

RESTRICTION OF PUBLICATION OF PART CLAIMED (pages 8, 9, 10, 17, 18, 19)

[PUBLIC REGISTER VERSION]



**Submission to the Australian Competition
and Consumer Commission**

**in support of the
Application for Authorisation of
the HFC Subscriber Agreement between
NBN Co Limited and SingTel Optus Pty Ltd
and other Optus entities**

26 August 2011

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1. Introduction

- 1.1 This submission is made by SingTel Optus Pty Ltd, Optus Networks Pty Ltd, Optus Internet Pty Ltd and Optus Vision Media Pty Ltd (together, **Optus**) in support of the application for authorisation dated 26 August 2011 and lodged by NBN Co Limited (**NBN Co**) relating to the Optus HFC Subscriber Agreement between NBN Co and Optus dated 23 June 2011 (**HFC Agreement**).

Executive Summary

- 1.2 Optus submits that the ACCC should authorise the relevant provisions of the HFC Agreement because the public benefits that will arise from the HFC Agreement will clearly outweigh any perceived public detriments.
- 1.3 Optus submits that the public benefits include:
- (a) promoting increased retail competition by ensuring that there is a level playing field;
 - (b) enhancing competition in wholesale markets;
 - (c) ensuring that Optus HFC customers receive equitable treatment with other telecommunications users by ensuring that their transition to the NBN is seamless;
 - (d) allowing Optus to proceed with its fixed line strategy;
 - (e) improving the economic viability and reducing the risk profile associated with the roll-out of the NBN;
 - (f) ensuring consistency with the Government's public policy objectives for the NBN; and
 - (g) facilitating environmental benefits.
- 1.4 Optus further submits that there are no public detriments that will arise from the HFC Agreement.

2. Optus and the Optus HFC network

- 2.1 Optus is a leading Australian integrated telecommunications company, delivering communications, information technology and entertainment services. Optus owns and operates one of the two major hybrid fibre coaxial (HFC) networks in Australia (the other is operated by Telstra). HFC technology uses optical fibre plus coaxial cable to supply telephony, broadband and pay TV services. The optical fibre forms the backbone within the access network while the high-speed coaxial cable runs from the fibre nodes to the customers' premises.
- 2.2 The Optus parties to the HFC Agreement include the Optus entities which supply services using the Optus HFC network (**HFC Network**). The HFC Network services households in Brisbane, Melbourne and Sydney. Maps showing the coverage of the HFC Network are at Confidential Annexure 1. As can be seen from these maps, coverage is provided on a street-by-street basis and there are gaps in the areas of metropolitan Brisbane, Melbourne and Sydney that are covered by the HFC Network.
- 2.3 Optus uses the HFC Network to supply fixed line telephony, broadband and pay TV to consumers with the HFC Network coverage area. Outside the HFC Network coverage area, Optus supplies fixed line telephony and broadband services using Telstra's copper network. Optus also uses the fibre optic cable that forms part of the HFC Network for its mobile network (providing connections to mobile base stations) and to deliver telecommunications services to business customers. This fibre optic cable is also integrated into the overall Optus fibre network, providing interconnection between Optus facilities such as exchanges, fibre access node sites and points of interconnect.
- 2.4 The deployment of the HFC Network began in February 1995 and by the end of 2000, about 21,000km of coaxial cable and 5,500km of fibre cable had been laid around the suburban residential areas of Brisbane, Melbourne and Sydney. Optus had originally intended to also roll out an HFC network in Adelaide, but decided against this in 1997.¹ Optus has no plans to further extend the HFC Network.
- 2.5 The HFC Network currently consists of 21,000 km of steel wire (strand) supporting 7,000 km of fibre and 25,000 km of coaxial cable strung across 550,000 poles. While the network passes 2.4 million homes, only around 1.4 million of these premises are deemed to be serviceable. The remaining 1.0 million homes are non-serviceable as they either cannot be technically connected to the HFC Network or the costs and/or practical difficulties of connecting the premises outweigh the benefits of connecting the customer. A large percentage of these non serviceable homes are Multi Dwelling Units (**MDU's**).
- 2.6 An HFC network is a contested network where a number of customers share each coaxial cable. As such, quality of service falls as the number of users increase. As the

¹ BIS, *Telecommunication infrastructures in Australia* 2001, A research report prepared for ACCC, December 2001, p.99

coaxial cable is shielded, high speed connections are possible over reasonably large access networks.

- 2.7 Typically, HFC networks can provide download speeds of up to 30 Mbit/s however with upgrading to the DOCSIS (data over cable service interface specification) 3.0 standard, an HFC network can provide download speeds of up to 100 Mbit/s.²
- 2.8 Optus upgraded its HFC Network in 2010 to DOCSIS 3.0 technology to offer higher speeds in Brisbane, Melbourne and Sydney.³ This is the leading HFC technology currently deployed in Australia today to support mass consumer grade highspeed broadband services.
- 2.9 Optus has no plans to expand the HFC Network outside its current footprint, nor does it have any plans to undertake any further major upgrades of the network.

Residential services on the HFC Network

- 2.10 Optus currently uses the HFC network to provide telephony, broadband and pay TV services to residential customers. Currently, where residential customers' premises are serviceable by the HFC Network, Optus will supply telephony, broadband and pay TV services via the HFC Network.
- 2.11 As at 31 March 2011, Optus' HFC customer⁴ base comprised approximately 504,000 individual subscribers, of which there are approximately:
 - (a) 504,000 Local Access Telephone subscribers; and
 - (b) 426,000 High Speed Broadband subscribers.
- 2.12 Approximately 87% of HFC customers take one or more products.

Business and wholesale customers

- 2.13 Optus does not supply business grade or wholesale services via the HFC Network.
- 2.14 The HFC Network is not suitable for the supply of business services because it is not capable of meeting business customers' typical requirements with regard to quality of service, including features such as availability, symmetric capacity and diversity.
- 2.15 Business customers typically require symmetric "business grade" upload / download capacity which the HFC Network is not able to deliver. Further, both business and

² ACMA, *Communications report 2009-10*, November 2010, p.40

³ Optus, "Optus upgrades cable broadband to deliver supersonic speeds in Brisbane, Melbourne and Sydney," Media Release, 2 August 2010

⁴ SingTel, Singapore Telecommunications Limited and Subsidiary Companies, Management discussion and analysis of financial condition, results of operations and cash flows for the fourth quarter and year ended 31 March 2011, p.51

wholesale customers require consistency of service. However, since the HFC Network is a shared network, capacity is affected by congestion levels and particular speeds cannot be guaranteed. This feature of the HFC Network also creates difficulties which limit the ability of wholesale customers to control the quality of service they provide to their customers (a typical requirement of wholesale customers).

- 2.16 Business customers also often require a diverse network, for secure continuous operation. The HFC Network is not a diverse network and is not able to provide this requirement. Consequently, Optus considers the HFC Network is not suitable for business services because it is not capable of meeting those customers' typical requirements with regard to quality of service, including features such as availability, symmetric capacity and diversity.
- 2.17 In relation to wholesale customers, in addition to the limitations referred to above, the HFC Network is not currently configured to enable wholesale access. Optus would need to undertake a major upgrade of the HFC Network which would require significant investment. Optus has no plans to make such an investment in the network.

HFC Network and the NBN

- 2.18 The HFC technology will be surpassed by the Fibre to the Premise (FTTP) technology being deployed by NBN Co for the NBN. There are numerous technical differences between FTTP and HFC technology that will give the FTTP technology a significantly greater service capability both in the immediate and longer-term.
- 2.19 As mentioned above, the HFC Network is a contested network and the user performance is dependent on the network loading. Shared networks are designed to optimise the resources available by exploiting the characteristics of a large number of end users. In any one network not all users are active at the one time and of the active users not all users are actually utilising the network at the same time. This allows each user to achieve the peak data rate available on the network for the short periods that they are active on the network. However, as the network becomes more loaded the average throughput of users in a busy period can be reduced. The HFC Network will share the 100Mbps downlink with up to 200 users whereas the NBN GPON (Gigabit Passive Optical Network) will share 2500Mbps between 32 users providing over 150 times the average capacity per user than the HFC Network.
- 2.20 Whilst the HFC Network can offer peak speeds of up to 100 Mbps today, the NBN consumer service will offer peak speeds of up to 1,000 Mbps (this speed is limited by the throughput of the NBN end customer equipment) which is over 10 times the capability of the HFC Network. A further key differentiator of the NBN is that it will offer superior upload speeds. While the HFC Network can offer upload speeds of up to 2

Mbps⁵, NBN Co proposes to offer upload speeds starting at 1 Mbps for an entry level service and up to 400 Mbps.

- 2.21 Further, it is planned that the consumer fibre to the home technology will use 10Gbps GPON technology (shared between 32 users) in the near future for the NBN and there are clear upgrade paths that will provide even higher speeds per user.
- 2.22 Whilst HFC Networks also have an upgrade path to higher speeds allowing peak speeds of over 300Mbps, HFC technology will lag the capability of fibre to the premise technology. More pertinently, as mentioned earlier, it is unlikely that such future technology would ever be deployed because it effectively requires significant re-engineering of the network through node splitting or extending fibre deeper into the network (this pushes the HFC Network to more closely resemble a fibre to the premise network with fibre being provided closer to the home and the coaxial portion shared with fewer users). This is costly and would require significant capital expenditure.

⁵ Note, this is the speed at which Optus has configured the network. The standard can provide higher speeds but Optus has not due to the incremental cost versus benefit.

3. HFC Agreement and proposed conduct

- 3.1 Optus and NBN Co entered into the HFC Agreement on 23 June 2011. The HFC Agreement provides for the phased migration of Optus' HFC subscribers to the National Broadband Network (NBN) from the HFC Network, with Optus acquiring wholesale access services from NBN Co. Once services have been migrated to the NBN, Optus will decommission the HFC Network.
- 3.2 Under the proposed terms of the HFC Agreement, Optus will:
- (a) Actively migrate its HFC customers onto the NBN platform as it is built out in Optus' HFC footprint;
 - (b) Receive a fee for each subscriber migrated to the NBN over a 4-5 year timescale;
 - (c) Pay an ongoing wholesale access fee to NBN Co for each migrated customer, with a minimum commitment of 24 months;
 - (d) Progressively deactivate and decommission the HFC Network within 18 months of the NBN being completed in each HFC serving area (excluding those parts of the HFC Network that provide ongoing support for Optus' mobile infrastructure and business customers⁶);
 - (e) Make a **[RESTRICTION OF PUBLICATION OF PART CLAIMED]** commitment (from the date the NBN is first available in an HFC serving area) to only use the NBN for fixed line services for mass market customers within the HFC footprint, along with granting a first right of refusal to build any point-to-point fibre Optus may require within that area; and
 - (f) Make a 15 year commitment (from the date of execution) not to conduct a marketing campaign in respect of wireless data services targeted at retail customers within the HFC serving area which is disparaging of the performance or functionality of the NBN.

There are various ancillary provisions in the HFC Agreement that support these terms. A confidential copy of the HFC Agreement is enclosed with the NBN Co submission.

- 3.3 The Applications and NBN Co submission set out the specific conduct for which authorisation is being sought.
- 3.4 Key provisions of the HFC Agreement (including those the subject of the authorisation application) are conditional on obtaining ACCC authorisation. **[RESTRICTION OF PUBLICATION OF PART CLAIMED]**

⁶ Optus plans to retain all fibre components of the HFC Network.

3.5 [RESTRICTION OF PUBLICATION OF PART CLAIMED]

- 3.6 This transaction helps to underpin Optus' future competitiveness in the fixed line market by enabling it to progressively decommission the parts of the HFC Network that do not provide ongoing support for mobile infrastructure and business customers and to assist in the orderly and early migration of its HFC fixed line customers to the NBN.

4. The counterfactual

- 4.1 This section considers the relevant counterfactual against which the public benefits and detriments of the proposed conduct the subject of the authorisation application should be assessed.

HFC Agreement

- 4.2 As set out above, key provisions of the HFC Agreement are conditional on ACCC authorisation **[RESTRICTION OF PUBLICATION OF PART CLAIMED]**.
- 4.3 The provisions the subject of the authorisation application are fundamental to the agreement reached by Optus and NBN Co. These provisions represent the principle obligations imposed on Optus in exchange for which Optus receives payment of the migration fee for migration of its HFC customers to the NBN. As noted in NBN Co's submission, it is not the case that the HFC Agreement could proceed without one or more of those provisions.
- 4.4 Optus submits that, if the HFC Agreement is not authorised, it is unlikely that Optus and NBN Co would reach a new agreement dealing with the same subject matter on substantially different terms. The HFC Agreement was reached after extensive negotiation between the parties.
- 4.5 Accordingly, the counterfactual against which the public benefits of the relevant provisions of the HFC Agreement must be considered is a future in which there is no HFC Agreement (or other similar agreement).

Telstra Transaction

- 4.6 One important consideration in identifying the relevant counterfactual against which the HFC Agreement is to be assessed is the agreement between Telstra and NBN Co.
- 4.7 On 23 June 2011, Telstra and NBN Co announced that they had reached a final agreement that will, amongst other things, involve the decommissioning by Telstra of its extensive copper network and the migration of customers from both its copper and HFC cable network to the NBN over the proposed roll-out period (i.e. the Telstra Transaction). The Telstra Transaction is conditional on ACCC approval of the structural separation undertaking and migration plan.
- 4.8 If the Telstra Transaction proceeds, Optus considers it likely that the NBN will proceed regardless of whether or not the HFC Agreement is authorised by the ACCC.
- 4.9 If however the Telstra Transaction does not proceed, then it is difficult to make assumptions as to what would be likely to happen. **[RESTRICTION OF PUBLICATION OF PART CLAIMED]**

4.10 In terms of the market more generally and the NBN in particular, Optus cannot speculate as to what is likely to happen. Given these uncertainties, Optus submits that the appropriate assumption to adopt is that the status quo will continue. The current state of competition in the relevant markets is summarised further in section 5 below. Optus submits that Telstra will continue to enjoy a dominant position in the fixed voice and broadband retail markets, and the wholesale market for fixed voice and broadband, as it has done for the past 15 years. Optus will continue to compete in the fixed voice and broadband retail markets as it has done to date, using both the HFC Network and the Telstra network to compete. As noted above, Optus has no current plans to expand or upgrade the HFC Network.

Relevant counterfactual

4.11 In light of the above, Optus submits that the relevant counterfactuals against which the authorisation application should be assessed are:

- (a) the status quo; and
- (b) the Telstra Transaction and NBN proceeds but there is no HFC Agreement or similar agreement.

4.12 Optus is not able to state definitively at this time what it would do in connection with the HFC Network if the second potential counterfactual were to eventuate. It should be assumed for the purpose of the authorisation application, however, that Optus will offer services using the NBN as well as continuing to offer services on the HFC Network to those customers who are within the HFC Network coverage area.

4.13 However, it is important to note that legislation enacted as part of the Government's NBN reforms effectively means that Optus will not expand its HFC Network. This is discussed further in section 6 below.

5. Relevant Markets

5.1 Optus submits that there are a number of markets that are relevant to the HFC Agreement, including:

- (a) the market for the retail supply of fixed voice telephony services;
- (b) the markets for the supply of fixed broadband services; and
- (c) the wholesale markets for the supply of fixed voice and telephony services.

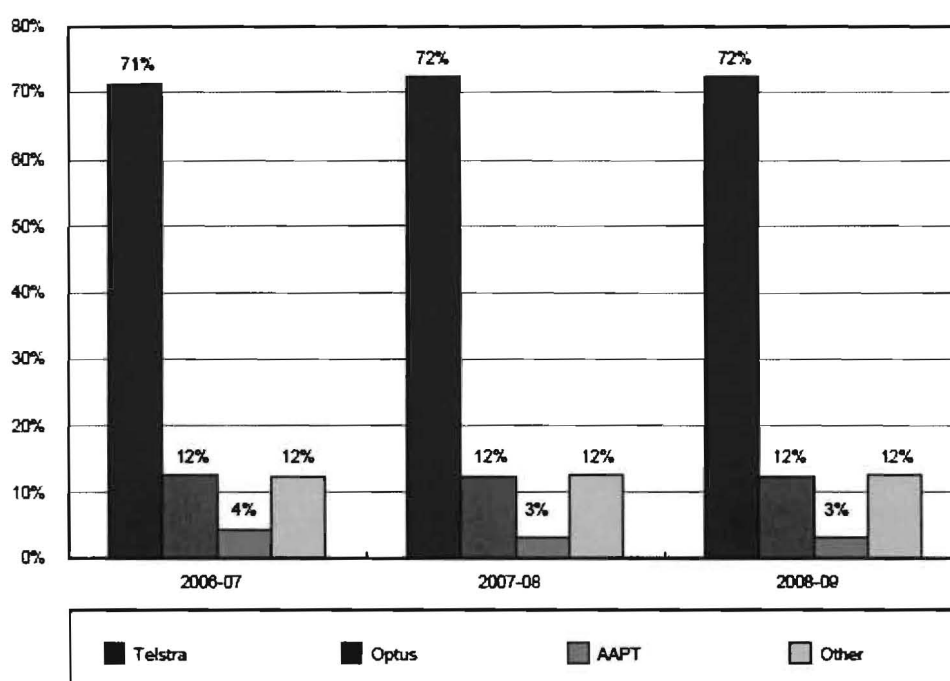
5.2 The current state of competition in each of these markets is examined below.

Market for the retail supply of fixed voice telephony services

5.3 Optus presently competes in the market for the supply of retail voice services using both its HFC network and other infrastructure (specifically, by obtaining access to Telstra's copper access network via the unbundled local loop service (ULLS) and also by reselling Telstra services).

5.4 Optus submits that the market for the supply of retail voice services is not currently subject to effective competition. As the following table demonstrates, some 15 years after competition was introduced into the market Telstra retains a dominant market share in the fixed line telephony market.

Fixed voice service shares by subscriber numbers, 2006–07 to 2008–09⁷



⁷ ACCC telecommunications reports 2008–09

- 5.5 However, this dominance is even more profound at the infrastructure level. Many of the competitive retail services captured in the above table are actually supplied over Telstra's infrastructure. For example, Optus currently supplies customers outside of the HFC Network footprint by obtaining access to Telstra's copper access network via the ULLS or reselling Telstra services (i.e. through wholesale line rental). Using the ULLS, Optus can provide voice and data services, connecting to the Optus network via DSLAM equipment installed at the Telstra local exchange. Optus resells Telstra services in geographic areas outside of Optus' DSLAM footprint.
- 5.6 Whilst there are a number of alternate fixed line networks deployed across Australia, including Optus' HFC network, around 90% of customer connections are provided over Telstra infrastructure. By contrast the Optus HFC network connects only 4.8% of customers.
- 5.7 The following table provides an analysis of the standard fixed line telephony services in operation.

Share of access Lines as at June 2010

	Subscribers (millions)	%
Telstra		
Retail Lines	7.41	70.0%
Wholesale Lines	1.25	11.8%
ULLS Lines	0.83	7.8%
Telstra Total	9.49	89.6%
Optus HFC	0.51	4.8%
Other	0.59	5.6%
Total	10.59	100.0%

- 5.8 Telstra's dominance at the infrastructure level has been recently noted by the ACCC in its July 2009 report on Fixed Services Review Declaration Inquiry for the ULLS, LSS, PSTN OA, PSTN TA, LCS and WLR;

"Telstra still controls the infrastructure by which the overwhelming majority of fixed voice and fixed broadband services are provided and because of its vertical integration Telstra enjoys a strong position in fixed voice and fixed broadband services".⁸

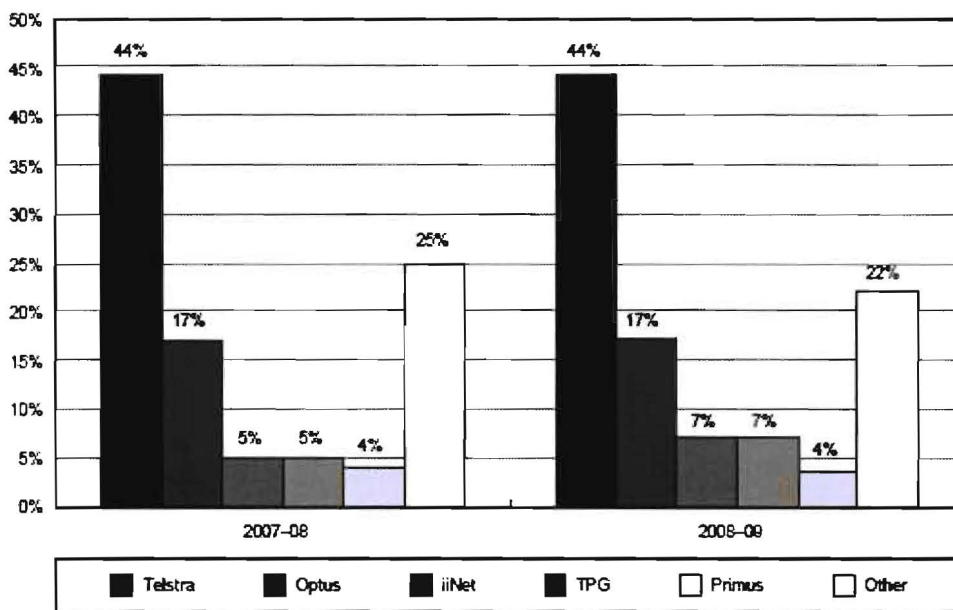
Market for the retail supply of fixed broadband services

- 5.9 Competition is more developed within the market for the supply of retail broadband services with some 529 Internet Service Providers operating in the market as at June

⁸ ACCC report on Fixed Services Review Declaration Inquiry for the ULLS, LSS, PSTN OA, PSTN TA, LCS and WLR, July 2009 – page 53

2010⁹. Nevertheless, Telstra retains a dominant position in this market with a retail market share well over double that of its nearest rival Optus. This is demonstrated in the following table.

Retail fixed broadband (DSL and HFC) market shares by number of subscribers¹⁰



5.10 Similar to the market for the supply of retail voice services, the majority of services provided by competing service providers are actually delivered over the Telstra local copper loop. Competing network infrastructure, such as the Optus HFC network, accounts for a modest proportion of broadband services. As at June 2010, the Optus HFC network accounted for 4.8% of Broadband services in operation within Australia.

Wholesale market for the fixed voice and broadband services

5.11 Optus also currently competes with Telstra in the market for the provision of wholesale voice and broadband services.

5.12 Optus' wholesale access services are supplied using Optus DSL based infrastructure which relies on access to Telstra's copper loop (through the ULLS access services) as a key infrastructure input.

⁹ ACMA Communications report 2009–10, page 23

¹⁰ ACCC telecommunications reports 2008–09

- 5.13 Optus does not provide wholesale access services over its HFC network. As described in section 2 above, it is not currently possible to do so and there are technical difficulties associated with providing wholesale access that would require a major upgrade to the network to be overcome. Optus has no plans to make a wholesale service available.
- 5.14 This means that at both the retail and wholesale levels, Telstra dominates the market for the provision of voice and broadband access services. This is a conclusion that the ACCC shares as evidenced by its comment in its July 2009 report on Fixed Services Review Declaration Inquiry for the ULLS, LSS, PSTN OA, PSTN TA, LCS and WLR

*“Accordingly, it is the ACCC’s view that both the wholesale and retail markets for the provision of fixed voice services, fixed broadband services and bundled fixed voice and fixed broadband services do not display the characteristics of effectively competitive markets”.*¹¹

¹¹ ACCC report on Fixed Services Review Declaration Inquiry for the ULLS, LSS, PSTN OA, PSTN TA, LCS and WLR, July 2009 – page 53

6. Public Benefits of the HFC Agreement

6.1 Optus believes the NBN has the potential to positively reshape the fixed line telecommunications sector in Australia and deliver significant benefits to Australian consumers and businesses. In particular, Optus sees the role of the NBN to be one of pro-competition, levelling the playing field for fixed line services.¹² The HFC Agreement supports the NBN to create a level playing field and puts Optus in a position to compete effectively in wholesale and retail fixed line markets. It also has a number of other benefits.

6.2 In summary, Optus submits that there are number of public benefits arising from the HFC Agreement, including;

- (a) promoting increased retail competition by ensuring that there is a level playing field;
- (b) enhancing competition in wholesale markets;
- (c) ensuring that Optus HFC customers receive equitable treatment with other telecommunications users by ensuring that their transition to the NBN is seamless;
- (d) allowing Optus to proceed with its fixed line strategy;
- (e) improving the economic viability and reducing the risk profile associated with the roll-out of the NBN;
- (f) ensuring consistency with the Government's public policy objectives for the NBN; and
- (g) facilitating environmental benefits.

6.3 Each of these benefits is considered in more detail below.

Promoting increased retail competition by ensuring there is a level playing field

6.4 As discussed above, there is currently limited competition in retail markets due to the dominance of Telstra. Optus is currently Telstra's closest competitor. Optus' ability to compete effectively with Telstra in the future under the NBN is dependent on there being a level playing field for competition in the relevant retail markets. The HFC Agreement helps ensure that there is such a level playing field.

6.5 If the Telstra Transaction proceeds but the HFC Agreement does not, Telstra will receive an advantage as a result of the proposed early migration of its customer base to the

¹² See further Optus Submission to the House Standing Committee on Infrastructure and Communications Inquiry into the role and potential of the National Broadband Network, March 2011

NBN while Optus, the other retail service provider which owns and operates a major fixed line network, will be at a relative disadvantage.

- 6.6 Optus submits that competition, and therefore consumers, will benefit if Optus is also in a position to migrate its entire customer base to the NBN at the earliest opportunity. While Optus' existing customers attached to the Telstra network will be migrated under the Telstra Agreement, the migration of Optus' HFC customers under the HFC Agreement will ensure that from day one there will be an alternative national scale player to Telstra providing access to retail services delivered over the NBN.
- 6.7 Further, if the HFC Agreement does not proceed, then Optus will be in a position where it is servicing its customers on both the HFC Network and the NBN. This will mean that Optus will be required to maintain duplicate sets of systems, processes, customer care functions and operational support capabilities to service its fixed line customer base. Clearly, this will raise Optus' costs of supply and will put Optus at a competitive disadvantage to its competitors, including Telstra and other retail service providers, who will be focusing all of their resources and efforts towards supporting services offered over a single fixed line access technology.
- 6.8 Optus submits that the HFC Agreement will put Optus on a level playing field with all other retail service providers accessing the NBN, including Telstra. This is because Optus will generate significant efficiency benefits through being able to decommission its HFC Network and offer services from the NBN. Specifically, Optus will be able to:
- (a) manage a unified national range of products;
 - (b) operate uniform systems and back-office programmes;
 - (c) market services through unified sales and marketing campaign activities; and
 - (d) develop uniform customer care and technical support capabilities.

Other than Telstra (which has its own agreement with NBN Co), other retail service providers do not own and operate any comparable fixed line network for supply of fixed line telecommunications services to consumers and small businesses.

- 6.9 In relation to efficiency benefits, the HFC Agreement will enable Optus to achieve savings in ongoing capital and maintenance costs in the order of **[RESTRICTION OF PUBLICATION OF PART CLAIMED]** post-migration of its services to the NBN. These savings will be generated because Optus will be able to progressively de-commission the HFC Network and support platforms. **[RESTRICTION OF PUBLICATION OF PART CLAIMED]** The efficiency gains resulting from the HFC transaction will enable Optus to supply better, more competitive services to its customers.
- 6.10 In summary, the HFC Agreement will put Optus in the best position for the roll out of the NBN, enabling it to compete as a strong, focused, national scale player in the retail voice and broadband markets. This will produce significant public benefits in the form of enhanced competition.

HFC Agreement will enhance competition in the wholesale market

- 6.11 As set out in the NBN Co submission, the HFC Agreement is also consistent with promoting a vibrant wholesale market using the NBN.
- 6.12 The HFC Agreement will also ensure that Optus is in the best possible position to compete with Telstra in the wholesale market. The current market for the supply of wholesale voice and broadband services is fragmented. Whilst Optus competes with Telstra in key metropolitan areas (through its DSL infrastructure, not the HFC Network), Telstra does not face meaningful competition in much of regional and rural Australia. The NBN opens up the opportunity for a genuine national scale competitor to Telstra to emerge in the wholesale market. Optus plans to be this competitor.

6.13 [RESTRICTION OF PUBLICATION OF PART CLAIMED]

Early and seamless migration of Optus customers to the NBN

- 6.14 A significant benefit of the HFC Agreement is that Optus and NBN Co will cooperate to develop a process for migrating Optus' HFC customers over to the NBN. This process is expected to make the migration of existing HFC customers to the NBN as efficient and as seamless as possible. It will also ensure that Optus' customers will receive equitable treatment to customers on the Telstra network and will have the ability to access the superior suite of services that will be offered over the NBN as soon as possible.
- 6.15 Under the terms of the HFC Agreement, NBN Co and Optus are required to negotiate in good faith an Implementation Plan that will set out their respective actions to facilitate the migration of Optus customers to the NBN consistent with NBN Co's non-discrimination obligations.
- 6.16 Importantly what the HFC Agreement contemplates is a well developed and highly coordinated plan for the migration of Optus HFC customers to the NBN. It means the migration of existing HFC customers to the NBN will be as efficient and as seamless as possible such that Optus' HFC customers are likely to gain access to the NBN potentially earlier than would be the case without the HFC Agreement and through a process that will minimise any disruption to the customer.
- 6.17 If the HFC Agreement is not authorised, customers connected to the HFC Network will still have the opportunity to connect to the NBN (whether through Optus or through another service provider). However, existing HFC customers wishing to connect to the NBN will have to do so under their own initiative. This is likely to give rise to customer inconvenience and potentially additional costs than would apply if the HFC Agreement proceeds. As an example, customers under contract may face contract exit fees associated with a migration to the NBN or fees to connect to the NBN.
- 6.18 The HFC Agreement will also ensure that there is equity between customers attached to the Telstra copper loop and Telstra HFC networks and those attached to the Optus HFC Network. The Telstra Transaction contemplates that Telstra will implement a migration

process for customers directly connected to its network. This will mean that some 9 million or so customers connected to the Telstra copper loop and HFC network will be provided with the opportunity to partake in a coordinated migration to the NBN. If the HFC Agreement does not proceed some 504,000 customers currently connected to the Optus HFC Network will be denied the opportunity to partake in a similar migration process.

HFC Agreement will allow Optus to proceed with its fixed line strategy

- 6.19 The ACCC will be aware that Optus has been one of the most vocal advocates for reform of the fixed line telecommunications markets. In particular, Optus has lobbied for structural and regulatory reform that will deliver a level playing field, thereby enabling competitors such as Optus to compete with Telstra in the fixed line market on equal terms. The NBN will deliver on this objective because NBN Co will operate as a wholesale-only provider and access will be provided on an equivalent basis to all retail service providers. Having advocated this reform, we plan to take full advantage of the opportunities the NBN will deliver. **[RESTRICTION OF PUBLICATION OF PART CLAIMED]**
- 6.20 To do this Optus will be building new systems, processes and internal capabilities to provide the best in use broadband experience for its customers. Optus' ability to deliver on this strategy will be enhanced if all Optus' fixed line customers can be serviced off a single access platform with a unified set of systems and processes due to the efficiencies that will be created (as discussed above). Scale will be a vital point of differentiation in an NBN environment where retail service providers will have access to an identical set of wholesale services

HFC Agreement is consistent with the Government's policy objectives

- 6.21 The Government has introduced a number of significant telecommunications policy reforms aimed at delivering major structural change in the fixed line telecommunications market and a significant improvement in competitive intensity in the sector. The NBN is an essential element of the Government's reform programme. It aims to deliver a level-playing field in the fixed line sector through the Government's commitment to ensuring that the NBN will operate as a wholesale-only, open access network that will provide the access platform for the vast majority of fixed voice and broadband services for Australian consumers and businesses.
- 6.22 To give effect to this policy objective, the National Broadband Network Companies Act 2011 was recently enacted. This Act requires NBN Co to be a wholesale-only supplier of services with clear restrictions on its ability to provide retail based services either directly to end-users or through related companies (Part 7 of Schedule 1 of the Telecommunications Act).
- 6.23 The NBN is intended to be a single national network servicing all of Australia, providing high speed broadband and avoiding the inefficiencies associated with infrastructure duplication. The HFC Agreement is consistent with the Government's policy and helps

that policy be achieved by providing for the orderly migration of HFC customers to the NBN and decommissioning of the HFC Network.

- 6.24 A further key policy objective of the Government is to ensure that NBN Co treats all access seekers on an equivalent basis. The HFC Agreement will help to deliver on the Government's objectives since it will result in the decommissioning of the HFC Network and ensure that there is equitable treatment between the operators of the two sole mass market fixed line networks within Australia. Authorisation of the HFC Agreement will ensure that Optus receives equitable treatment to Telstra if the Telstra Transaction proceeds, which is consistent with the Government's policy objectives.
- 6.25 In addition, the National Broadband Network Measures - Access Arrangements Act 2011 (**NBN Access Act**) includes measures to extend this wholesale-only obligation to alternate highspeed broadband network infrastructure. This is defined to include both new infrastructure and existing infrastructure that is expanded or upgraded to offer competing highspeed broadband services. In practical terms these provisions will prevent the roll-out of any alternate network infrastructure to the NBN since there will be no investment case to support a second scale wholesale-only network in Australia. These measures reflect a strong policy desire to have a single national highspeed broadband infrastructure that operates on a wholesale-only basis. This was articulated in the Senate Committee debate on the Bill by Senator Conroy who noted in respect of these provisions that

“the rules will mean that NBN Co. is not hindered in delivering its objective, particularly uniform national wholesale pricing, by strict regulatory requirements while competing against other, less regulated providers of superfast broadband”.

¹³

- 6.26 In respect of the HFC Network these provisions will not prevent Optus from operating its existing services, but they will prevent Optus from expanding the HFC Network. That is, Optus would not be in a position to expand its network to serve its own retail customers in direct competition with the NBN. Should Optus wish to expand the HFC Network then it will only be able to provide wholesale based services over the network. There is no investment case to support such a scenario.
- 6.27 An additional implication of this policy is that whilst the NBN has a superior technical capability to the Optus HFC network today, this gap will grow as the NBN is upgraded and the HFC remains technically static.

Improvements in the economic viability of the NBN

- 6.28 Optus submits that the ability for NBN Co to achieve early access to an additional 504,000 customers is likely to be of significant positive benefit to its business case. This is especially the case since these customers, who are already users of highspeed

¹³ Senator Conroy, Hansard 24 March 2011.

broadband services, are located in the more affluent suburbs of the capital cities of Sydney, Brisbane and Melbourne. Approximately 87% of Optus' HFC subscribers take more than one service, as compared to approximately 40% of Telstra's customers. As such these customers are likely to generate higher than average ARPU because of a higher than average propensity to take multiple services and higher tier broadband plan.

- 6.29 Optus notes that in its Corporate Plan, NBN Co indicates that demand and ARPU assumptions can have a significant impact on its expected Internal Rate of Return. Its IRR can drop 230 basis points from mid-demand high ARPU to a low demand low ARPU scenario. Clearly, the early migration of the Optus HFC customer base will improve both the demand and ARPU metrics that NBN Co is likely to be able to achieve.
- 6.30 In addition, the longer-term viability of the NBN will be advanced because it will have certainty that not only will it not face inefficient competition from the two largest telecommunications providers, those providers will have a direct interests in marketing the use of the NBN. This outcome will significantly reduce the risk profile of the roll-out. Optus' own experience with its investment in the HFC Network is that the market cannot efficiently support multiple fixed line networks of scale.¹⁴ We note that NBN Co has valued legislative provisions that protect it from competition as having a 160 basis point impact on its IRR.
- 6.31 These benefits will not just accrue to NBN Co, they can be expected to flow through to all users. An improvement in the economics and risk profile of the NBN should result in lower access prices and therefore lower retail prices for end-users. The lower risk profile will lead to lower costs and better longer-term returns for the Australian taxpayer.

Environmental benefits

- 6.32 Another benefit of the HFC Agreement is that the decommissioning of the HFC network will lead to lower carbon dioxide emissions.
- 6.33 Optus notes that FTTP networks such as the NBN are likely to have lower power requirements and will therefore have lower carbon dioxide emissions than the present HFC network. This is because the HFC network has active elements which translate from the fibre portion of the network to the coaxial portion of the network (this is at each node). The FTTP network does not have any such requirements being passive between the exchange and the end user premises. This is also discussed in NBN Co's submission.
- 6.34 Further, as noted in NBN Co's submission there will also be benefits arising from the removal of Optus' aerial cabling.

¹⁴ See further Optus Submission, Regulatory Reform for the 21st Century, June 2009, pp 60-61.

7. No public detriment

- 7.1 Optus does not believe that there are any public detriments arising with the proposed deal.

Lack of infrastructure based competition

- 7.2 An issue that may be raised is the fact that the HFC Agreement could remove a potential source of infrastructure based competition from the NBN. Optus submits that this is not the case.
- 7.3 As set out in section 5 above, there is a lack of effective competition in the fixed line market today which is dominated by Telstra. The Optus HFC does not act as an effective constraint on Telstra because its competitive effect is constrained by its limited scale and the fact that wholesale access is not provided over the HFC Network. This is so even though the HFC Network is technically superior to the Telstra copper network in many respects. These points have been recognised by the ACCC:

“The ACCC has noted in its consideration of the relevant markets in chapter 3 that alternative networks to Telstra’s CAN, such as Optus’ HFC network, may be a competitive alternative for the owners of these networks, however, they are confined to the extent to which they provide a competitive alternative for other access seekers. Optus’ HFC network, which is the largest piece of alternative competitive infrastructure to Telstra’s CAN, has a limited geographic footprint which ensures it can not act as a competitive alternative on a national scale”¹⁵

- 7.4 The NBN will be as extensive as the Telstra network and, under the terms of the Telstra Transaction, will effectively carry the traffic of all services formerly connected to the Telstra copper loop once that network is de-commissioned. Accordingly, as is currently the case for Telstra, the Optus HFC network will not act as an effective constraint to the NBN.
- 7.5 In many respects the HFC Network will have a lesser competitive impact on the NBN than it does today on the copper network. This results from:
- (a) the technical superiority of FTTP over the HFC technology; and
 - (b) the disincentives that will prevent Optus from effectively expanding its network in the future.
- 7.6 Further, as outlined in section 6 above, the promotion of infrastructure based competition to the NBN is inconsistent with the Government’s policy objective for a viable national wholesale-only highspeed broadband network.

¹⁵ ACCC - Fixed Services Review Declaration Inquiry for the ULLS, LSS, PSTN OA, PSTN TA, LCS and WLR, Final Decision July 2009, page 85

8. Conclusion

- 8.1 In conclusion, Optus submits that the ACCC should authorise the relevant provisions of the HFC Agreement as the public benefits associated with the HFC Agreement clearly outweigh any public detriment.