

**Table: Pro-competitive architecture – which retains use of existing equipment**



**Table: Telstra's proposal**

