

Optus Public Submission to
the Australian Competition and Consumer Commission
in response to its
in response to its
Draft Decision on Telstra's Exemption Application in respect of the Optus HFC Network
October 2008

Table of Contents

1.	Executive Summary	3
2.	The Statutory Test Under Section 152AT	5
3.	The Exemption Would Not Encourage Efficient Investment	9
	Disincentives to investment due to the asymmetric nature of the exemption	9
4.	The Exemption Would Not Stimulate Investment in the Optus HFC	13
	Content costs Cost of further investment in HFC National Broadband Network deployment	14
5.	The Exemption Would Not Promote Competition	23
	The pro-competitive role played by Optus	
Ap	pendix A: Optus HFC Subscribers: September 2008	27
Ap	pendix B: Value of DSLAM Investment Stranded by Exemption	28
Ap	pendix C: Pay TV Financials	29
Ap	pendix D: Likely Timing of NBN Fibre Roll-out	29
Ap	pendix E: Content Costs	30
Ap	pendix F: Cost of HFC Network Upgrade	30
Ap	pendix G: Switching Costs: Optus Cable Internet Installation Costs	31
Ap	pendix H: Regulations Concerning Overhead Cabling	32
Ap	pendix I: Engineering Characteristics of 3G Mobile Networks	34
Att	eachment 1: CEG Report: Assessing the Likely Effects of Asymmetric Acce Regulation in Australia	

1. Executive Summary

- 1.1 On 18 December 2007 Telstra made an application under section 152AT of the TPA to the ACCC seeking an exemption from the supply to Optus of the following services:
 - Local carriage service (LCS);
 - Wholesale line rental (WLR);
 - Public switched telephone network originating access (PSTN OA);
 - Line sharing service (LSS); and
 - Unbundled local loop service (ULLS);

to customer premises within 75 metres of Optus' HFC cable network in Sydney, Melbourne and Brisbane.

- 1.2 On Monday 22 September 2008, the ACCC released for public consultation a draft decision to reject Telstra's application. The ACCC identified as major issues of concern both the exemption's disincentive effect on the deployment of infrastructure and also Telstra's 50 per cent interest in Foxtel and the effect of that interest on investment in Optus' HFC network. It also took the view that uncertainty over the deployment of the National Broadband Network (NBN) and the reduction in competition in wholesale markets likely to flow from the exemption were of concern, and could impact negatively on competition and on the efficient use of and investment in infrastructure if the exemption were granted.
- 1.3 Optus welcomes the ACCC's draft decision on Telstra's 'HFC exemption'. The ACCC has quite rightly rejected Telstra's application, which was solely aimed at benefiting Telstra and would be detrimental to consumers and to competition. The ACCC has reaffirmed a fundamental principle that underpins effective pro-consumer regulation: that investment should be encouraged only where to do so would benefit competition and consumers.
- 1.4 Attached to this submission is a report produced by the consultancy CEG (Attachment 1). CEG highlights the crucial role of the exemption's asymmetry (that is, the continuing ability of other operators to access regulated ULLS) in constraining Optus' commercial returns from infilling its HFC network, in addition to the exemption's general deterrent effect on investment. CEG finds that Optus' ability to access the ULLS is an efficient use of infrastructure, and examines the exemption's likely reduction of the competitive impact of Optus as a leading ULLS-based competitor. CEG has also found "fundamental flaws" in the analysis of Telstra's expert Eisenach

¹ CEG, 2008, Assessing the Likely Effects of Asymmetric Access Regulation in Australia: Telstra's Proposed HFC Exemption

² CEG, 2008, Assessing the Likely Effects of Asymmetric Access Regulation in Australia, p.9

³ CEG, 2008, Assessing the Likely Effects of Asymmetric Access Regulation in Australia, pp.12-15

⁴ CEG, 2008, Assessing the Likely Effects of Asymmetric Access Regulation in Australia, p.9

⁵ CEG, 2008, Assessing the Likely Effects of Asymmetric Access Regulation in Australia, p.7

- (including inter alia its reliance on an unrepresentative spot exchange rate), and brings to light international developments that cast doubt on Telstra's position.
- 1.5 In the remainder of this paper and its appendices Optus presents further data relevant to the assessment of the application as well as submissions responsive to the draft decision.
- 1.6 In Section 2 some observations about the statutory test under section 152AT are set out, focusing on analysis of the discriminatory nature of the proposed exemption; rejection of the incorrect test urged on the ACCC by Telstra through its expert, Henry Ergas; analysis of the objective of promoting competition under s152AB(2)(c); and analysis of the risks involved in making investments as part of the LTIE test in accordance with s152AB(7A).
- 1.7 The ACCC has correctly recognised that the exemption could lead to significant disincentives for companies to deploy infrastructure. In Section 3 Optus examines this issue and also other reasons why the proposed exemption cannot encourage efficient investment in infrastructure including the exemption's negative impact upon Optus' ability to recover its significant investment in DSLAMs.
- 1.8 Optus endorses the ACCC's finding that high content costs are a significant barrier to expansion that limits Optus' ability to achieve potential economies of scope on its HFC network and to recover the costs of expanding or infilling the network. In Section 4 Optus sets out some further evidence to demonstrate that the exemption would not stimulate investment in the Optus HFC network.
- 1.9 Telstra's proposed exemption is incapable of promoting competition. In Section 5 Optus considers the impact of the exemption in curtailing the procompetitive role played by Optus through its investment in DSLAM infrastructure and other relevant issues.

_

⁶ CEG, 2008, Assessing the Likely Effects of Asymmetric Access Regulation in Australia, p.24

⁷ CEG, 2008, Assessing the Likely Effects of Asymmetric Access Regulation in Australia, p.17

2. The Statutory Test Under Section 152AT

- 2.1 Optus sets out below some observations about the statutory test under section 152AT focusing on:
 - analysis of the discriminatory nature of the proposed exemption;
 - rejection of the incorrect test urged on the ACCC by Telstra through its expert, Henry Ergas;
 - analysis of the objective of promoting competition under s152AB(2)(c); and
 - analysis of the risks involved in making investments as part of the LTIE test in accordance with s152AB(7A).

The discriminatory nature of the proposed exemption

- 2.2 The proposed exemption requires the ACCC to assess whether Optus as a non-incumbent operator that has invested in cable infrastructure should lose its right to regulated access to Telstra's declared fixed access services while regulated access remains available to other operators.
- 2.3 Optus endorses the ACCC's analysis and key conclusion that the discriminatory nature of the proposed exemption is likely to lead to disincentives for investment by all competitive carriers⁸. Optus would also make additional observations regarding the disincentive to investment due to the exemption in paragraph 2.5 below.
- 2.4 Optus understands from the ACCC's analysis in the Draft Decision that it is not proposing to reject the proposed exemption on the basis that it could never be satisfied that a discriminatory or ad hominem exemption could be in the LTIE. It is the specific disincentive effects likely to arise were the discriminatory exemption to be granted which are significant and which inform the ACCC's conclusion.
- 2.5 Optus believes that the specific consequences of the discriminatory nature of the proposed exemption which justify its rejection are in fact likely to be broader than those disincentives contemplated in detail by the ACCC in the Draft Decision. As is made clear elsewhere in this submission (see section 3) and the report by CEG (see Attachment 1), 9 such asymmetric regulation raises the potential for economic distortions quite distinct from more traditional issues relating to the overall desirability of access regulation. In particular, as CEG describes in its report, the continued existence of competitors who have access to regulated fixed line services impacts directly on the likelihood of Optus embarking on the type of 'infill' investment upon which any claimed promotion of competition is predicated. ¹⁰

¹⁰ CEG, 2008, Assessing the Likely Effects of Asymmetric Access Regulation in Australia, p.9

⁸ ACCC, 'Telstra exemption application in respect of the Optus HFC network – Draft Decision', September 2008 at 88-92.

⁹CEG, 2008, Assessing the Likely Effects of Asymmetric Access Regulation in Australia

s152AT test proposed by Telstra's expert is misconceived

- 2.6 Henry Ergas in his expert report dated 4 June 2008 suggests that the same question must be asked when the ACCC considers:
 - (a) an application for an exemption order under section 152AT of the *Trade Practices Act 1974* (Cth) (**TPA**); and
 - (b) whether to declare an access service under section 152AL of the TPA. 11

Ergas suggests that this question is, 'whether imposing access or maintaining access would promote the LTIE'. 12

- 2.7 Whilst both of these sections require a consideration of the LTIE, the tests when considering whether to declare an access service and whether to grant an application for an exemption are not, in their application, the same. This is because the status quo (that is, the counterfactual world without the order sought) in each of these situations is different and the statutory test requires satisfaction as to the LTIE relative to that counterfactual.
- As a consequence of his misconception, Ergas is led to adopt the proposition that '[i]n short, the present exemption should be granted unless there is substantive evidence that providing Optus with imposed access to Telstra's network is likely to materially promote the LTIE'. That proposition is incorrect. Section 152AT of the TPA requires the Commission be **satisfied** that the **exemption order** will promote the LTIE. Satisfaction requires the Commission to 'make up its mind', on the evidence before it, and reach a decision. This requires more than merely concluding that the exemption seems to promote the LTIE. The Commission must be 'satisfied affirmatively' that the exemption will promote the LTIE.
- 2.9 Consequentially, if the material provided to the Commission:
 - (a) does not satisfy the Commission that the exemption order will promote the LTIE; or
 - (b) leaves the Commission uncertain as to whether the exemption order will promote the LTIE,

the Commission must reject the exemption application and the declaration of the access service will continue. The present exemption should **only** be granted if the Commission is **satisfied**, based on substantive evidence, that **not** providing Optus with access to various fixed line services in the proposed exemption area will promote the LTIE.

2.10 This approach is consistent with the approach taken by the Commission in its Draft Decision. The Commission 'weighed up the extent to which granting'

Anguna v Fayne [1944] NZLK 610 at 626

16 Telstra Corporation Limited (2006) ATPR ¶42-121

¹¹ H Ergas, 'Expert Report – Henry Ergas', June 2008 paragraph 41.

¹² H Ergas, 'Expert Report – Henry Ergas', June 2008 paragraph 41.

¹³ H Ergas, 'Expert Report – Henry Ergas', June 2008 paragraph 41.

¹⁴ Blyth v Blyth [1966] 1 All ER 524 at 541

¹⁵ Angland v Payne [1944] NZLR 610 at 626

the exemption would promote the LTIE and concluded that 'on balance' the exemption would not promote the LTIE.¹⁷ Accordingly, the Commission has proposed to reject the exemption application as the Commission is not satisfied that the exemption will promote the LTIE.

Promoting competition

- The ACCC in the Draft Decision notes 18 the utility of a three stage analysis in 2.11 considering whether the proposed exemption would promote competition. The third stage of that analysis involves an assessment of whether price and service offerings to consumers are likely to be better with the granting of the exemption. Optus endorses this approach as a useful part of the consideration whether granting the exemption will create 'the conditions or environment for improving competition'. That test is acknowledged in the ACCC's draft decision¹⁹.
- 2.12 The ACCC quite correctly considers, in accordance with the direction in section 152AB(4), the extent to which the exemption will remove obstacles to end-users²⁰. Optus understands that when the ACCC refers to the discriminatory nature of the exemption in that context as something which 'could affect the promotion of competition' it means that the conditions or environment for competition would not be promoted. The ACCC's analysis would perhaps benefit from clarification.

Risks of investment

Optus endorses the ACCC's conclusion as to the objective of efficient use of 2.13 infrastructure for the purposes of s152AB(2)(e) ²¹.

- Optus submits that the concerns addressed by the ACCC in this context are 2.14 reinforced by the consideration of the effect that granting the exemption would have on the risk involved in making an investment, as directed by section 152AB(7A).
- 2.15 Granting the proposed exemption would increase the risk involved in making investments, since access seekers would make investment decisions in the knowledge that they alone could lose regulated access as a means of supply alternative to the infrastructure that they are proposing to build. Optus submits the exemption would clearly increase the risks involved in making such investments.

September 2008 at 26

¹⁷ ACCC, 'Telstra exemption application in respect of the Optus HFC network – Draft Decision', September 2008 at 111. Optus notes that there is a typographical error in the last sentence of the first paragraph of p111 and suggests that the word "not" be deleted where it last appears.

18 ACCC, 'Telstra exemption application in respect of the Optus HFC network – Draft Decision',

¹⁹ ACCC, 'Telstra exemption application in respect of the Optus HFC network – Draft Decision', September 2008 at 24.

ACCC, 'Telstra exemption application in respect of the Optus HFC network – Draft Decision', September 2008 at 98.

21 ACCC, 'Telstra exemption application in respect of the Optus HFC network – Draft Decision',

September 2008 at 108-9.

2.16	In the context of addressing the risks of investment and section 152AB(7A), Optus also notes the particular risks arising from the NBN deployment as discussed in section 4.

3. The Exemption Would Not Encourage Efficient Investment

- 3.1 In this section Optus examines some of the key reasons why the proposed exemption cannot encourage efficient investment in infrastructure, including:
 - disincentives to investment due to the asymmetric nature of the exemption;
 - its potential encouragement of inefficient duplication of infrastructure; and
 - its impact upon Optus' ability to recover its investment in DSLAMs.
- 3.2 Note that Optus' incentives to infill its HFC network to serve currently unserviceable premises are examined in section 4.

Disincentives to investment due to the asymmetric nature of the exemption

- 3.3 Optus agrees with the ACCC's assessment that the asymmetric and carrier-specific nature of the exemption could lead to significant disincentives for companies to deploy infrastructure and have significant negative implications for the promotion of competition.
- 3.4 The economic consultancy CEG has considered this issue in its report "Assessing the Likely Effects of Asymmetric Access Regulation in Australia". CEG emphasises the role of the exemption's asymmetry in deterring investment in telecommunications infrastructure. CEG found that the exemption would "carry a serious risk of deterring efficient new investment" since it would "send a signal" to operators considering new investment" that to invest "would risk the loss of those operators' future rights to regulated access". CEG has also considered the arguments of Telstra's experts Ergas and Cave against the significance of this deterrent effect, and found them unconvincing.
- 3.5 Optus would encourage the ACCC to take into account CEG's conclusions on this matter.

Inefficient duplication of infrastructure

3.6 The ACCC in its draft decision noted that it was not satisfied that it would be efficient for Optus to infill its HFC network.²⁶ The ACCC also acknowledged in its draft decision²⁷ the general principle that facilities based competition is

²² CEG, 2008, Assessing the Likely Effects of Asymmetric Access Regulation in Australia

²³ CEG, 2008, Assessing the Likely Effects of Asymmetric Access Regulation in Australia, pp.12-15

²⁴ CEG, 2008, Assessing the Likely Effects of Asymmetric Access Regulation in Australia, p.5

²⁵ CEG, 2008, Assessing the Likely Effects of Asymmetric Access Regulation in Australia, p.13-15

²⁶ ACCC, *Telstra's exemption application in respect of the Optus HFC network*, Draft Decision, September 2008, p.10

²⁷ ACCC, *Telstra's exemption application in respect of the Optus HFC network*, Draft Decision, September 2008, p.27

to be encouraged only where it is economically efficient to do so. In the Fixed Services Review Position Paper no. 2 the ACCC stated that: ²⁸

"Where it does not result in the economically inefficient duplication of infrastructure, facilities-based competition is more likely to promote the LTIE."

and: 29

"For example, the Commission indicated [in its June 2006 position paper?] that it would not be appropriate to encourage facilities based competition where the demand for services in a market can be satisfied at a lower cost by one facility than two or more facilities. In these circumstances, the LTIE would be best served by an effective access regime."

- 3.7 Optus considers that even if it invested in the HFC network in order to increase the levels/quality of serviceability in the exemption area, that would not be an economically efficient outcome since the demand for services in the relevant markets identified by the ACCC can be satisfied at a lower cost by one facility than by two or more facilities, and amongst those multiple facilities, provision over the upgraded HFC network would not involve the least cost option.
- 3.8 In this regard Optus submits that the existing ULLS access regime (and hence the "future without" scenario) provides access seekers with the incentive to make an efficient 'build or buy' decision, and encourages efficient investment in infrastructure. This was recognised by the ACCC in its arbitral determination of the access dispute between Telstra and Optus on the ULLS, ³⁰ and previously in its re-declaration of the ULLS in which it stated that: ³¹

"As direct access to the local loop enables competitors to bypass large sections of Telstra's network, it can make the deployment of new infrastructure, (such as DSLAMs for xDSL provision), more economic and practical, thereby promoting quasi facilities-based competition. Access to the ULLS also allows access seekers to provide a much higher quality, and more diverse range of broadband services than is currently possible by simply reselling Telstra's existing ADSL service. The Commission considers that the LTIE is promoted by competitors' ability access Telstra's copper network to provide a larger range of services."

and: 32

"Declaration of the ULLS has enabled access seekers to combine existing customer access infrastructure with their own equipment so that they can bypass Telstra's wholesale voice and data services and engage in more competitive provision of high bandwidth services, and voice

²⁸ ACCC, 2007, Fixed Services Review Position Paper no. 2, p.15

²⁹ ACCC, 2007, Fixed Services Review Position Paper no. 2, p.21, footnote 49

³⁰ ACCC, March 2008, *ULLS Access Dispute Between Telstra and Optus, Statement of Reasons for Final Determination*, p.67.

³¹ ACCC, Declaration inquiry for the ULLS, PSTN OTA and CLLS—final determination, July 2006, p.39.

³² ACCC, Declaration inquiry for the ULLS, PSTN OTA and CLLS—final determination, July 2006, pp35-36

services to end-users, as well as to other service providers. As noted above, this will enable end-users to gain access to an increased choice of high bandwidth and telephony service providers, therefore improving their access to those services and providing greater scope for price competition in those services. The competition that results from ULLS-based investment encourages innovation, product differentiation and price discipline in the supply of voice and broadband services, and is therefore likely to enhance productive and allocative efficiency in those markets. This results in the more efficient use of infrastructure used to supply the ULLS, as well as downstream services such as broadband services and voice services. The Commission considers that this promotes the long-term interests of end-users."

- 3.9 It is also relevant to note the ACCC's statement in this draft decision that it "aims to set ULLS prices on an efficient cost-reflective basis" and it "has signalled and set geographically de-averaged cost-based prices." ³³
- 3.10 CEG has considered this issue and found that Optus' current ability to access ULLS helps to promote productive efficiency in terms of the efficient use of infrastructure. CEG has reviewed relevant international developments and finds that a proper reading of these casts doubt upon the views of Telstra and Eisenach on the efficiency of competition via cable infrastructure. CEG concludes that: 36

"Cable's loss of market share internationally supports the view that DSL is a more efficient (lower cost) means of service delivery compared to cable, particularly for new connections where copper legacy infrastructure is in place and equivalent cable infrastructure is not."

3.11 Given that the existing regime encourages efficient investment in infrastructure, Optus submits that – to the extent it is capable of encouraging investment at all – the exemption could only encourage inefficient duplication of infrastructure.

The exemption's impact on Optus' investment in DSLAMs

- 3.12 The ACCC in its draft decision recognised that Optus has the second largest deployment of DSLAMs.³⁷ Later in the decision the ACCC identified that "...competitive carriers will be reluctant to make facilities-based investment if they could then be singled out and lose their access rights.³⁸
- 3.13 Optus submits that Telstra's exemption, if granted, would strand a large number of Optus DSLAMs within the exemption area or, at the very least, significantly reduce the value of Optus' DSLAM investment and reduce

³³ ACCC, *Telstra's exemption application in respect of the Optus HFC network*, Draft Decision, September 2008, p.110

³⁴ CEG, 2008, Assessing the Likely Effects of Asymmetric Access Regulation in Australia, p.9

³⁵ CEG, 2008, Assessing the Likely Effects of Asymmetric Access Regulation in Australia, p.17

³⁶ CEG, 2008, Assessing the Likely Effects of Asymmetric Access Regulation in Australia, p.24 ACCC, Telstra's exemption application in respect of the Optus HFC network, Draft Decision, September 2008, p.93.

³⁸ ACCC, *Telstra's exemption application in respect of the Optus HFC network*, Draft Decision, September 2008, p.109

- Optus' ability to recover the costs of that investment, as well as reducing the commercial viability of upgrades to Optus' DSLAM infrastructure.
- 3.14 Optus has estimated the approximate value of its stranded DSLAM investment if the exemption were granted, at **CiC begins CiC ends** See Appendix B for details.
- 3.15 Optus has determined that the total value of DSLAM investment whose commercial viability would be reduced to some extent by the exemption is in the order of **CiC begins CiC ends** Optus does not mean to imply that this investment would necessarily be completely stranded since, in some locations within the affected ESAs, Optus may be able to continue to use ULLS infrastructure to serve customers. Nevertheless the exemption would reduce the addressable market for this infrastructure and thus Optus' ability to recover the investment would be reduced.
- 3.16 If the exemption was granted, the resulting stranding of Optus' investment would result in a powerful disincentive to private investment in telecommunications infrastructure. As a result the exemption would not encourage efficient investment in infrastructure.

4. The Exemption Would Not Stimulate Investment in the Optus HFC

4.1 In this section Optus sets out some further evidence to demonstrate that the exemption would not stimulate investment in the Optus HFC network.

Content costs

- 4.2 The ACCC in its draft decision has correctly recognised that the high content costs faced by Optus are a significant barrier to expansion that limits Optus' ability to achieve potential economies of scope on its HFC network and to recover the costs of expanding or infilling the network. The ACCC has observed that Telstra's 50% interest in Foxtel and its ownership of a competing HFC network are responsible for the high cost of content faced by Optus. ³⁵
- Optus agrees that Telstra's ownership of the HFC network and its interest in 4.3 Foxtel are relevant to the high cost of content faced by Optus – since these factors are relevant to Telstra's incentive to raise Optus' costs of access to Pay TV content. However, it must be recognised that the primary issue is not Telstra's ownership of the HFC network and its interest in Foxtel as such. Rather, the chief issue of relevance to the exemption application is the high cost of pay TV content to Optus, which is demonstrably the case, irrespective of whether or not it is caused by Telstra's ability to control the terms and conditions upon which Optus has access to this content.

4.4 CiC begins CiC ends

- 4.5 Telstra's expert Eisenach has contended that despite its high cost of content Optus performs well with respect to revenue per serviceable home passed and argues that "the analysis fails to support Optus' contention that the unique characteristics of the Australian market make its HFC infrastructure uneconomic compared with cable TV companies in the United States". 40
- 4.6 However, CEG has examined the analysis relied upon by Eisenach on this subject and found "fundamental flaws", including its focus on revenue rather than profit and its reliance on an unrepresentative spot exchange rate. CEG's analysis reaffirms Optus' view that the unique characteristics of the Australian market – including the high cost of content – are relevant to the economics of HFC infrastructure.
- 4.7 Further, Optus submits that its already high content costs are continuing to rise. CiC begins CiC ends A summary of Optus' pay TV package costs is provided in Appendix E.
- 4.8 The ACCC is well aware of the difficulties which would be faced by Optus in relying on any of the alternatives to that structure, from its analysis of the arrangements in 2002 as part of which Optus entered into the CSA with Foxtel.

³⁹ ACCC, Telstra's exemption application in respect of the Optus HFC network, Draft Decision, September 2008, pp.70, 111

Eisenach Expert Report, Appendix D.

⁴¹ CEG, 2008, Assessing the Likely Effects of Asymmetric Access Regulation in Australia, p.24

Cost of further investment in HFC

4.9 In this section Optus provides further data on the costs of connecting MDUs, on demand assumptions and on the costs of network upgrade.

Technical points on the costs of connecting MDUs

4.10 The ACCC did not reach a definitive position on the costs of connecting MDUs in its draft decision. ⁴² In this section Optus addresses some of the points raised in the draft decision.

The age of the costings

- 4.11 Telstra's expert Harris considers that certain of the costs quoted by Optus for 2003 business case for connecting MDUs may be overstated due to the age of Optus' calculations.
- 4.12 Optus submits that the most substantial part of the costs of cable installation relate to labour costs, which have increased not decreased since 2003.
- 4.13 The main costs of connecting MDUs to the HFC network for Optus are:
 - network enhancement costs;
 - lead-in cable costs for wire connecting the HFC network to the MDU communications room; and
 - lateral cable drop costs connecting the communications room to each unit in the MDU.
- 4.14 Network costs are incurred where the network has to be modified to cater for the increased number of MDUs since the original build in 1996, as well as the number of MDUs which were not originally captured or designed for during the original build. The costs associated with modification include:
 - walkout to capture the additional MDUs mentioned above (that is, a physical street-by-street visual inspection of the network footprint by Optus employees to determine the number and location of buildings and/or dwellings);
 - redesign of that part of the network and which may involve significant network rebuild due to the flow-on effect of the attenuation of signals downstream of the MDU areas; and
 - actual implementation costs in accordance with the new design.
- 4.15 Lead-in costs can vary depending on whether aerial or underground wiring is used to connect the HFC network to the MDU communications room. This includes the cost of:
 - bringing the hardline (co-axial cable) into the telecommunications Main Distribution Frame (MDF) room or a common area in the block of MDUs; and

⁴² ACCC, *Telstra's exemption application in respect of the Optus HFC network*, Draft Decision September 2008, p.57

installing taps to provide services.

The lead-in cost can be significant if the co-axial cable has to be underground routed and could be in the order of many thousands of dollars depending on the site conditions of the MDU.

- 4.16 Drop costs will also vary depending on the site conditions of the MDU. This is the cost of:
 - taking the drop co-axial cable from a tap port to a customer's unit; and
 - also cabling any additional outlets within that unit required by a customer.
- 4.17 Drop costs will change as technology changes, for example if VoIP were introduced. Optus periodically reviews the scope for alternative technological solutions to connect customers. Accordingly, the cost profile for connection may vary over time. Nevertheless, MDU connection will remain generally costly due to the typical masonry construction of MDUs and the resultant lack of access for cabling to the individual units.
- 4.18 Optus submits that the above activities involve significant labour costs.

MDUs vs SDUs

- 4.19 Harris has stated that it would be possible to treat MDUs in the same way as SDUs when connecting, assuming that more updated technology was used. 43
- 4.20 Optus submits that in making the statement noted above, Harris is considering a scenario where a separate cable drop is installed into the MDU for each subscribed customer. While this may be the case in the US, this is certainly not a workable solution in Australia since:
 - body corporate approval would be required and except in a very few instances, multiple aerial drop cables into MDUs are generally not acceptable to the body corporate in Australia for aesthetic reasons; and
 - local authority DA approval is often required to carry out work in some circumstances.

Site Make Ready and Network Make Ready costs

- 4.21 Harris opines that "the Site Make Ready and Network Make Ready costs appear higher than what would be necessary from an engineering point of view." 44
- 4.22 From an engineering point of view, the Optus considers the actual Make Ready costs would be higher now than the costs submitted previously due to the increase in labour costs relative to material costs over time. For example, the increased labour costs can be attributed to additional RF analysis, design and upgrades to cater for distance and increased access capacity, as well as to mitigate the propagation effect of signals downstream of the network.

-

⁴³ Harris Attachment C, p1

⁴⁴ Harris Attachment C, p1

- 4.23 Another consideration relates to the asset ownership of cabling once installed into the MDU which could in some circumstances contribute to the installation costs incurred and require Optus to install additional internal cabling. In the majority of situations the MDF will require upgrading to cater for the additional Optus cabling. ⁴⁵
- 4.24 A Site Make Ready alternative could involve the use of external ducting work where individual cable drops are installed into each unit as suggested by Harris. However, as discussed, this is not a workable solution in Australia.
- 4.25 The ACCC in its draft decision has noted that:⁴⁶

"Harris also states that it would be unnecessary to incur incremental telephony equipment costs as standard telephony equipment could instead be used... It is unclear that all customers would need new telephone equipment, in light of Harris' evidence that existing telephony equipment would be sufficient."

- 4.26 Optus submits that Harris has misunderstood the definition of incremental telephony equipment. This phrase means incremental head-end (exchange or central office) equipment rather than customer premises equipment (CPE).
- 4.27 Harris also comments on the issue of incremental customer installation that "Given the amounts already included in Site Make Ready and Network Make Ready costs, it is not clear why a further **CiC begins CiC ends** would remain to be spent on customer installation."⁴⁷
- 4.28 Optus submits that Harris' comment reflects differing definitions of the 'readiness' of a site. In particular, for Optus, even once a site has been 'made ready' (ie, Optus has performed the network modifications and the lead-in for the building), additional work is still required (connecting up individual customer units as they sign up). Other operators may have a different definition, eg they may install drop cables to every unit at the beginning as part of 'site make ready'.
- 4.29 Optus also submits that the **CiC begins CiC ends** cost for customer installation should be considered conservative (an underestimate). The **CiC begins CiC ends** provides a best estimate based on *SDU* cable drop costs, however for installation into a MDU it is likely that higher costs are to be expected due to the increased labour inputs and other costs required.

Demand and revenue assumptions

4.30 The ACCC in its draft decision stated that "Optus assumes a penetration rate of [c-i-c starts] [c-i-c ends] for the purposes of distributing fixed costs. The [c-

⁴⁵ This may not always be possible due to the asset ownership issue associated with what Telstra classes as 'joints' – which are small MDFs which do not have A & B sides for patching. The ownership of MDU cabling now generally resides with the body corporate but this does not apply to units that have this type of MDF. It should also be noted that probably the majority of old and small (less than 10 units) MDUs still have this type of MDF.

⁴⁶ ACCC, *Telstra's exemption application in respect of the Optus HFC network*, Draft Decision,

⁴⁶ ACCC, *Telstra's exemption application in respect of the Optus HFC network*, Draft Decision, September 2008, p.58

⁴⁷ Harris, Expert report – Issues arising from Optus' submissions on Telstra's proposed HFC exemption, June 2008, Attachment C, p.2

- i-c starts] [c-i-c ends] penetration would not appear to be as high as that achieved by Optus over its currently serviceable homes." ⁴⁸
- 4.31 Optus submits that it is entirely realistic for the penetration assumption in respect of the MDUs segment to be less than that achieved by Optus over its currently serviceable homes. It has taken Optus more than 10 years to reach its current share in cable telephony and broadband. If Optus attempted to enter the MDUs, its penetration rate would be negatively impacted by a number of factors including:
 - problems getting MDU body corporates to agree to deployment;
 - the low owner-occupier ratio in MDUs in Australia (and more transient nature of MDU occupants), which results in less favourable acquisition and churn behaviours compared to overseas;
 - the fact that Optus has to compete against many other ULLS based access seekers in MDUs;
 - the impending NBN rollout, which would increase the number of competitors that will be able to offer a similar service into those MDUs (as discussed in the later section on NBN deployment); and
 - Telstra's first mover advantage (ie its own HFC network is already in MDUs).
- 4.32 With regard to the last point (Telstra's first mover advantage), it is relevant to note that, as CEG has observed, "overbuilders remain marginal in the US market today". ⁴⁹ While Telstra appears to consider cable overbuild as a viable competitive model, CEG reports on the low market shares achieved and financial difficulties encountered by US overbuilders and concludes: ⁵⁰

"The US evidence actually confirms the severe challenges faced by Optus in being one of two competing cable networks in the same area".

- 4.33 The ACCC in its draft decision uses an EBITDA margin of 40% to analyse the business case for connecting MDUs, stating that "If the [EBITDA] margin was 40 per cent, which is [c-i-c starts] [c-i-c ends], then the ACCC notes that the 2, 4 and 16 unit payback periods would increase to 35 months, 27 months and 22 months respectively." 51
- 4.34 Optus submits that the ACCC's assumption of 40% EBITDA margin for the proposed infill investment of the HFC network is too high, considering that Optus' EBITDA margin for the June quarter 2008 for the entire company was only CiC begins CiC ends
- 4.35 Moreover, the exemption would not permit Optus to recover its costs through increasing revenue per subscriber. CEG highlights the crucial role of the

⁴⁸ ACCC, *Telstra's exemption application in respect of the Optus HFC network*, Draft Decision, September 2008, p.57

⁴⁹ CEG, 2008, Assessing the Likely Effects of Asymmetric Access Regulation in Australia, p.33

⁵⁰ CEG, 2008, Assessing the Likely Effects of Asymmetric Access Regulation in Australia, p.33

⁵¹ ACCC, *Telstra's exemption application in respect of the Optus HFC network*, Draft Decision, September 2008, p.59

exemption's asymmetry in constraining Optus' commercial returns from infilling its HFC network, noting that: ⁵²

"the exemption will not remove regulated ULLS from the market. Telstra and other providers would still be able to use Telstra's services and this will severely constrain Optus' ability to earn a commercial return by seeking to compete against these providers by making significant new investments in higher cost infrastructure."

4.36 Consequently, as CEG emphasises, Optus' incentives for efficient investment in its HFC network would not be directly affected to any significant extent by the exemption.

Cost of network upgrade

4.37 The ACCC in its draft decision noted that Telstra had submitted that the cost of a DOCSIS upgrade would be a few million dollars (although it does not give a citation for this) but found that it "does not have sufficient information to assess all the costs of a DOCSIS upgrade." ⁵³ Optus submits that to upgrade its HFC network to DOCSIS 3.0 would cost approximately **CiC begins CiC ends** Further details are set out at Appendix F.

Other barriers

4.38 In this section Optus examines other barriers to the deployment of HFC network infrastructure, including local authority resistance to overhead cabling, the cost of DA requirements for extensive additional work on network and negotiations with apartment building owners and body corporates. These issues highlight some of the major obstacles faced by Optus for network expansion and demonstrate that the exemption would not stimulate investment in the Optus HFC network.

Local authority resistance to overhead cabling

- 4.39 The ACCC in its draft decision has noted that "it is relevant that certain premises would be effectively unserviceable by HFC under any circumstances, which would constitute a barrier to entry to the use of HFC, eg heritage areas that restrict overhead cabling." ⁵⁴
- 4.40 In this regard Optus submits that the determination of overhead cabling as 'non low-impact' can effectively prevent any further HFC build in some areas, since local planning authorities have the power to stop it, and they frequently exercise this power.
- 4.41 Cable deployment is vulnerable to local authority resistance as a result of its high visibility. The DCITA in its *Broadband Technology Rollout Costing Study* has

⁵² CEG, 2008, Assessing the Likely Effects of Asymmetric Access Regulation in Australia, p.9

⁵³ ACCC, *Telstra's exemption application in respect of the Optus HFC network*, Draft Decision, September 2008, p.66

⁵⁴ ACCC, *Telstra's exemption application in respect of the Optus HFC network*, Draft Decision, September 2008, p.61

recognised the problems flowing from the high visibility of HFC network infrastructure: 55

"A coaxial cable drop cable strung from the hardline coax to the customer premises connects residences with the main feeder cable. A difficulty with aerial HFC networks is that they are highly visible. Not only must the cables be slung below the live power lines but there are also amplifiers every 200 metres or so and large pole-mounted power supplies at least at every fibre node. ... Unfortunately, coaxial cable does not lend itself to underground installation because the coax is inflexible and not particularly waterproof at the connectors. Aerial HFC networks have attracted community resistance and heated debate in Australia."

- 4.42 As a result, local planning authorities have often taken a hardline stance to any telecommunications development within their jurisdiction given community aversion to overhead cables. This is particularly true for aerial cabling. For example, the installation experiences by Optus Vision in the 1990s generally demonstrated that the community and councils had negative views towards aerial cabling. Optus could experience a similar widespread negative backlash if the current HFC network were to be expanded or infilled. This backlash extends beyond the economic cost to Optus to undertake environmental assessments required to obtain planning consent from various councils. Optus relies heavily on its 'brand' which would be adversely impacted.
- 4.43 This is relevant particularly in NSW, where restrictions may apply to overhead cabling that is defined as a 'subscriber connection' (such as an installation for the sole purpose of connecting a building, structure, caravan or manufactured home to a line that is part of an existing telecommunications network). The regulations in this area vary according to state jurisdiction. The main regulatory considerations that apply to Optus' HFC network are summarised in Appendix H.

Cost of DA requirements for extensive additional work on network

- 4.44 Although some MDUs were planned for, the majority of MDUs were never properly captured or designed for in the original Optus HFC build. As a result, to connect MDUs to the HFC network would require a large amount of resources, primarily in the form of network reworking and redesign.⁵⁷
- 4.45 DAs are required when any 'development' work is to be carried out. For example, under the *Environmental Planning and Assessment Act (NSW) 1979*, 'development' is defined as:
 - the use of land;
 - the subdivision of land:

⁵⁵ DCITA, Broadband technology rollout costing study, November 2003, p.49

⁵⁶ In addition, it should be noted that cabling installed as subscriber connections cannot function as part of a Carrier's network (such that, it can only link existing network to a subscriber but can't be built off of in the future).

⁵⁷ The HFC network operates based on RF signals supported by amplifier links located at intervals along the length of the network cable. The technical constraints of RF signals mean that new links to MDUs cannot just be spliced into the network, instead this requires that the whole network needs to be redesigned to allow for additional capacity to cater for customers from the MDU.

- the erection of a building;
- the carrying out of work;
- the demolition; or
- any other matter controlled by an environmental planning instrument.

This only applies to 'non-low impact' installations for Carriers and is similarly true within Queensland and Victorian jurisdictions.

4.46 The scope of this work is extensive because of the downstream effect of the redesign. These activities also now encroach on local planning authority jurisdictions, and as such would incur additional costs due to the development application (DA) process for an already financially unfeasible project. In particular, DA fees would be incurred with no guarantee of obtaining consent to undertake the required work.

Negotiations with apartment building owners and body corporates

- 4.47 The ACCC also notes that "the addressable market for the Optus HFC network may also be limited by difficulties in obtaining access from body corporate in MDUs," in particular where a Telstra HFC backbone has already been supplied to the building.
- 4.48 Optus agrees with this assessment. Optus further submits that negotiations with apartment building owners and body corporates do not merely consume time; they would also impose significant additional cost upon Optus, due to the additional staff headcount, processes and IT systems that would need to be established in order to implement and track the progress of negotiations with apartment building owners and body corporates.
- 4.49 In addition to body corporates, another critical consideration is the fact that the vast majority of MDUs are often subject to strata title involving individual privately owned dwelling units. There are in excess of 60,000 strata title schemes in NSW alone.
- 4.50 Optus submits from past experience that strata titles present particular problems for customer access such that they create extensive delays and attendant costs in delivering services to customers within them. For example, should Optus be denied access to the existing Telstra copper network and had to service a potential subscriber, it would be forced to cross adjoining third party properties.
- 4.51 Further, the Telecommunications Code of Practice 1997 ("the Code") places additional statutory obligations on Optus to deal with these third parties. This results in delays and costs that are often unacceptable to potential customers who may, as a result, be required to wait months for a meeting to be convened by the body corporate for an opportunity to discuss the issue. Strata meetings are usually annual unless an extraordinary one is called and this usually requires as a minimum one month waiting period, often longer.

⁵⁸ ACCC, *Telstra's exemption application in respect of the Optus HFC network*, Draft Decision, September 2008, p.59

4.52 It is also often difficult for all the relevant parties to meet at a mutually acceptable time and how these parties interact when they do meet, can significantly impact the ability to service customers. Therefore, potential Optus customers associated with MDUs would be denied a fair opportunity in deciding on Optus as their service provider should Optus be excluded from access.

National Broadband Network deployment

- 4.53 Optus also agrees with the ACCC's view that uncertainty over the NBN is of concern, and may impact negatively on the efficient use of and investment in infrastructure if the exemption were granted.
- 4.54 The ACCC notes that one implication of the exemption may be that, if Optus is not the successful bidder for the NBN, it would not have rights to access services over the NBN in the Optus HFC footprint. ⁵⁹ Optus would observe that this is one of many possibilities. For example, it is also possible that Optus will have access to services supplied over the NBN, but will be denied its right to use its HFC network to replicate that network. This could arise if the Government legislates for a prohibition on overbuild as a condition of the NBN tender, as some bid proponents are seeking. As this point demonstrates, a key problem with the NBN is that it creates such uncertainty as to make it impossible for the ACCC to be satisfied, with any confidence, that granting Telstra's application today will promote competition in the relevant markets.
- 4.55 A further issue is that the NBN is likely to reduce Optus' expected penetration for the mooted expansion of the HFC network to MDUs and other unserviceable premises, since it would allow many other competitors to supply products at least equivalent to (if not more attractive than) those products that can be supplied over Optus' HFC network. Given the NBN is intended to be an *open access* high speed broadband network, it follows that a large number of resellers would be able to get regulated access to the NBN and could supply triple play (including IPTV) to end users in competition with Optus' HFC network. In this scenario Optus would be competing not solely with one other infrastructure player, but with a host of competitors. There is simply no credible basis to conclude that Optus could command penetration high enough to make the business case for infill infrastructure viable. Telstra's application does not genuinely consider this scenario, however Optus must consider it when contemplating any infrastructure investment.
- 4.56 The prospect of reduced penetration due to the NBN would make it difficult for Optus to achieve scale. The ACCC recognised the importance of scale in its *Emerging Markets* report, stating that: ⁶⁰

"The ability to achieve economies of scale is an important consideration for potential entrants to the pay TV industry. Scale is required to disperse fixed costs over a high number of subscribers, thereby decreasing the cost per subscriber. The ability to achieve these economies of scale may determine the pay TV operator's success, and may also act as a barrier to entry."

_

⁵⁹ ACCC, *Telstra's exemption application in respect of the Optus HFC network*, Draft Decision, September 2008, p.93

⁶⁰ ACCC, Emerging market structures in the communications sector, June 2003, p.10

- 4.57 In considering whether Optus would make the investments required to infill its HFC network 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 the main capital city metropolitan areas.
- 4.58 Optus considers that there is no reasonable basis for any expectation that any party rolling out fibre would be subject to lengthy notice periods. In this regard, Optus considers that a rapid rollout in the main capital city metropolitan areas should be considered a high probability, given the Government's stated policy intention to have the NBN deployed as quickly as possible. In September Senator Conroy said publicly that the Government "want[s] to complete this project as fast as we can..." ⁶¹ It is likely that the Government will implement measures to expedite the roll-out of the NBN.
- 4.59 Optus considers the issue of the timing of the NBN deployment in Appendix D and concludes that, even on a conservative estimate, fibre infrastructure will be deployed in the majority of the ESAs within the main capital city metropolitan areas by CiC begins CiC ends
- 4.60 Further, as the ACCC has noted, were significant sections of the Optus fibre in the HFC network to be incorporated into the NBN, significant investment in the coaxial cables that connect premises to network distribution cables may be lost or stranded. ⁶² CEG observes that the NBN deployment "must increase the degree of uncertainty associated with investment in infrastructure at this point in time", given that the NBN's future development path is unknown, and concludes that: ⁶³

"This implies that if the exemption is granted, it would be risky to take a short term decision to invest in cable..."

Page 22

⁶¹ Australian, 3 September 2008, "Broadband plan in starter's hands". Full quote: "We want this to be a proper and transparent process," Senator Conroy said. "We also want to complete this project as fast as we can and we are progressing as fast as possible with the information that has been available."

ACCC, Draft Decision (Confidential Version), page 67.
 CEG, 2008, Assessing the Likely Effects of Asymmetric Access Regulation in Australia, p.34

5. The Exemption Would Not Promote Competition

5.1 In this section Optus considers the impact of the exemption in curtailing the pro-competitive role played by Optus' DSLAM platform; and the role of barriers to customer substitution. These issues, in addition to the exemption's negative impacts on efficient investment in infrastructure and on competition in wholesale markets, amount to strong reasons why the exemption would not promote competition in relevant markets.

The pro-competitive role played by Optus

- 5.2 One of the issues considered by the ACCC is what effect on competition would follow from Optus being effectively excluded from competing for the custom of 800,000 unserviceable homes, on the assumption that the HFC network is not upgraded. The ACCC draft decision recognised the strong procompetitive role played by Optus through its DSLAM network, noting that "Optus is the main part of the recent strong growth in the ULLS". 64
- 5.3 Optus considers that removing the ability of Australia's second largest telecommunications operator to access 800,000 end users via the ULLS would have a significant negative impact upon competition.
- 5.4 In this regard Optus submits that Optus' ability to access the ULLS via the existing access regime (and hence the "future without" scenario) promotes competition. This was recognised by the ACCC in its arbitral determination between Telstra and Optus on the ULLS⁶⁵ and in its most recent re-declaration of the ULLS in which it stated that:

"The Commission is of the view that the use of the ULLS for voice services promotes competition by expanding the range of potential voice service providers and therefore the ability for price competition."

and: 67

"The use of ULLS also provides access seekers with the ability to offer a full service alternative to that provided by Telstra, including the ability to configure the line to provide various voice and data services... In this sense ULLS can also be seen as promoting competition in basic access services independently of its impact in particular call services."

5.5 Optus has often been a leader in providing new competitive services using the ULLS platform, for example, in its introduction of the 'Fusion' bundled offers. Optus submits that its scope, scale and nationally recognised brand name make it the most effective competitor to Telstra.

⁶⁴ ACCC, *Telstra's exemption application in respect of the Optus HFC network*, Draft Decision, September 2008, p.74-76, p.93

⁶⁵ ACCC, March 2008, ULLS Access Dispute Between Telstra and Optus, Statement of Reasons for Final Determination, p.155.

⁶⁶ ACCC, Declaration inquiry for the ULLS, PSTN OTA and CLLS—final determination, July 2006, p.33

p.33 67 ACCC, Declaration inquiry for the ULLS, PSTN OTA and CLLS—final determination, July 2006, p.35

5.6 The ACCC has in other fora (for example, its 'Prices Paid' report for 2006-2007⁶⁸) recognised the competitive impact of Optus in driving competition and forcing Telstra to respond to its competitive initiatives. In a submission to the Government in 2007, for example, the ACCC observed:⁶⁹

"The entry of Optus into DSL broadband in 2004 led to Telstra slashing entrylevel broadband prices to \$29.95 in response to competitors. Optus has recently introduced its 'Fusion' entry-level broadband and phone cap for \$69 and Telstra is responding."

- 5.7 CEG has considered this issue and observes that there is evidence that suggests "Optus is able to use ULLS to produce services of greater value to end-users than other access seekers". Accordingly, CEG found that the exemption was likely to reduce the competitive impact of Optus as a leading ULLS-based competitor. 1
- 5.8 Further, even Telstra's best case scenario seems to contemplate that a proportion of homes (around 7% if Telstra's HFC is the benchmark) will be unserviceable by an HFC network. That is, even Telstra does not suggest that an upgraded HFC network would be a complete substitute for ULLS access in the exemption area. Therefore, even on the most optimistic views about serviceability using the HFC, denying Optus access to the declared services would impede Optus from competing for those customers whose premises remain unserviceable.
- 5.9 The ACCC considers the scenario where Optus seeks access to the ULLS within the exemption area through commercial negotiations with Telstra in its draft decision and notes that Optus would likely pay prices above those available were the services still regulated. Optus believes that guidance to Telstra's likely approach in any such negotiations can be gleaned from history. Optus would observe in this regard that Telstra has proposed in bilateral 'negotiations' with access seekers and in previous regulatory proceedings a ULLS charge of \$30 per service per month for Band 2 exchange areas, as was noted in the ACCC's arbitral determination between Telstra and Optus on the ULLS. The ACCC determined a price of \$14.30 per service per month for Band 2 exchange areas for the 2007-08 financial year. Notwithstanding the fact that the ACCC and the Tribunal have recently rejected a \$30 ULLS price as being unreasonable, Telstra continues to pursue such a price commercially.

⁶⁸ ACCC, Changes in the prices paid for telecommunications services in Australia 2006–2007, pp22-23

 $^{^{23}}$ 69 ACCC, November 2007, Submission to the DCITA review of the universal service obligation (USO), p.5

CEG, 2008, Assessing the Likely Effects of Asymmetric Access Regulation in Australia, p.35
 CEG, 2008, Assessing the Likely Effects of Asymmetric Access Regulation in Australia, p.7

⁷² ACCC, *Telstra's exemption application in respect of the Optus HFC network*, Draft Decision, September 2008, p.10

⁷³ ACCC, March 2008, ULLS Access Dispute Between Telstra and Optus, Statement of Reasons for Final Determination, p.1.

⁷⁴ ACCC, March 2008, *ULLS Access Dispute Between Telstra and Optus, Statement of Reasons for Final Determination*, p.1.

Barriers to customer substitution

5.10 Telstra has suggested that in the event of exemption, Optus customers currently served via the ULLS could be served via other platforms including HFC (potentially via VoIP) or via mobile. In this section Optus notes some points relevant to Telstra's contentions.

HFC: customer switching costs

- 5.11 Optus currently serves over five hundred thousand customers over its HFC network. These customers may readily be served on an ongoing basis. However, if the exemption was granted, Optus' DSLAM-based customers would need to switch to its HFC network if they were to remain with Optus. These customers would incur switching costs.
- 5.12 The ACCC noted the relevance of customer switching costs in its draft decision, stating that: ⁷⁶

"the differing technology of the HFC network compared to the CAN may mean that there will be switching costs for consumers in changing their customer premises equipment from ULLS-based provision to the HFCbased provision or vice versa, even if the premises is serviceable by HFC."

- 5.13 Optus charges various one-off installation fees for new standalone cable connections (details are provided in Appendix G), for example a \$59 connection fee for a standard, standalone installation for a 12 month contract and a further \$99 for a cable modem. The customer premises equipment used for HFC connection (including cable modem) typically differs from the customer premises equipment used for DSL connections, and thus the a customer switching to HFC would need to purchase new equipment.
- 5.14 The extent of the installation cost may be amplified if a non standard connection is required. Non standard connection occurs in circumstances where cable installation is required beyond normal conditions (a list of these circumstances is provided in Appendix G), the most notable being where additional Optus infrastructure or underground installation is required for service provision.

3G Mobile

5.15 The ACCC in its draft decision noted that "Telstra makes submissions that Optus could use its 3G network to serve some customers were the exemption granted". ⁷⁷

⁷⁵ As at September 2008 the number of premises served was 516,816. See Appendix A for further detail.

⁷⁶ ACCC, *Telstra's exemption application in respect of the Optus HFC network*, Draft Decision, September 2008, p.53

⁷⁷ ACCC, *Telstra's exemption application in respect of the Optus HFC network*, Draft Decision, September 2008, p.21

5.16 **CiC begins CiC ends** In Appendix I Optus sets out some of the engineering characteristics of 3G networks, which are relevant to a proper consideration of this issue.

VoIP

- 5.17 The ACCC in its draft decision noted Telstra's submission that VoIP should be treated as being in the same retail market for fixed voice services.⁷⁸
- 5.18 In this regard Optus submits that the view expressed recently by the ACCC in another context on VOIP may be relevant. The ACCC noted that:⁷⁹

"the physical and technical characteristics of a carrier-grade VoIP product can be quite different to that of traditional PSTN voice... At this stage the ACCC considers carrier-grade and application layer VoIP services are unlikely to be effective substitutes for PSTN voice due to the current limitations concerning the quality characteristics of VoIP services, the requirement for switching customer premises equipment and also the necessity to acquire a broadband service in conjunction with the VoIP service."

⁷⁹ ACCC, 2008, Final Decision on Telstra's WLR and LCS exemption applications, p43-44

⁷⁸ ACCC, *Telstra's exemption application in respect of the Optus HFC network*, Draft Decision, September 2008, p.34

CiC begins			
CiC ends			

Appendix B: Value of DSLAM Investment Stranded by Exemption
Optus has estimated the approximate value of its stranded DSLAM investment if the exemption were granted, at CiC begins CiC ends

CiC begins

CiC ends

Appendix D: Likely Timing of NBN Fibre Roll-out

In considering whether Optus would make the investments required to infill its HFC network 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 the main capital city metropolitan areas.

Optus considers the issue of the timing of the NBN deployment in this Appendix and concludes that, even on a conservative estimate, fibre infrastructure will be deployed in the majority of the ESAs within the main capital city metropolitan areas by CiC begins CiC ends.

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.⁸⁰

It is not in question that the new fibre network will be rolled out in the main capital city metropolitan areas. The key question is when this will occur.

Proposals to roll-out and operate the new network are now due by 26 November 2008. The Federal Government will decide on its preferred FTTN operator after considering these proposals. The Government has indicated that it will announce the preferred bidder by March/April 2009. It is unlikely that the Government consideration will be prolonged, given the Government's public statements that it "want[s] to complete this project as fast as we can..."

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 (which it is likely to do by April 2009). That is the objective is that the network will be complete (able to serve 98% of the population) within five years. However the network will be operational in many areas well within that timeframe.

_

⁸⁰ DBCDE, April 2008, Request for Proposals to Roll-Out and Operate a National Broadband Network for Australia

Australian, 3 September 2008, "Broadband plan in starter's hands". Full quote: "We want this to be a proper and transparent process," Senator Conroy said. "We also want to complete this project as fast as we can and we are progressing as fast as possible with the information that has been available."

Appendix E: Content Costs CiC begins CiC ends Appendix F: Cost of HFC Network Upgrade CiC begins CiC ends

Appendix G: Switching Costs: Optus Cable Internet Installation Costs

Optus charges various one-off installation fees for all new standalone cable connections, including:

- connection fee for a standard, standalone installation: \$59 for a 12 month contract:
- \$99 for a cable modem;
- \$9.95 modem delivery fee; and
- \$50.00 for the network interface card (NIC) including installation.

Installation fees charged differ depending on whether or not a standard connection is required. The extent of the installation cost may be amplified if a non standard connection is required. Non standard connection occurs in circumstances where cable installation is required beyond normal conditions (a list of these circumstances is provided in Appendix G), the most notable being where additional Optus infrastructure or underground installation is required for service provision. The following section (which is an extract from customer documentation) sets out the circumstances in which a non-standard connection may apply.

What is the difference between a standard and a non-standard connection?

The connection to the *service* will be a 'non-standard connection' in circumstance that include, for example, the following:

- (a) the length of the external cabling between the relevant *network point of* presence and the service delivery point is greater than 50 metres,
- (b) the link between the *network point of presence* and the service delivery point requires the installation of *Optus owned equipment* in addition to cable,
- (c) *you* request that the cable between the *network point of presence* and the *service delivery point* be placed underground,
- (d) there is no underground or roof access to your premises,
- (e) the length of the external cabling between the relevant *network point of presence* and the *service delivery point* is less than 50m, but an aerial installation is not technically possible, or
- (f) it will require in excess of four (4) man hours to complete the installation of one outlet at your *premises*, or in excess of seven (7) man hours to complete the installation of multiple outlets and/or sockets at your *premises*.

In most other circumstances, the connection will be considered to be a 'standard' connection.

Appendix H: Regulations Concerning Overhead Cabling

'Non-low impact' development

With regard to the issue of 'non-low impact' development, the Telecommunications Act 1997 distinguishes between non-low impact and low-impact facilities and accredits state governments with the power to establish the planning regime that will govern the rollout of telecommunications infrastructure in their jurisdictions. In addition to the Act, the Telecommunications Code of Practice 1997 and the Telecommunications (Low Impact Facilities) Determination (1997) Amendment No. 1 of 1999 together provide the statutory framework for planning of telecommunications infrastructure in Australia.

Under the Telecommunications (Low-impact Facilities) Determination 1997, telecommunications facilities are defined as either being 'low impact', and therefore able to be installed by a Carrier as authorised under the Telecommunications Act 1997, or 'non-low impact', and therefore not permissible to be installed without consent from the relevant approval authority (Council, State government authority and/or Commonwealth government authority, depending on the land in question). Overhead cabling is classified as 'non-low impact' and, as such, local planning authorities have the power to stop deployment of cable. Consequently any HFC network expansion would rely on development consent from local Councils, which would be granted at the Council's discretion based on the merits of the development.

State-specific regulations regarding subscriber connections

The rules applying to overhead cabling that is defined as a 'subscriber connection' (such as an installation for the sole purpose of connecting a building, structure, caravan or manufactured home to a line that is part of an existing telecommunications network) varies across different state jurisdictions. 82

The treatment of subscriber connections will varies across different state jurisdictions. The main considerations that apply to Optus' HFC network are summarised below:

New South Wales

Subscriber connections (aerial or underground) that are NOT co-located with an underground or above ground electricity supply connection do not require development consent unless the subscriber's premises, or any land traversed by the connection, is a State or local heritage item or is located in a heritage conservation area. Aerial subscriber connections of this type must also be consistent with the Australian Communications Industry Forum Industry Code entitled ACIF C524:2004 External Communication Cable Networks.

Subscriber connections that are co-located with an underground or above ground electricity supply connection and are consistent with ACIF C524 are exempt from requiring development consent so long as certain criteria are met (see clause 20(2) of the State Environmental Planning Policy (Infrastructure) 2007), including:

the development must involve no more than minimal impact on the environmental amenity of the surrounding area; and

⁸² In addition, it should be noted that cabling installed as subscriber connections cannot function as part of a Carrier's network (such that, it can only link existing network to a subscriber but can't be built off of in the future).

• if the development is likely to affect a State or local heritage item or a heritage conservation area, the development must involve no more than minimal impact on the heritage significance of the item or area.

Queensland

Subscriber connections are not regulated and therefore permits are not required, regardless of the heritage status of the building or area [Section 854 (6) and (7) of the *Local Government Act 1993* and Schedule 9 of the Integrated Planning Act 1997].

Victoria

Permits are not required for subscriber connections, which are governed by Clause 52.19 of all planning schemes in Victoria.

Appendix I: Engineering Characteristics of 3G Mobile Networks

From an engineering perspective, an important difference between fixed and 3G networks (apart from mobility) is that 3G networks are designed so that the radio frequency spectrum utilised by that network is shared between multiple calls (or data sessions) at any one time.

CiC begins

CiC ends

Attached as separate docu	ument.]		